Alexander of Aphrodisias on phantasia

An Aristotelian account of mental representation in 2nd-3rd centuries CE

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Abstract

I discuss the account of phantasia of Alexander of Aphrodisias, a most prominent Late-Antique Aristotelian. For Aristotle phantasia is a motion of the perceptive soul that makes possible a great amount of activities and higher cognitions beyond sense-perception. Phantasia became a fundamental psychological concept in the Hellenistic Era: in empiricist epistemology, in action theory as perceptual representation of the external world; in aesthetics as creative imagination. I argue that Alexander proceeds from an Aristotelian framework of parts and capacities of the soul, but unlike Aristotle, he distinguishes a distinct capacity for phantasia. The main reason for this comes from his polemic against the Stoics: they do not acknowledge an activity of phantasia. A distinct activity requires a distinct object, which in turn a distinct capacity. The distinct status of a phantasia-capacity in itself modifies the architecture of the soul in comparison with Aristotle. But in addition Alexander makes important changes in the framework: he makes capacities as basic (and rather modular), and parts and the soul as sets of capacities.

The object of phantasia is the *residue* from perception in activity. The status of this as internal object needs clarification. I show that it is internal on account of being a physical process in the body. Again, I argue that it is the *causal object* of phantasia: it is the item that provides content to the phantasia-activity by triggering it. But the residue is not an intentional object: it is a representation of something else. I give a reconstruction of Alexander`s account how the residue may be representation. Accordingly, it is a representation in virtue of *preserving fully* a perceptual content (something that had been perceived); or in virtue of functioning as an equivalent of a fully preserved residue insofar as phantasia completed an incompletely preserved residue. The latter case explains a wide range of cases, in general the fact that phantasia is more prone to error than perception.

Finally I analyse the activity of phantasia. I argue that its content is propositional, in particular it is ‘S is P’: a predication of a perceptible feature P of a thing that caused a perception S. First, I show that it is implausible to construe simple cases of phantasia (or perception: for perception has the same type of content as phantasia) as non-propositional, demonstrating that the object reading of the content (x sees ‘white’) is inadequate in that at the best it reduces to existential propositions (‘there is white’). Again, I analyse two positive evidences. (1) Alexander`s account of the truth-conditions of phantasia implies propositional content:

phantasia is about an existent thing, S; and it is such as the thing, P. (2) The account of simultaneous perception (of several perceptibles) entails propositional content, and even uses examples as ‘this is white’.

The phantasia-activity is said to be *krisis*, which I take to be judgement: primarily because its content is propositional. I argue that it is a certain type of judgement, *perceptual*, in contrast to conceptual judgements of the rational soul-part: esp. opinion. However, phantasia-judgement may be distinguished from perceptual judgement only because they are concerned with different objects: internal vs. external.

Contents

Abbreviations

Works of Alexander of Aphrodisias

DA	*De Anima*
Mant.	*Mantissa (Supplement to De Anima)*
in Sens.	*On Aristotle`s De Sensu et Sensibilia*
in Met.	*On Aristotle`s Metaphysics*
De Fato	*On Fate*
Mixt.	*De Mixtione*
Q	*Questiones*
in Top.	*On Aristotle`s Topics*

Works of Aristotle

Cat.	*Categories*
Int.	*De Interpretatione*
AnPost.	*Posterior Analytics*
Phys.	*Physics*
GC	*De Generatione et Corruptione*
DA	*De Anima (On the Soul)*
PN	*Parva Naturalia*
Sens.	*De Sensu et Sensibilia (On the Senses and Sensible Objects)*
DM	*De Memoria et Reminiscentia (On Memory and Recollection)*
Somn.	*De Somno (On Sleep and Waking)*
DI	*De Insomniis (On Dreams)*
Mot.	*De Motu Animalium (On Movement of Animals)*
Met.	*Metaphysics*
EN	*Nicomachean Ethics*
Rhet.	*Rhetorics*

Modern collections and works

[AD]	Accattino P, Donini P (1996) *Alessandro di Afrodisia: L'Anima*. Laterza, Bari
[BD]	Bergeron M, Dufour P (2008) *Alexander of Aphrodisias: De l'âme*. Vrin, Paris
[LS]	Long A, Sedley D (1987) *The Hellenistic Philosophers*. CUP, Cambridge
SVF	von Arnim I (ed) (1903-1905) *Stoicorum Veterum Fragmenta*. Teubner, Leipzig
LSJ	Liddel HG, Scott R, Jones HS (eds) (1996) *A Greek-English Lexicon.* OUP

1. Introduction

1.1. The importance of phantasia

Phantasia[1] is a fundamental psychological concept in the Hellenistic Era.[2] It is a focal term in empiricist epistemology,[3] in action theory,[4] and also in discussions in aesthetics as creative imagination.[5] Due to the prevalence of epistemological debates in the Era we have evidence for the controversies over phantasia mainly in its highest epistemic manifestation: as the criterion of truth. Thus, phantasia has to cover sufficiently broad range of mental states to allow for different paths to knowledge (through perception, or through rational reasoning) – it might be called appearance. But there must be a specific kind of it that by being basic and infallible may secure the validity of other states: this is the cognitive phantasia in Stoicism.

Further, phantasia has a central role in Aristotle's philosophy too, as an activity of the perceptive soul.[6] It seems to be the link between perception and thinking. It makes possible a great amount of activities and higher cognitions beyond sense-perception for humans and for lower animals. These functions include remembering, dreaming, imagination, moving by desire, experience, and it is also needed for thinking. In spite of its importance, Aristotle did not give a full theory of the concept, his most detailed account in *De Anima* 3.3 being rather

[1] Since the whole study is an investigation into the concept of phantasia in Alexander, I leave the word transliterated, avoiding premature judgement on its meaning. Its translation into English is notoriously difficult, due to the different connotations and the diverse application of the term in Alexander as well as Aristotle and other Greek philosophical texts. See some further notes on translation in Sect. 3.1.

[2] A history of the concept of phantasia from Plato to the Medieval Era can be found in Watson 1988. It is a good synopsis for the importance of phantasia and the main roles it plays in the different theories (Ch. 1 on Plato; Ch. 2 on Aristotle; Ch. 3 on Epicureans and Stoics; Ch. 4 on the creative imagination; Ch. 5 on the Neo-Platonists).

[3] Phantasia is taken to be the criterion of truth by Epicureans and by the Stoics, which is debated by the Skeptics. In Epicurus all phantasiai are true: see e.g. [LS] Ch. 16 and 17; Asmis 1999; Annas 1992. 157-173; Watson 1988. 38-44. In Stoicism, truth is guaranteed by cognitive (*katalēptikai*) phantasiai: see e.g. [LS] Ch. 39 and 40; Frede 1983 and 1999; Inwood 1985; Annas 1992. 71-85; Hankinson 2003, see Sect. 3.2.2.1 and 5.1.3. On Skeptic objections the best source is SE *M* 7-8; cf. Striker 1997.

[4] Phantasia is needed for action to represent that to which action is aimed, cf. Inwood 1985; [LS] Ch. 57; for a debate with the Stoics see *De Fato*; *DA* 73.14-80.15.

[5] Creative imagination is a central topic in rhetorical investigations. Our main source for the notion (perhaps in a developed phase) is Philostratus' *Life of Apollonius of Tyana*, esp. VI.19.

[6] Aristotle's treatment of phantasia is a highly controversial issue, which I shall investigate only in such detail that is relevant for drawing a contrast to it in Alexander (see Sect. 3.1).

negative.[7]

It is not surprising, then, that Alexander, trying to defend an Aristotelian theory of soul in an environment dominated by Hellenistic schools, esp. the Stoic (see Sect. 1.2), discusses phantasia in detail in his *De Anima* (66.9-73.1).[8] While he generally follows the structure of Aristotle's treatise (*DA* 3.3 on phantasia), he incorporates points from other works of Aristotle (*De Memoria*, *De Insomniis*) where different aspects of this concept are dealt with, and discusses issues that emerged in the intervening centuries (the Stoic theory, or the creative activity of imagination). Alexander deals with phantasia elsewhere too,[9] but mainly applying the concept, rather than explicating it. So I focus on this part of *DA*, and use other passages as necessary to make some relevant point.

1.2. Alexander`s place in the history of philosophy

Alexander of Aphrodisias was considered to be the *par excellence* commentator of Aristotle,[10] the main Peripatetic commentator of whom we possess extant works in large amount.[11] He was active around the turn of 2nd-3rd centuries CE (cf. *De Fato* 164.1-3), before the Neo-Platonic turn, most probably as a renowned teacher in Athens or elsewhere.[12] Apparently his main philosophical agenda was to establish a systematic Aristotelian philosophy as a viable alternative to the contemporary popular philosophical schools: especially the Stoics. However, this required him not merely to reiterate Aristotle`s claims (obviously, for those are quite difficult to grasp due to the character of the presentation), and not merely to give a coherent

[7] Cf. e.g. Ross 1961; Hamlyn 1968a; Nussbaum 1978; Schofield 1978; Frede 1992. Notwithstanding some did attempt to find a coherent theory in that chapter, most notably Watson 1982; Wedin 1988; Caston 1996; Osborne 2000.

[8] On Alexander's views on phantasia (in particular in the *De Anima*) three articles may be mentioned: Modrak 1993; Lautner 1995; de Haas 2014. See also [BD] 42-45, 311-321; [AD] XIX-XXIV, 240-255; Fotinis 1980. 262-274.

[9] Beyond sparse individual occurrences 'phantasia' appears in a few continuous discussions: in the examination of Protagoras' relativism, *in Met.* 300.20-322.28; in Alexander`s entry on falsity, *in Met.* 430.39-436.27; in the analysis of colour appearance, *in Sens.* 55.1-56.15; and in the discussion on the connection between phantasia and action, *De Fato* 178.8-186.12 and *De Anima* 73.7-80.15 (cf. *Mant.* 20. 161.6-162.3 and 23. 172.17-174.28). On the *De Fato* and *Mantissa* passages see Sharples 1983. 140-149. On what concept of phantasia seems to be used in most of these treatises, see Modrak 1993. In general it might be agreed that 'phantasia' has a broad sense: 'appearing' that covers cases of perception, and a technical sense that is analysed in the *DA*; just like in Aristotle, cf. Everson 1997. 180-186.

[10] Later sharing the title 'The Commentator' with Averroes.

[11] Blumenthal 1979 identifies Themistius as another, later Peripatetic, cf. Todd 1981, 1996. 1-2.

[12] Cf. Lynch 1972; Sharples 1990.

interpretation of them, but often to provide his own account on issues that have not been discussed by Aristotle sufficiently or even not at all. Moreover, in some cases the philosophical arguments that had been offered since Aristotle made Alexander to reconsider, reformulate and even revise Aristotle`s position considerably; so that it is possible to detect divergences from his master`s views, even in topics covered by both of them.

Alexander has two broad types of writing: commentaries and treatises on certain topics.[13] In his commentaries he identifies the topic and the issues, analyses the views, arguments, and the text, appealing to other works of Aristotle, refuting competing interpretations or theories of others. He does this without being comprehensive, focusing rather on issues important to him and being content with the details that suffice for his aims and interests – largely as a teacher. His procedure shows that he sees Aristotle`s philosophy as a systematic whole, thus he smooths any tension found in Aristotle`s works. Notably, even though his account on occasion is clearly at odds with Aristotle`s, he avoids openly criticising or contradicting Aristotle.[14] I shall be using Alexander`s commentaries that contain arguments or details that are relevant to his psychology, or important in other respect for my argument: most extensively *in Sens*. and *in Met*.

In his systematic treatises Alexander writes not mainly for students or professionals but rather to the public.[15] These works concern diverse topics: that, even though Aristotle himself has discussed (*GC* 1.10), require reconsideration in order to refute more recent materialists (notably the Stoics): the composition of bodies (*De Mixtione*); that are not discussed by Aristotle, being later development: fate, determinism, responsibility (*De Fato*); and that are entirely covered both by Aristotle and Alexander in his (now lost) commentary, but presumably present such an important issue that requires a separate study to demonstrate the viability of Aristotelian philosophy to the public:[16] on soul (*De Anima*). My main source for phantasia is indeed this latter work (containing Alexander`s official account of phantasia, see Sect. 1.5), the

[13] On the preserved and lost works of Alexander see Sharples 1987.

[14] On Alexander as commentator of Aristotle see Frede 2003/2012; Moraux 2001; also on the commentary tradition before Alexander Barnes *et al*. 1991. 4-14; Todd 1976a 12-15.

[15] Caston 2012. 2 claims that the role of a commentary is merely to elucidate a text. Guyomarc`h 2013 notes that this is inadequate characterization, the difference between commentaries and individual works lies rather in the difference of the audience; cf.; Todd 1976a 16.

[16] Only fragments of the commentary may be identified in later citations, see esp. Moraux 2001. 317-353. Hence one might only speculate on why Alexander needed two works on the same topic, which one is written earlier (if either), what is the relation between the views and arguments presented in them. I offered the simplest reason that exploits the difference of audience. Cf. [AD] VII-XI; [BD] 12-15.

others I use only occasionally.[17]

Apart from these there are disparate collections of short essays of diverse character (problems and solutions, collections of arguments for a given position, paraphrase or commentary of certain texts of Aristotle, etc.). The authenticity and the purpose of each work should be scrutinized individually. I shall use treatises from *Mantissa* and from *Questiones*, and wherever my appeal to them is crucial and extensive I shall have a remark on the status of the writing in question.[18]

Because of Alexander`s method and approach to Aristotle as merely explicating and supplementing Aristotle`s views, and Alexander`s own self-estimation for that matter (*DA* 2.4-9), Alexander was often taken only as a commentator without significant philosophical contribution.[19] This, however, is a mistaken view: the above facts do not imply that he follows Aristotle in every issues. Aristotle`s position is underdetermined by his words in many topics, or even it is apparently determined in contradictory ways. Alexander has his distinctive view not merely in such cases, but he diverges from Aristotle sometimes even without these obvious reasons. E.g. he has a peculiar view of universals as dependent on individuals;[20] the active intellect as identified (explicitly) with the divine intellect originates from him;[21] he views the soul to be emergent from the mixture of the elemental forms (*DA* 2.25-11.13).[22] In many of these cases his approach may be seen as more naturalistic or materialistic than Aristotle`s.[23] It is arguable in several of these cases that his considered view emerges from polemics with other philosophers, with other interpreters of Aristotle, or from giving justice to Aristotle`s text.[24]

It is important to see, then, Alexander`s relation and attitude to other philosophers or

[17] Even though the term 'phantasia' and related terms occur frequently in *De Fato*, since the discussion there is connected to the aspect of phantasia that is beyond the scope of this study – action – I shall refer to this account only occasionally.

[18] On the character, composition of these collections and the types of treatises in them see in general Sharples 1987. 1194-1195; Todd 1976a 18-19; on *Mant.* see Sharples 2008. 1-4; on *Q* see Sharples 1992. 1-5.

[19] Cf. Moraux 2001. 320.

[20] Cf. Sirkel 2011; Sharples 2005b, 1987. 1199-1202; Tweedale 1984.

[21] Alexander`s treatment of intellect (*DA* 89.16-92.15; *Mant.* 2) is a much debated issue, I shall not go into it. See Schroeder and Todd 1990; [BD] 48-58, 333-358; [AD] 24-30, 268-296; Moraux 1942. 63-182, 2001. 373-394; Sharples 1987. 1204-1214; Fotinis 1980. 320-339. Especially on the receptive intellect: Tuominen 2010; Thillet 1981.

[22] Cf. Moraux 1942. 29-62; Sharples 1987. 1202-1204; Caston 1997. 347-354; 2012. 79-81; [AD] 12-16, 106-122; [BD] 22-35, 234-242.

[23] See e.g. Moraux 1942; Zeller 1883. 323-331. For a balanced account of Alexander`s naturalism see Caston 2012. 3-5; cf. [AD] 114-117.

[24] Alexander as Aristotle`s follower did not appear from a vacuum, rather his philosophy emerges from a long history of Peripatetic thought. See e.g. Gottschalk 1987; Todd 1976a 1-12; Zeller 1883. 112-145, 304-318.

schools. He certainly knew and considered Galen`s views on determinism and on the soul. In particular, he devotes the final part of his *DA* to rebut Galen`s encephalocentric view in favour of Aristotelian cardiocentrism (*DA* 94.7-100.17).[25] Notwithstanding, his most important adversaries are the Stoics – though often just as the exemplar of materialism. He borrows much of their *terminology* (or probably the terminology is common currency by Alexander`s time), even in cases when he uses it to expresses genuinely Aristotelian notions. He often turns the recycled terms against the Stoics themselves in rebutting their theory;[26] which may even lead to the vague judgement that he was an eclectic.[27] The Stoic influence, however, is not merely terminological. Alexander`s own view is often shaped by a polemic opposition to the Stoics: both in cases when Aristotle does not have explicit account on the issue: e.g. on determinism;[28] and when he does: on the emergence of soul from the mixing of elemental bodies.[29] Since both types of influence is shaped in Stoic terminology, it requires attention in each individual case which kind is operative. A further difficulty with Alexander`s relation to the Stoics is the simple fact that the Stoic school did not have a homogeneous set of doctrines, but it was full of internal controversies over many issues throughout its history. Thus it requires special attention who is the particular Stoic author that Alexander attacks on a given occasion. However, the nature of Alexander`s references and our lack of extant Stoic works in most cases make it impossible to settle even whether the Stoic in question is an early or a contemporary representative, or whether there is any one meant particularly rather than the school in general.[30] I shall argue that in Alexander`s account of phantasia there is not merely terminological influence of the Stoics – despite the *prima facie* appearance: since Alexander applies the term 'phantasia' in its Aristotelian sense instead of the Stoic sense which is closer to Aristotle`s 'perception' (Chap. 2) –, but his account is formed in order to give a better account than the Stoics did (Sect. 3.2.2).

Despite the fact that he was considered mainly as expressing Aristotle`s view, he made strong influence from the next generation onwards. It is doubtless that Plotinus used Alexander`s commentaries extensively, and formed his use of Aristotelian language and

[25] On Galen and *DA* 94.7-100.17 see Tieleman 1996; Accattino 1987; on Galen and *DA* 2-26 see Caston 1997. 347-354; on Alexander`s relation to Galen see Sharples 1987. 1179, 1203; Todd 1976a 3-4.

[26] On the relation of Alexander to the Stoics see Todd 1976a 21-29; Sharples 1987. 1178; and in *DA* cf. [BD] 19-22.

[27] Zeller 1883; Fotinis 1980. 156. The term 'eclectic', however, must be used with caution, as Donini 1988 shows; and it seems not to apply to Alexander in any interesting sense.

[28] See e.g. Sharples 1983, 1987. 1218-1220; de Haas 2014.

[29] Cf. Caston 1997.

[30] Todd 1976a 22-25 argues that most probably Alexander attacked early Stoics, but this may not be decided.

philosophical understanding through reading Alexander.[31] Alexander`s works remained in use throughout the period of the Neo-Platonic commentators: many fragments of Alexander`s lost works may be gathered from them. The fact that some of his works had been translated to Arabic and Hebrew again attests that he had a prominent place in philosophical scholarship.[32] It is also demonstrated that Alexander`s view on the soul (esp. on the intellect) influenced even the thought of Renaissance authors.[33]

1.3. Alexander`s account of phantasia in the history of the concept

Just as his role in general in the history of philosophy, the importance of Alexander`s account of phantasia has been judged (explicitly or implicitly) in different ways. One might believe, under the influence of the outmoded view that Alexander worked in the age of eclecticism, that his account is simply irrelevant.[34] This might be formulated somewhat more charitably as Alexander indeed provided a systematic account of phantasia which is lacking in Aristotle, that closely approximates or hits Aristotle`s own view. If this latter formulation is true, it gives a place for Alexander`s account (even if not his theory) of phantasia in the history of the concept by itself, as it is apparent from its influence on others (esp. Plotinus). But it is crucial not to prejudge whether Alexander just explicates Aristotle`s view without adding to it, and leave this option as a last resort only after a close examination of the respective accounts and the relation between them.

One, in trying to find the core notion of phantasia in Alexander, may even find it hopeless, and conclude that his use of the term is an incoherent amalgam of different tenets from different philosophical schools.[35] However, this might be consistent with claiming that Alexander improved on some aspects of the concept compared to Aristotle, e.g. the mechanism

[31] Cf. Magrin 2015; Sharples 1987. 1220-1223; Fotinis 1980. 156-157; Blumenthal 1971, 1977; Rist 1966; Armstrong 1960.

[32] On Alexander`s influence see bibliography in Sharples 1987.

[33] Kessler 2011.

[34] Watson 1988 simply neglects some contributors to the history of the concept of phantasia – including Alexander or any Peripatetic after Theophrastus – writing (p 59) that 'It will be generally admitted that the period from 200BC to 200AD was not one of great philosophical originality.'

[35] Modrak 1993 argues that Alexander`s use of the term 'phantasia' is incoherent across his writings, so that we may not find an interesting notion in his treatment of the concept. Accordingly, Alexander uses mostly Aristotle`s narrow, perceptual notion, but in many cases reuses Stoic ideas, and appeals to the broad notion of appearance, i.e. content of any mental state. The most Modrak finds as a core notion is quite thin: that phantasia originates from perception, it is important in explaining cognition and action, however it is defeasible in action context (p 193-195). Even if this is coherently presented in *DA* (p 195), this seems to be too modest.

that brings about representational structures of perceptual content.[36] Nevertheless, one might say, due to its dependence on Aristotle and incoherent use of the term phantasia, it is not surprising that Alexander`s account remained untouched by most of the later commentators.

Others might be more optimistic and find Alexander`s view on phantasia instructive in his theory of action or in his account of (perceptual) mental content. In action-theory phantasia is clearly a crucial element in the account of human and animal purposive behaviour. Phantasia represents previously perceived things, and it may initiate impulse (or motivation) in the subject which may terminate in moving her limbs (cf. *DA* 72.13-73.4) – in humans this is complicated with deliberation over the means or goals. Since one of the main philosophical agenda of Alexander is to rebut Stoic (or any kind of) determinism – for it easily slips into fatalism – so that he offers his original view of fate in a libertarian theory (cf. n28), the fact that his account of phantasia contributes to this theory, it is argued by de Haas 2014, gives relevance (and motivation) to his specific conception of phantasia. This might well be correct, though one might find Alexander`s conception of phantasia innovative in itself, not merely in a broader perspective of his moral psychology: regarding the content of perception.

Annas notes, without further elaboration, that

> It is instructive to see Alexander's struggles when he restates Aristotelian psychology in Stoic-influenced terms. He drops incidental perception and tries to squeeze far-reaching points about appearances out of Aristotle`s limited and idiosyncratic account of appearance [phantasia] in *De anima* 3.3. (Annas 1992. 80n19)

The context of this remark makes it clear what she has in mind. She is claiming that the Stoic account of perception is more interesting than Aristotle`s, for Aristotle focuses mainly on the physical requirements of perception without treating its articulable content in detail – which is recognised only in accidental perception.[37] The Stoics, in contrast, have a detailed discussion on conceptualization, on the propositional content of perception (phantasia) and its relation to the content of other kinds of mental state. And hereby lies Alexander`s importance: to provide an account of the content of perception in his discussion of phantasia (see Sect. 5.1.3). Again, this is an important point, Alexander apparently gives a more explicit and more adequate account of the content of perception than does Aristotle (see Sect. 5.1) – even if Annas` verdict

[36] Modrak 1993. 192.

[37] I use ‘accidental perception’ for *kata symbebēkos* perception; common perception for *koinos*; and ‘proper perception’ for *idios*; see Sect. 5.1.2.

on the irrelevance of Aristotle`s account is overstated.[38] In this case it may well turn out that Alexander is not so much original, rather he explicates an important tenet and incorporates it into his Aristotelian system.

The place of one philosophical view in the history of philosophy is double-related: to the predecessors and to the successors. So another approach is to see Alexander`s importance from the perspective of his influence, first and foremost on Plotinus. It might be pointed out that the object of phantasia is emphatically characterised by Alexander as internal and as the result of perceptual judgement, which is taken up by Plotinus to make a further step in claiming that these objects are without extension, hence incorporeal representations.[39] This may well be true, but the role this assigns to Alexander`s account depends on a misinterpretation of his theory by Plotinus. Because the internal object of phantasia for Alexander is clearly something corporeal (see Sect. 4.1).[40]

All of this is granted, but I believe we can assign a double-sided role to Alexander`s account that is in dialogue with the predecessors and has influence on successors. Alexander clearly identifies phantasia as a distinct faculty of the soul (see Chap. 3). If we interpret Aristotle as denying this, and taking phantasia rather to be an activity of the perceptual faculty (as I do in Sect. 3.1.3), we may find Alexander`s account both quite innovative and much influential. His novelty would thus lie in distinguishing more capacities of the soul than Aristotle, so that (on the more basic level) making the division of soul into parts and capacities in a different way and different sense than Aristotle (as I shall argue in Sect. 3.3). On the other hand, we can see from the subsequent history of philosophical psychology that more and more faculties of soul have been postulated to account for the diverse psychic phenomena. This proliferation of faculties seems to contravene the principle of economy that is taken to be essential to faculty-psychology (see Sect. 3.1.1). Now, since according to the picture I promote Aristotle admitted only three main faculties of the soul and explained all mental phenomena in terms of these, and Alexander considerably expanded the number of faculties (partly by distinguishing phantasia), Alexander may be seen in the history of psychology as opening the door for this proliferation of cognitive faculties.

[38] Just a few investigations on perceptual content in Aristotle: Sorabji 1992; Everson 1997. 187-228; Caston [Content]; Garcia-Ramirez 2010; Marmodoro 2014.

[39] Even though Emilsson 1988 is not explicit on this, but his description of Aristotle`s view on phantasia seems to be closer to Alexander`s, and he shows Plotinus` reliance on that (p 107-112). Cf. Magrin 2015.

[40] Alexander`s influence on Plotinus and later Neoplatonists could be traced further, cf. Blumenthal 1996. 137-150; Sheppard 1991. In this, however, most probably Alexandar remains to have his influence insofar as his account is misinterpreted.

This noted, it must be emphasised that it is not my aim to defend this claim about the importance of Alexander`s theory of phantasia in any detail. I explored the possible roles his account may play in the history of philosophy merely to motivate my investigation into it and my reconstruction of his theory.[41] This is all the more true, since it may well be the case that at the end of the day one should adopt an interpretation of Aristotle that is similar or even identical to Alexander`s, at least in respect of identifying phantasia as a distinct faculty of the soul, which is the more popular and traditional view. Again, it might be the case that the proliferation of faculties has nothing to do with Alexander`s psychology, not to mention his account of phantasia; although Plotinus provides a plausible case in this regard. Even in such an improbable case we may learn much about Aristotelian philosophy of the soul. However, there is a *prima facie* reason to think that Alexander`s account has some novelty in comparison to Aristotle`s. This is the terminology adopted. In a sentence: since Alexander but not Aristotle use the term *phantaston* for the object of phantasia; and both of them adopt the criterion for being a faculty that there is a characteristic object (that is reflected also in the terminology); it seems that Alexander but not Aristotle identified phantasia as a faculty of the soul (on the terminology see Chap. 2; on the argument from the terminology see Chap. 3).

1.4. Methodology

Let me devote some space to what and how I shall be doing. My primary aim is to interpret Alexander`s account of phantasia, in particular the thesis that he identifies phantasia as a distinct faculty of the soul on a par with faculties such as perception, opinion, knowledge, etc. I am to interpret Alexander mainly from Alexander himself, i.e. I use Alexander`s works to illuminate points that may not be clear from the passage under inspection, draw parallels in different passages dealing with the same issue, etc. On occasion, however, I use Aristotle as evidence for Alexander`s view, for after all he follows Aristotle for the most part. I do so only in cases where there is no evidence in Alexander for contrary opinion.

I refrain in particular from using Aristotle as evidence in the main case of phantasia (and perception), for that would be detrimental to keeping their respective views interpreted independently. This is crucial for construing Alexander as diverging from Aristotle. For to

[41] This will show important details in which Alexander shows novelty: the creative aspect of phantasia in shaping its content, cf. Fotinis 1980. 272-273; Lautner 1995; [AD] XX-XXI; see Sect. 4.2.3.3. Again, Alexander`s defence of Aristotelian epistemology against the Stoics, who base knowledge on cognitive phantasia, as suggested by [BD] 43-45, cf. Sect. 5.1.3.

identify a difference in doctrine one must have – besides an account of the view that differs from another (Alexander`s theory of phantasia) – an independent interpretation of the paradigm-view (here Aristotle`s doctrine). In providing the independent background of Aristotle`s theory of phantasia, I assume a particular interpretation without thorough defence, providing just a sketch of supporting arguments, without discussing much of the controversy over Aristotle`s stance (Sect. 3.1.3). This assumption is important for my account of Alexander`s specific role in the history (Sect. 1.3), though its rejection does not affect my interpretation of Alexander`s theory. I adopt this in order to present Alexander`s divergence as sharp as possible. Should one adopt a reading of Aristotle closer (or even identical) to my Alexander, the account of Alexander`s view remains worthy of preparing.

In most cases, however, where Alexander`s views are to be investigated with a background theory of some other author – Aristotle or the Stoics – I try to present that as uncontroversial as it is possible, going into debates only if necessary.

In my account I use mainly Alexander`s official treatment of phantasia in his *De Anima* (see Sect. 1.5), and I do not aim at explaining all passages where the term occurs or where the theory is applied. I use, however, other passages as necessary, either supporting a claim, or dismissing some apparent conflict. Moreover, I appeal to discussions of related topics from *DA* and occasionally from other works (*in Sens.*; *Q*; *Mant.*; *in Met.*): on the consequences of Alexander`s account (Sect. 3.3); on the perceptual change (Sect. 4.1); on simultaneous perception (Sect. 5.1.4); or on the judging activity (Sect. 5.2). In case I cite a text I provide the Greek text in footnotes for convenience; I note the translation I use on the first occasion of citing a work or when I depart from the one noted first.

Regarding secondary literature, since Alexander`s account of phantasia is scarcely investigated (see note 8), and there is not even much discussion on Alexander in general; and since his theory depends much on Aristotle`s (and the Stoics), I frequently use the vast literature on Aristotle on diverse topics (and a smaller portion on the Stoics in relevant cases) to find support and illumination for interpreting Alexander. In doing so, however, I do not aim at being comprehensive, and I by no means want to conclude anything final on Aristotle.

1.5. Alexander`s official treatment of phantasia: *DA* 66.9-73.7

It is clear that Alexander mostly follows Aristotle's thoughts. In his *De Anima* he not only pursues the structure and the arguments of his master,[42] but attempts to make a case for Aristotelian philosophy. In doing so, however, he departs from the paradigm treatise in some details, in covering issues not treated by Aristotle, or occasionally even in doctrines.[43] The part treating phantasia (*DA* 66.9-73.7) mostly corresponds to Aristotle *De Anima* 3.3 – Aristotle`s most detailed discussion of the topic. But since Aristotle's views are not fully presented there, on account of systematization, at some points Alexander digresses to related topics from other works of Aristotle (*DM*, *DI*) or even from other authors (presumably the Stoics). Structural correspondences are interesting though, but the divergences are most significant. Let us now draw an outline of the structure of Alexander`s passage.

In the first part of his discussion (*DA* 66.9-68.4) Alexander follows Aristotle in coordinating phantasia among the judgemental (or cognitive: *kritikē*)[44] capacities of the soul. He distinguishes it from several such faculties: perception (*aisthēsis*) (66.24-67.9), intellect (*nous*)[45] or knowledge (*epistēmē*) (67.9-12), opinion (or belief: *doxa*)[46] (67.12-23), and any composition of perception with opinion (67.23-68.4), by showing that they have different characteristics.[47] This section closely corresponds to Aristotle's reasoning (*DA* 3.3. 427b6-428b9), Alexander just occasionally employs different arguments[48] or goes into some more

[42] See the table of correspondences in [BD] 17. This procedure, however, was common among Peripatetics, cf. Gottschalk 1987. 1090-91.

[43] Caston 2012. 1-3.

[44] In general I follow Caston`s terminology that may be found in the Index of Caston 2012. 189-214. In case of *krisis*, however, I depart from his rendering ('cognition'), see Sect. 5.2.1.1.

[45] In rendering *nous* as intellect I follow the tradition, against Caston 2012. His suggestion is problematic, for 'understanding' may fit better with *episteme*; cf. Barnes 1993. 82; Burnyeat 1981.

[46] I use 'opinion' instead of Caston`s 'belief', simply to reserve 'belief' for the non-technical notion that may cover non-rational attitudes as well, such as perceptual beliefs, cf. Sect. 4.2.3.3; 5.1.5; 5.1.6. On the distinctions between phantasia, perception and opinion see Sect. 5.2.3.

[47] E.g. they have different extension, they are used in different cases of cognition, they relate to truth differently etc.

[48] Two examples can be found at *DA* 67.20-23 and at 67.23-68.4, against the identification of phantasia with opinion and with the composite (*synthesis*) of perception and opinion respectively. The first one relies on the assumption that phantasiai can be simple, but opinion involves complexity (see Sect. 5.1.1); the second invokes the notion of mixture, and just barely asserts that the features of the capacities involved according to the theory being attacked are not found in phantasia; cf. [BD] 314; [AD] 239-240.

detail;[49] but in general, his reasoning is the simplified version of Aristotle's distinctions.

In the second part (*DA* 68.4-69.20), however, Alexander goes on to illuminate the notion by invoking Aristotle's treatment of memory (*DM* 1. 450a22-32), which employs the concept of impression (or imprint: *typos*). This in turn suggests the examination of the Stoic view in which also impression is the key term (together with impressing: *typōsis*). First Alexander argues against the Stoic theory (*DA* 68.10-21), but then revises Aristotle's terminology in light of the Stoic achievements (68.21-30). Next, he sets out his own doctrine (alluding to Aristotle's *De Insomniis*), starting with the analysis of the object of phantasia (*phantaston*) as an internal object (*DA* 68.31-69.20). Even though what we find here could have been suggested by Aristotle`s texts, Alexander diverges from him significantly. He incorporates Stoic elements into his own terminology besides the Aristotelian ones (Chap. 2). Most importantly, though, he approaches phantasia through its *characteristic object* – something which Aristotle does only in cases where distinct faculties are involved (Chap. 3). Moreover, this object is straightforwardly described as the inner object of cognition (Chap. 4), which may only be found in Aristotle on specific interpretations.

In the third part (*DA* 69.20-70.12) Alexander returns to Aristotle's discussion (*DA* 3.3. 428b10-429a9). First he applies the theory of motion-transmission to perceptual movements and movements of phantasia (*DA* 69.20-70.5). This leads to the proper description of phantasia as 'a movement [caused] by perception in activity'[50] (70.2-3; cf. Aristotle *DA* 3.3 429a1-2). Now, following Aristotle, he sums up the relative reliability of phantasiai corresponding to different sorts of perceptible objects (*DA* 70.5-12; cf. Aristotle *DA* 428b17-30). The falsity of many phantasiai presses him to explain in turn (conceptually and causally as well) this possibility, which allows us to have a refined account of his conception of the object of phantasia (Sect. 4.2).

His explanation, however, goes beyond Aristotle's text. In the fourth part (*DA* 70.12-71.21) first he identifies the cause of one kind of error – that concerns proper objects of perception – in the imperfect preservation of the object of phantasia and in the co-formation of the object by phantasia (70.12-14). Then, by alluding to Aristotle's discussion of illusion and dreaming, he describes the sorts of false representations (70.14-23) (see Sect. 4.2). This provides an occasion for specifying the conditions of truth and falsity in phantasia (70.23-71.5)

[49] E.g. Alexander specifies the metaphorical sense of *phantasia* at 66.19-24, whereas Aristotle just mentions it in order to set his issue in the proper, non-metaphorical sense, *DA* 3.3. 428a1-2; for a survey of the interpretation of this passage see Wedin 1988. 64-71.

[50] κίνησις ὑπὸ τῆς κατ` ἐνέργειαν αἰσθήσεως.

(see Sect. 5.1.3) and analysing its epistemic features by making several distinctions (71.5-71.21). He does this by using Stoic terminology again, but now doing so in order to remove phantasia from high epistemic position – as criterion of truth.[51]

The fifth and last part (71.21-73.2) deals with the importance of *phantasia* in action. Action is motivated by intellect (in humans) or by phantasia (in all animals, including humans in non-favourable circumstances). This occurs through the judgement that something should be pursued or avoided. Phantasia is connected to action, for it originates endorsement (or assent: *synkatathesis*),[52] then endorsement impulse (or striving: *hormē*),[53] which in turn motivates action (*praxis*). This is not a determined series of mental states according to Alexander (72.13-73.2). Here again he uses the Stoic terminology and refutes their deterministic theory.[54] This section, thus, is a transition to the issue of action proper (73.8-80.15). Since to analyse the relevance of phantasia in action requires a detailed study of Alexander`s theory of action itself, this aspect of his account is to be investigated on another occasion.

There are two further, probably displaced[55] sections. The first (72.5-13) discusses the meaning of impression (*typos*). It asserts that in the proper sense it denotes the physical impression of a shape into a material that can retain it, thus applicable only for shape; and if we employ the term for perception or phantasia in general we use it metaphorically for any perceptible object. The second passage (73.3-7) elaborates on Aristotle's remark on the etymology of the word 'phantasia' (cf. Aristotle *DA* 3.3. 429a2-4).

[51] Even though this is an important issue – for Alexander objects against the notion of *katalēptikē phantaisa* not from a skeptic point of view, but rather from another empiricist, Peripatetic, perspective – I shall not discuss this epistemological consequence of his theory in detail.

[52] I follow Caston in rendering the term as endorsement rather than the traditional (esp. for the Stoics) 'assent', for it clearly has an Aristotelian sense in Alexander.

[53] Here I follow the traditional rendering of *hormē* in Stoic context, for Alexander clearly adopts their terminology, cf. Sharples 1983; Inwood 1985; [LS]; [AD]; [BD].

[54] Just as in *De Fato*, cf. Sharples 1983; Inwood 1985. 52, 89-90; de Haas 2014; see also [BD] 320-321; [AD] 252-253.

[55] See Todd 1976b. But compare [BD] 316-319.

1.6. The argument

Finally in this introduction I summarise my thesis and argument. I offer an account of Alexander`s conception of phantasia, showing that it is a *distinct capacity* for him on a par with other faculties of the soul, e.g. the perceptual capacity, the capacity for opinion, that for knowledge, etc. I pursue (Sect. 3.3) an important consequence of this thesis for Alexander`s theory of the soul, in particular for his division of the soul into parts and capacities. Accordingly Alexander distinguishes *several capacities* of the soul that are considerably *independent* from each other in their activities and in having their specific objects concerning which they are active; he also considers these capacities to constitute *clusters* that might be called *parts* of the soul. These parts, however, remain conceptual constructs – or divisions, from the perspective of the soul as a whole – relative to certain theoretical needs. This allows for a flexibility that in different contexts the capacities are distributed for the parts differently – one division reflects the needs of biological taxonomy: nutritive, perceptual, rational parts (Sect. 3.1.1 and 3.3); another reflects the different goals a living being might have: judgemental and practical parts (Sect. 5.2.2).

In supporting the claim that Alexander in distinguishing phantasia as a separate faculty departs from Aristotle I first note, in Chap. 2, that Alexander`s terminology includes the term *phantaston* for the object of phantasia, whereas Aristotle`s does not. Then, in Chap. 3, I show that this renders Alexander as positing phantasia as a distinct faculty (Sect. 3.2.1), whereas Aristotle most probably takes phantasia to be a further activity of the perceptual capacity (Sect. 3.1.3). This is due to the Object Criterion that both of them adopt for identifying capacities of soul (Sect. 3.1.2). However, I show that Alexander makes this shift regarding the capacity-status of phantasia in response to a Stoic account (Sect. 3.2.2). In addition I try to find some deeper motivation for Alexander to depart from Aristotle by identifying the phenomena phantasia is to explain, suggesting that it is his preference for *psychological explanation* in psychology that he moves away from Aristotle (Sect. 3.2.3). Finally in the chapter I consider and partially answer three objections to the thesis, which in turn makes the following chapters necessary (Sect. 3.4).

For it is not sufficient to show that Alexander posited a distinct object for phantasia, but it has to be investigated what kind of object it is, otherwise it remains obscure what is its difference from the object of perception. I provide this account in Chap. 4. First by showing that being an internal object means that it is *in the body* (Sect. 4.1), indeed it is a certain type of bodily change (Sect. 4.1.2) in the primary sense-organ (Sect. 4.1.1). Then I analyse the sense

of being an object of cognition as *causal object* rather than intentional object (Sect. 4.2.1). The causal object is the item that *triggers the activity* of the respective capacity, and in case of cognitive capacities it is the item that *determines the content* of the respective mental state. In particular, I argue (Sect. 4.2.2) that for the object of phantasia to serve as causal object it is necessary but insufficient to sustain *causal continuity* between the phantasia-state triggered by it and the external perceptible object which is in its content. But it needs to have certain features if it is to represent the original object: it must be a full or *completed preservation* of the original perception (Sect. 4.2.3). I interpret preserving fully as being able to provide content in such detail that it inherited from its cause: the original perception. In particular, I take this to involve a certain type of content: propositional content with the form: S is P, i.e. *predicational content*. I argue that it is fruitful to take Alexander`s remarks about the creativity of phantasia in *impressing further* (*prosanatypoun*) and in *picturing* (*anazōgraphēsis*) as completing the incompletely preserved residue; i.e. making the residue capable of providing a definite denotation for the subject and the predicate term of the predicational content even in cases when some information had been lost from its initial content.

Since my account of the object of phantasia presupposes that phantasia and perception have propositional (predicational) content, I turn to this in Chap. 5, with an additional inquiry into the activity of phantasia. I show that Alexander indeed took phantasia and perception to have propositional content (Sect. 5.1), despite the fact that his distinction between phantasia and opinion seems to point to the contrary (Sect. 5.1.1.1). First I consider a few options that take perceptual content to be non-propositional, and show that they are incoherent or at least inadequate to explain the difference between phantasia and opinion to which Alexander refers (Sect. 5.1.1.2). In addition I cite two positive arguments in favour of attributing propositional content to perception even in Aristotle (Sect. 5.1.1.3): one appealing to animal purposive behaviour, another to concept acquisition of humans.

Then I reconsider the Aristotelian distinctions between different types of perceptible objects, and argue that the basic differences should be taken as causal (Sect. 5.1.2). Once this preliminary discussion is made, I turn to the two cases that establish predicational content for phantasia and for perception. Regarding phantasia, I argue that Alexander`s account of the *truth-conditions of phantasia* entail propositional content for phantasia (Sect. 5.1.3). Regarding perception, I argue for the same conclusion in case of *simultaneous perception* of more than one proper perceptibles (Sect. 5.1.4). This account implies that the simple case of perceiving only one proper perceptible object is to be taken as well to involve predicational content. For the complex content of simultaneous perception (‘x is white and y is black’) is formed by

conjoining two simple propositions, both of which attribute one perceptible feature to an external object (‘x is white’ and ‘y is black’).

Alexander`s ingenious account of this cognitive phenomenon provides important discussions on the relation between perceptual activity and the material change involved in perception (Sect. 5.1.4.6). This account in turn might be extended to the relation between phantasia-activity and the physiological aspect of phantasia (Sect. 4.1.2.3 and 5.2.4). Accordingly, the judging is the activity of the *incorporeal capacity* that resides in the primary sense-organ, being the *form* of that body, hence enforming it (as a whole and all of its parts) in the same way throughout; whereas what is affected is the body, the primary sense-organ. Its affection – the presence of the changes in certain parts of the organ – is required for the judgement to be made, for this affection determines the content of the judgement. Since the affection in favourable circumstances is assimilation to the external cause, the object in the environment, it might be explained that living beings perceive their environment as it really is.

Finally, in Sect. 5.2, I analyse the account of the activity of phantasia as *krisis*. I argue that it is best to take *krisis* to be *judgement*, rather than discrimination or cognition, for the most important feature of this activity is its propositional content (Sect. 5.2.1.1). I show that in case of Alexander there is no reason to connect his account of *krisis* to the doctrine of the mean, even if this might be fruitful for Aristotle (Sect. 5.2.1.2). Next, I show that even though Alexander for certain purposes talks about a *judging part* of the soul in contrast to the practical part, nevertheless he believes that the proper subject of the different types of judgements (perception, phantasia, opinion, endorsement, etc.) are the corresponding *autonomous capacities* of the soul (or the animal by means of these capacities) (Sect. 5.2.2). These different types of judgements may be subsumed at least under two broad types – perceptual and rational – in respect of whether they involve endorsement or not and whether they involve the use of rational capacities (concepts) or not (Sect. 5.2.3). Whether or not the activities under these two types have further differences in themselves, or they differ only because their respective objects differ is a further question I do not decide here.

2. Terminology

Now, let us turn to Alexander`s terminology. In this chapter I examine the key terms he uses both from the family of *phantasia* (*phantasia*, *phantaston*, *phantastikē*/*phantastikon*, *phantasma*) and others relevant to it (*typos*, *typōsis*, *prosanatypoun, anazōgraphēma*, *enkataleimma*). Many of these (or an analogue) can be found in Aristotle except *phantaston*. But because most of them are used by the Stoics (and in the Hellenistic period in general), they are re-interpreted by Alexander. The most striking difference between Alexander and Aristotle is Alexander`s virtual neglect of '*phantasma*', his adaptation of '*phantaston*', the frequent use of *typos* and *typōsis*, and the introduction of *enkataleimma* as an explanatory concept. Let us see first the ph. terms, then the others.

2.1. phantasia, phantaston, phantastikē/phantastikon, phantasma

Having invoked the theory of impressions and the Stoic interpretation of it, Alexander compares phantasia with the full-blown faculties of perception (*aisthēsis*) and intellection (*noēsis*) (68.21-30). Both of them imply a capacity (*aisthētikē*, *noētikē*), an activity (*aisthēsis*, *noēsis*), and an object (*aisthēton*, *noēton*). Moreover, the capacity has to be defined in terms of the activity, and that, in turn, in terms of the object (FAO). This is something that Aristotle himself endorses (Sect. 3.1.2). However, comparing phantasia to them is Alexander`s own contribution. On the one hand, Aristotle`s theory could suggest the distinction between the capacity and the activity of phantasia, even if Aristotle did not assert this (Sect. 3.1.3). But Aristotle never uses the term *phantaston* for the object of phantasia, neither does he define phantasia by invoking its object. In fact, he asserts that the object of phantasia is the same as that of perception, i.e. the external object responsible for causing it.

Below, Alexander specifies the object (*phantaston*) as an internal perceptible object (*tina aisthēta entos*) (68.31-69.1). This seems to correspond to Aristotle`s term: *phantasma*. Aristotle did speak about *phantasmata* as if they were internal images of things (see Sect. 3.1.3), which seem to be mental objects. E.g. in the case of recollection someone chases them (*De Memoria* 2 453a10-14);[56] or in dreams there is no external object (though Aristotle would

[56] Cf. Sorabji 1972. 42-46. But Aristotle immediately specifies that the *phantasmata* are in body, they are bodily movements, *DM* 2. 453a14-16, 21-23; cf. Alexander *Q* 3.1.

emphasize the causal history of the dreams, which ultimately originate in external stimuli, *DI* 3). This could, perhaps, suggest the idea of internal objects (see the discussion in Sect. 3.1.3). Alexander, however, does not use '*phantasma*', but '*phantaston*', which must come from another source.

This source may be identified as Stoic. First, the distinction in Alexander occurs after discussing the Stoic definition of phantasia (*DA* 68.10-21). Most importantly, though, the Stoics did use the same vocabulary together with *phantasma* – in a different sense, however. Chrysippus is said to have distinguished *phantasia*, *phantaston*, *phantastikon* and *phantasma*, [LS] 39B. 'A phantasia is an affection occurring in the soul, which reveals itself and its cause.'[57] Whatever is meant by this, it is clear that phantasia has a cause external to itself, to which it is directed on account of this very causal link. The cause of a phantasia is a *phantaston*.[58]

The remaining two terms have a deflationary meaning. *Phantastikon*, unlike in Alexander is not a capacity, but an 'empty attraction', when no genuine cause, no *phantaston* is there. A *phantastikon* state is attracted by a *phantasma* instead of a *phantaston*, a figment somehow created by the mind itself.[59] So it seems that these latter terms are connected with active, creative imagination, most importantly that which is responsible for many kinds of error.

From all these it seems that Alexander proceeds from Aristotle`s tripartite scheme of psychic capacities (faculty, activity, object), which Aristotle proposes for perception and intellect. But since he does not find this in the case of phantasia, Alexander emends the theory by postulating *phantaston*: the cause of phantasia. He may just be filling the gap in the Aristotelian account by this move. But in fact this term had been already used in this sense, e.g. by the Stoics. Since Alexander accepted the theory of capacities and activities, he preserved Aristotle`s meaning for the terms *phantastikon*[60] and *phantasia*.

[57] φαντασία μὲν οὖν ἐστι πάθος ἐν τῇ ψυχῇ γιγνόμενον, ἐνδεικνύμενον αὑτό τε καὶ τὸ πεποιηκός. Cf. [LS] 70A5-6; *SVF* 2.85.

[58] On the Stoic account of phantasia in general see Sect. 3.2.2.1.

[59] [LS] 39A3, B5-6; cf. 30A1 for the claim that concepts are *phantasmata*. *Phantasma* as a mind-created fictional, deceptive content is already present in Plato (*Phaidon* 81D; *Republic* 382A; *Sophist* 266B, 268C), cf. Schofield 1978. 264-271.

[60] The fact that Aristotle uses the term *phantastikon* does not entitle us for concluding that he took it to be a capacity, not to say a separate capacity. He uses the term three times. At *DA* 3.9. 432a31 claiming that it is a difficult question to which part of the soul *phantastikon* belongs. At *DI* 1. 459a15-17 claiming that the *phantastikon* is the same as the perceptual faculty, but different in being (cf. Sect. 3.4.2); and at *DI* 1. 459a21-22 that dreaming belongs to the perceptual faculty *qua phantastikon*.

The Stoic influence can also explain why Alexander drops talking about *phantasmata*,[61] which term was used for a prominent role by Aristotle. First, there is no place in the theory for a further concept beyond the three mentioned, so no need to use a distinct word. Moreover, in the Hellenistic Era *'phantasma'* was used by Epicureans, and mostly by the Stoics in the sense of *figment*.[62] This connotation could not be bracketed, even if Aristotle used the term for other, positive purposes. So it seems that Alexander partly replaced in his terminology *'phantasma'* with '*phantaston'*,[63] and partly with 'phantasia'.[64] This, in turn, suggests that phantasia has a separate (internal) object beyond the external perceptible object itself, to which it is immediately directed. And having its object, it is a distinct capacity.

[61] The term occurs only once in *De Anima* (66.21) in a citation from Aristotle *DA* 3.3. 428a1-2, and 13 times in the whole corpus of Alexander. There are 8 occurrences in his commentary *On Metaphysics*. Two of these are citations from Aristotle: at 3.16, the citation of the definition of memory from *DM* 1. 451a15; at 81.23, in the lemma, cf. Aristotle *Met.* A9. 990b14; this is followed by one use in the comments, at 82.4. Two other occurrences are in the discussion of Protagorean relativism, refuting those who suppose it for the sake of argument, at 319.33 and at 321.13. In both occurrences *phantasma* is connected to the absurd case of the same thing or appearance being both true and false in every respect. Thus it seems to be close to the Hellenistic meaning as fiction. This meaning is operative also at *Q* 3.12. 105.28, where Alexander argues against the Stoics, and uses the term in connection to dreaming and empty imaginings. At *Q* 3.13. 107.14, in the context of responsibility, it is stated that humans judge *phantasmata* by reason based on deliberation in addition to mearly having the affection. '*Phantasma'* here seems to mean 'appearance', in the broad sense, as '*phainomenon*' in Aristotle. This again, with the polemic context against the Stoics, is the Hellenistic use. The remaining three occurrences in *in Met*. are found in the commentary on Aristotle`s summary of the meaning of falsity: at 432.18, and at 433.2-3. These invoke *phantasmata* in dreaming, presumably dream images. Dreams are something as physical movements in the body, but not the thing that they represent. This again corresponds to Aristotle`s treatment of dreaming (cf. *DI* 2. 459a24-b7). Alexander, however, specifies their physical nature as residues (*enkataleimmata*). At *Q* 3.1. 81.2 the term occurs again in a citation from Aristotle *DM* 2. 453a14-16 of the definition of recollection. At *Mant.* 15. 145.13 Alexander is citing the phenomenon of image-production (*phantasiousthai*), indeed after images, and explains it as putting *phantasmata* before one`s eyes (*pro ommatōn tithesthai* […] *phantasmata*), 145.13-14. This again invokes Aristotle`s account in *DI* 3. 462a8-31; cf. *DI* 2. 460b2-3; *DA* 3.2. 425b24-25, 3.3. 428a15-16.

[62] For Epicurus: *Letter to Herodotus* 51 (= [LS] 15A11), 75 (= [LS] 19A2). For the Stoics: [LS] 39A, B.

[63] It is noteworthy that *phantaston* is also sparsely used. Apart from the setting out of the theory, it occurs only twice: *DA* 71.7 and *in Met.* 300.22, the latter of which is apparently used in the Hellenistic sense (in an argument against the Skeptics), referring not merely to the cause, but to the intentional object too.

[64] Dooley 1989. 17 emphasizes that at *in Met.* 3.16 Alexander replaces *phantasma* with impression (*typos*). At *in Met.* 433.4-5, however, *phantasmata* are said to have some existence as *enkataleimmata*, cf. Dooley`s notes 1993. 181-182.

2.2. typos, typōsis, prosanatypoun, anazōgraphēma, enkataleimma

The passage of the tripartite distinction, as noted above, is preceded by the discussion of 'impression' (*typos, typōsis*), where other important terms occur as well: picture (*anazōgraphēma*), residue (*enkataleimma*), and image (*eikōn)* (68.4-21).

These terms were already used by Aristotle in this context. He compared the memory *phantasma* in us to a sort of impression (*typos tis*)[65]:

> 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[66] a sort of impression, as it were, (*hoion typon tina*) of the sense-impression, similar to what is done by people using their seals.[67] (Aristotle *DM* 1. 450a27-32)

This is the passage to which Alexander alludes here, writing:

> We must conceive [phantasia] as something becoming in us from the activities concerning the sensible objects like a kind of impression (*hoion typon tina*) and a picture (*anazōgraphēma*) in the primary sense-organ […], being a kind of residue (*enkataleimma ti*) of the movement generated by the sensible object, which remains and is preserved even when the sensible object is no longer present, being like a sort of image of it (*eikōn tis autou*).[68] (*DA* 68.4-9)

Alexander himself makes use of all these terms in his account, though he treats only impression (*typos*) as a separate issue in arguing against the Stoic theory right after this quote (at 68.10-

[65] The idea, goes back at least to Plato`s *Theaetetus* (as well as the terminology, cf. Sorabji 1972. 5n1), and used by Aristotle *DA* 2.12. 424a19-20 to describe perception.

[66] Sorabji`s rendering of *ensēmainetai*, instead of Bloch`s 'stamped'.

[67] Bloch`s translation adapted in terminology. From *De Memoria* I shall use the same translation, often somewhat modified. δῆλον γὰρ ὅτι δεῖ νοῆσαι τοιοῦτον τὸ γιγνόμενον διὰ τῆς αἰσθήσεως ἐν τῇ ψυχῇ καὶ τῷ μορίῳ τοῦ σώματος τῷ ἔχοντι αὐτήν – οἷον ζωγράφημά τι [τὸ πάθος] οὗ φαμεν τὴν ἕξιν μνήμην εἶναι· ἡ γὰρ γιγνομένη κίνησις ἐνσημαίνεται οἷον τύπον τινὰ τοῦ αἰσθήματος, καθάπερ οἱ σφραγιζόμενοι τοῖς δακτυλίοις.

[68] All translations from Alexander`s *DA* are mine, except those passages that are covered in Caston 2012 (*DA* 1-46.19), where I only make adaptations to my terminology. δεῖ νοεῖν γίνεσθαι ἐν ἡμῖν ἀπὸ τῶν ἐνεργειῶν τῶν περὶ τὰ αἰσθητὰ οἷον τύπον τινὰ καὶ ἀναζωγράφημα ἐν τῷ πρώτῳ αἰσθητηρίῳ […], ἐγκατάλειμμά τι ὂν τῆς ὑπὸ τοῦ αἰσθητοῦ γινομένης κινήσεως, ὃ καὶ μηκέτι τοῦ αἰσθητοῦ παρόντος ὑπομένει τε καὶ σώζεται, ὂν ὥσπερ εἰκών τις αὐτοῦ.

21; see Sect. 3.2.2). According to the Stoics phantasia is the impression itself (*typos*) in the soul or in the ruling faculty, or rather the impressing process (*typōsis)*.[69] Alexander argues that neither can be phantasia, for if it were the impression, then phantasia-states would occur without any activity; alternatively, if phantasia were the activity of impressing, it would be identical either to perceiving or to memory.

Alexander also argues against a literal interpretation of impression. In the literal sense an impression is a persisting pattern in the surface of a quite solid receptor that actually has a shape correspondent in negative to the shape of the object making the impression. Alexander picks out these features of impression in turn, and shows the inadequacy to explain sight, as the Stoics did, in *Mant.* 10. esp. 133.25-134.23. First, the medium of impression is most apt if it is solid, in contrast to air (133.25-28), for air is fluid and can only receive confused impressions if any (134.9-10). Again, impression intrudes into the receptor only depth-less, even in apt materials, and by no means throughout the receptor (133.38-134.6). An impression is also something persistent, and this feature actually disconnects it from perception, that requires the presence of its objects (134.6-9). Again, impression is a negative of the shape, a convex object creates 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 make convex appearances (134.11-23). And most importantly, impression can represent only the shape of the object creating it (133.28-31). Or perhaps, if impression is connected to air, not even shapes are apprehensible through it due to the fluidity of air (133.31-38).

Thus, instead of taking it literally, Alexander claims that 'impression' can be understood only metaphorically (*DA* 72.5-13). As we have seen, only a shape or figure can be impressed literally. So in case of other perceptible features the residue (*enkataleimma*) may be said to be an impression only *metaphorically*. This suggests that Alexander, at the end, gives an explanatory role to the residue instead of to the impression. This point is further justified by the fact that the terms of impression rarely occur outside the context of the arguments against Stoicism.[70]

At some places, actually three times, however, Alexander apparently replaces

[69] This is Cleanthes` view (*SVF* 1.484) criticised by Chrysippus as well, who replaces impression with qualitative change (*heteroiōsis)* (*SVF* 2.56). For the debate within the Stoic school see Sect. 3.2.2.1; cf. Hankinson 2003. 62.

[70] Indeed, '*typōsis*' never occurs in other context. '*Typos*' is used elsewhere in its ordinary sense as 'mould', and mostly in the sense of 'telling something in *outline*' (e.g. *Mant.* 186.11; *DA* 60.3; *in Met.* 464.1, or several times in *in Top.*). A few exceptions are discussed in the following paragraphs.

Aristotle`s term '*phantasma*' by impression (*typos*), and uses the *typos* terminology in his own voice. Of these occurrences (i) the first, at *DA* 83.4, can be explained easily, for this comes about ten pages after he has made caution about the metaphorical meaning of the term. The context here is concept formation, starting with perception, through memory (involving phantasia) and experience. He claims that in each case of perception an impression comes to be and this is preserved in memory (*DA* 83.2-10).

(ii) The second passage, *in Met.* 3.17, is concerned with different kinds of intelligence (*in Met.* 2.22-4.11). 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 Met.* 3.14-15, translation by Dooley). Thus, invoking memory calls for some remark on it, so that Alexander cites Aristotle`s definition: 'memory is the having of phantasma as being an image of that about which the phantasia[71] is'[72] (*in Met.* 3.15-16; cf. Aristotle *DM* 451a14-16). Alexander explains that the impression according to the phantasia is not sufficient, but the activity concerning the impression has to be such that it concerns it *as an image* of the cause of the impression.[73] What is relevant now from this is that Alexander uses 'impression' (*typos*) instead of '*phantasma'*.[74] In explaining why this term is used and not *enkataleimma*, I only enumerate a few factors without suggesting thereby that any of them in particular is the proper reason. First, it might be the case that this commentary was written at another time than *De Anima*. Then, either the commentary is an earlier work than *De Anima*, and probably Alexander has not yet clarified (by the time of *in Met*.) the relation between impression and residue. Or *in Met*. is later, so Alexander may be using the term 'impression' with the caveat made in *DA*.[75] Alternatively, the use might be explained without relying on the date of writing. Thus, since Aristotle himself applies the term 'impression' in explaining memory (the use which indeed Alexander picks up in his discussion in *DA*) perhaps in the context of a commentary on Aristotle`s theory on

[71] In Aristotle we find 'phantasma' here. τί μὲν οὖν ἐστι μνήμη καὶ τὸ μνημονεύειν, εἴρηται, ὅτι φαντάσματος, ὡς εἰκόνος οὗ *φάντασμα*, ἕξις,

[72] Translation is mine. ἔστι δὲ μνήμη ἕξις φαντάσματος ὡς εἰκόνος οὗ ἐστι φαντασία.

[73] I discuss this passage in treating Alexander`s views on memory in Sect. 4.2.3.1.

[74] Cf. Dooley 17n24.

[75] Even though in either case the use may be explained, I do not find this solution very appealing. One more remark in relation to dating with regard to *enkataleimma*. The term is used once in the commentary on Book 5 (*in Met*. 433.5), in the usual meaning of Alexander`s – a residue of perception – so this might suggest that he already had developed his theory of phantasia by the time of the Metaphysics commentary. But it might well be the case that the parts of the commentary were written at different times, and even there might be other works written between the times of writing two parts of the commentary. So I think the occurrence of the term at another place in the commentary, 430 pages below, does prove nothing regarding this issue.

memory it is safe and apt to apply the same terms that one finds in Aristotle. I want to emphasize, however, once more the significance of replacing '*phantasma*' with 'impression' in showing that even in *this* context the latter is indeed a safer term.

(iii) The third occurrence is at *in Met.* 312.3. Here Alexander discusses that not all perception is true, and in course of this he distinguishes perception and phantasia (*in Met.* 311.24-312.11). The differentiation starts with a recapitulation of the account of these capacities:

> phantasia is a motion of perception in action; 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*.[76] (*in Met*. 312.2-5)

Here again, 'impression' is used for the effect that the activity of perception makes inside, which then later can be used in different ways resulting in different mental states. The very same effect of perception is analyzed in *DA* and denominated as residue (*enkataleimma*). So the question is again: why it is called here 'impression'. The last explanation from the previous occurrence is not applicable here, for now it is not memory that Alexander connects to impressions, but phantasia as such. But I do not believe that we are left with the spurious explanation from the dates of the works. For let us take the context into account. It is truth and falsity in perception and in phantasia. The complications of Alexander`s theory with residues (*enkataleimmata*) are simply irrelevant in this regard.

There is one particular compound with this term that Alexander applies in his theory: *prosanatypoun,* impressing further. This is a curious term that occurs only once in the whole Greek corpus, at *DA* 70.13. For this reason I postpone the discussion of it to Sect. 4.2.3.3.1 in relation to the issue of causes of error in phantasia, making here only one remark. Even though the term is compounded from *typoun*, but the very fact that it is compounded renders it as not a simple application of the term from which it is compounded: impressing (*typoun*).

[76] I modified Dooley`s 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.

Before turning to 'residue', let us make some notes on one remaining term: 'picturing'. In the passage cited above (*DA* 68.4-10), Alexander alludes to Aristotle`s simile with a picture too (*DM* 1. 450a28-30), with almost the same wording. Alexander, however, writes '*anazōgraphēma*' instead of '*hoion zōgraphēma ti*'. As the LSJ entry says this is a Peripatetic term, indeed occurring only here in Alexander.[77] The corresponding words – *anazōgraphēsis* and *anazōgrapheō*[78] – occur elsewhere before (or around) Alexander.[79] Most important of these is to be found in Sextus Empiricus` summary of the Peripatetic doctrines concerning the criterion (SE *M* 7. 222). He uses the verb '*anazōgrapheō*' in describing the active power of the mind – 'voluntarily limned'[80] (*hekousiōs anazōgraphēi*) – that creates *phantasmata*, and in turn intellect (*nous*) or thinking (*dianoia*).

This suggests that the term corresponds to the active, creative aspect of phantasia.[81] Pictures are created in Alexander`s account (presumably from residues being already there) by phantasia in the picturing process (*anazōgraphēsis*). This picturing is not only responsible for the creativity of phantasia, but also for most of the errors. Since phantasia is claimed to partly form the erring representations.

At one of the two occurrences of *anazōgraphēsis* pictures are said to have become by that process (*ta kata anazōgraphēsin en hēmin ginomena*),[82] in the absence of the perceptible

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[77] On the term see Lautner 1995. '*Anazōgraphēma*' actually occurs only once in Alexander, though '*anazōgraphēsis*' twice, at *DA* 69.25, 70.18.

[78] The meaning of the verbal form (*anazōgrapheō*) is reported by LSJ as 'paint completely', 'delineate' or 'picture to oneself' (in the passive, even 'to be represented' is found). The significance of the '*ana*' prefix may lie in the role this process plays in filling the holes in a picture (i.e. completing it), see Sect. 4.2.3.3.3.

[79] Chrysippus is said to have written a work titled *Pros tas anazōgraphēseis pros Timōnakta (Against the anazōgraphēseis, addressed to Timonax)*, DL VII. 201. Poseidonius in writing about emotions describes *anazōgraphēsis* as an irrationally made picture resembling the sensible object, hence capable of inducing emotion by phantasia, cf. Galen *De Placitis Hippocratis et Platonis* 454-455. Albinus *Epitome* 4.5.17 attributes the term to Plato. He is known, however, of using Peripatetic doctrines in interpreting Plato. Lautner 1995. 34 suggests that Alexander may indeed echo Plato`s use in *Philebus* 40A-B and *Timaeus* 71C4, where Plato connects the term to *phantasmata*. Plato, however, even though uses *zōgraphein* with several prefixes, with '*ana*' he does not.

After Alexander, some Church Fathers used the word, but most importantly commentators on Aristotle`s *Physics* and *De Anima*: Themistius, Simplicius and Philoponus, and Michael of Ephesus in his commentary *On Parva Naturalia* 12 times.

[80] Bury 1935. 121.

[81] See Lautner 1995. 36-38. He also claims that the outcome of this process is a secondary, complex object for phantasia, of different sort. This interpretation can be discarded if we consider that the picturing is needed only in cases when something is *missing* from the representation. Then there is no need to coordinate two kinds of phantasiai with complex and simple phantasiai (p 39). See Sect. 5.1.1.2.

[82] [AD] 244-249 argue that this notion of *anazōgraphēsis* has no connection to *anazōgraphēma* in the passage cited above, their reasons are mentioned by [BD] 317 too. They claim that at 68.4-9 *anazōgraphēma* is simply

objects (*DA* 69.25-26). This is not an entirely clear description, but may tend to confirm the interpretation as a creative process. In the other passage, falsity in phantasiai is at issue. One example is the case when pictures in dreams are created in virtue of the picturing process (*hosai ginontai kata anazōgraphēsin tina*) (70.17-18). This obviously refers back to the previous description (note '*hōs eipon*'). This latter use, however, more apparently involves an active process on behalf of phantasia. This process is particularly responsible for error in the corresponding mental state. Now I terminate this examination to return to it in discussing the issue of falsity in phantasia (Sect. 4.2.3.3.3 and 5.1.1.2).

Our last term to be discussed here,[83] residue (*enkataleimma*), seems to be the most basic in the theory. Alexander uses it more frequently than *anazōgraphēma* and in a wider variety of contexts than *typos*; the latter employed only in enquiring into phantasia or indeed rebutting the Stoic view, but *enkataleimma* is used in *propria persona* in explaining certain phenomena, e.g. after images.[84]

Regarding its origin, it is most likely an Epicurean term.[85] Epicurus indeed uses it to describe the impression[86] resulting in phantasia (*Letter to Herodotus* 50.7). Phantasia in his theory is closer to a direct perception or presentation of something. It is the result of a strictly physical causal mechanism, which warrants its truth.[87] That is, phantasia comes about through the image`s (*eidōlou*) concentrated succession (*hexēs pyknōma*) or its residue (*enkataleimma*).

a synonym of impression (*typos*). But considering that this is a passage introductory to the terminology, the lack of a distinction does not entail that there is no distinction. It is perfectly right to clarify terms later – which seems to be Alexander`s procedure. Indeed, this introduction neatly describes phantasia as passive by *typos*, and as active by *anazōgraphēsis*. Such an account gives justice to the identity of the word-roots.

[83] Even though image (*eikōn*) is used extensively by Alexander, but mostly in relation to refuting Plato`s Forms, *in Met.* 83-105. Its use in psychological context seems to be restricted to memory (as in the passage above), see Sect. 4.2.3.1.

[84] Occurrences of *enkataleimma* outside the context of phantasia (there it occurs 15 times) in the *De Anima*: 38.10 (but here the residues of the vital activities and capacities of bisected animals are mentioned); 63.3 – where it is used to describe the endurance of after images, i.e. when the absent perceptible continues to operate through phantasia (cf. Aristotle *DA* 3.2. 425b24-25; *DI* 2. 459a24-28, 459b5-18); 97.13 – where it is stated that because residues from perception have their place where the perceptual capacity is (in the heart), phantasia (which is connected to these residues) must also be there.

[85] Cf. Todd 1974. 211. Though Fotinis 1980. 269 assigns a Stoic origin to it. Aristotle used *hypoleimma* at *DI* 3. 461b21-22.

[86] Epicurus too uses the vocabulary of *typos* in this context (*Letter to Herodotus* 46, 49), but he prefers to call these impressions 'images' (*eidōla*) (46.7).

[87] On the Epicurean theory of phantasia see [LS] Chap. 15 and 16; Asmis 1999; Annas 1992. 157-173; Watson 1988. 38-44.

This latter description, however, is left such vague, it is not explicated further.[88] Hence, instead of pursuing Epicurus` use, let us turn to Alexander`s.

First, Alexander introduces the term at *DA* 68.7-9 as a description of phantasia. It presumably denotes the primary, immediate product of sense-perception, remaining in the organ even after the perceptible object has gone (cf. 72.11).[89] The organ is actually the primary sense organ, the heart (97.12-14). Later, he specifies its place in the theory by asserting that indeed it is the object of phantasia analogous to the object of perception (68.26-28), so the activity of phantasia is concerned with an *enkataleimma*. Moreover, it is admittedly an *internal object* (*tina aisthēta entos*), in contrast to the external object of perception (68.31-69.2, cf. 69.16). His phrasing suggests on the one hand that the residues are the basis of phantasia:[90] 'the phantasiai that came about from the residues' (*hai ginomenai* apo *tōn enkataleimmatōn*) (70.12); or even the cause of it: 'the capacity of phantasia is moved by the residues' (*tēn phantastikēn dynamin kineisthai* hypo *tōn enkataleimmatōn*) (70.15-16). But Alexander hints at an activity of phantasia: 'the [phantasiai] concerning the residues' (*hai* peri *ta enkataleimmata*) (70.8-9); or even explicitly: 'the [phantasia] being active concerning such a residue' (*hē peri toiouton enkataleimma energousa*) (70.23-24). On these passages and the role of residue as the object of phantasia see Chap. 4, esp. Sect. 4.2.3.3.

It might be said in conclusion that Alexander uses basically Aristotle`s terminology where it is possible, but also imports many phrases from other schools. Indeed in some cases he replaces Aristotle`s word with a Stoic or Epicurean term. All this could be accounted for by taking the contemporary philosophical terminology into account, and the fact that most writers adopted it. In most cases then, Alexander does not merely take the terms, but gives them his own meaning. Thereby he refutes his opponents` views in their own language, though not by using their own concepts.

[88] Asmis 1999. 270 proposes that *enkataleimmata* are after-images only, for clearly dreams and other mental states are generated by new streams of images. If this was Epicurus` use, Alexander significantly changed the notion.

[89] Residue is invoked as well by Alexander in showing that *phantasmata* in dreaming have after all some existence, namely *as residues*, *in Met.* 433.4-5. Lautner 1995. 37 emphasises that phantasia, hence its object *enkataleimma* plays a role only when the sensible object is no longer present.

[90] Cf. Todd 1974. 211.

3. Phantasia as distinct faculty

Alexander considers phantasia to be a *distinct faculty* of the soul. It differs from all other cognitive faculties: from perception, opinion, knowledge, intellect (*DA* 66.9-68.4). It is an *autonomous* faculty of the soul having its own object and having its own activity concerned with that object (*DA* 68.21-30). In this chapter I set out Alexander`s thesis as being in opposition to Aristotle`s view, however allowing that it may turn out that Alexander`s interpretation of Aristotle correctly represents Aristotle`s view. To see the significance of Alexander`s position, we have to look at the Aristotelian background to which it will be compared (Sect. 3.1). Thus, I first summarize the methodological principles underlying any Aristotelian psychological investigation, including Alexander`s treatment of phantasia. I will give a preliminary account of *faculty psychology* focusing on how it appears in Aristotle, including an overview of the architecture of the Aristotelian soul (Sect. 3.1.1). I consider the criterion of identity for a faculty in this framework, which I call the Object Criterion or the Faculty/Activity/Object condition (Sect. 3.1.2). Then I turn to Aristotle`s view on phantasia, and defend the claim that according to Aristotle phantasia is not a faculty at all; primarily because in his theory there is not an object distinctively of phantasia. Thus I am to eliminate interpretations according to which Aristotle did indeed posit an object for phantasia (Sect. 3.1.3).

Against this background I consider Alexander`s contribution (Sect. 3.2). I show that his postulation of a distinct object of phantasia involves that phantasia is a faculty on its own (Sect. 3.2.1). I analyse his argument for this position, which appears as a polemic against the Stoics (Sect. 3.2.2). Additional to the reconstruction of the argument I try to identify possible motivations for adopting this view (Sect. 3.2.3). Further, I provide some remarks on the consequences of this view on Alexander`s general philosophy of psychology and his treatment of parts of the soul and capacities of the parts. Accordingly, I show that Alexander might be viewed as reconsidering – in comparison to Aristotle – the conception of the division of the soul into parts and the division of parts into capacities, in that he takes the capacities to be autonomous unities rather than the effect of conceptual division. A most clear example of the reconsideration of the capacities is the status of phantasia (Sect. 3.3).

Finally, I discuss three objections to my interpretation. The first (Sect. 3.4.1) and the second objections (Sect. 3.4.2) question the divergence of Alexander from Aristotle by pointing

to passages where Alexander endorses Aristotle`s relevant claims: first, that phantasia is a movement caused by perception; second, that the proposed relation between perception and phantasia is sameness but difference in being. The third objection (Sect. 3.4.3) questions that the characterisation of the object identified as the distinctive object of phantasia is indeed the object in all cases of phantasia, so that whether it can serve as its characteristic object.

3.1. The Aristotelian background

There is an outstanding controversy over the interpretation of phantasia in Aristotle.[91] It is not clear whether it is a faculty of the soul or just a sort of sub-faculty, or an activity of another faculty – the perceptual faculty –, or something different from a faculty that underlies the acts of genuine faculties by providing representations for them.[92] It is debated whether phantasia plays a sort of active role of interpreting sensations, unifying apperception; or it is more of a passive appearing.[93] Whether it carries its content as a pictorial or imagistic representation, or rather in virtue of its causal powers.[94] It is not even clear why Aristotle posits phantasia as some explanatory factor in his psychology. What does it explain? Why Aristotle needs phantasia?[95]

In a sense, Aristotle does not need phantasia, he has it as inherited partly from Plato

[91] I by no means aim at a comprehensive account of Aristotle on phantasia, which I believe may be done only in a separate monograph. I do not even intend to offer a detailed survey of most relevant interpretations from the vast literature on the topic, for this much as well would distract my inquiry. Rather, I only note here some crucial points of disagreement among commentators.

[92] On this question, and whether *phantasmata* are the internal objects of phantasia see Sect. 3.1.3. Phantasia as a faculty distinct from others (the Alexandrian view): Hicks 1907. 461; Beare 1906; Ross 1961. 39; Hamlyn 1968a; Schofield 1978; Everson 1997. 157-165; Bloch 2007. 61-64. As a faculty identical to perception, but different in account/activity: Modrak 1986, 1987, 2001. 227-239; Frede D 1992. As a further activity of perception Johansen 2012; Turnbull 1994. A device/sub-capacity for representation Wedin 1988; Osborne 2000, although she attributes receptive roles as well to phantasia, just like *perceiving as.*

[93] For phantasia as active, in interpreting perceptions: Ross 1923; 142-144; Hamlyn 1968a 129-134; Scheiter 2012; as for *perceiving* x *as* F: Nussbaum 1978; as grasping accidental perceptibles Kahn 1966; as for synthetic apperception Frede D 1992. For phantasia as passive appearing, especially in non-paradigmatic circumstances: e.g. Schofield 1978; Modrak 1986, 1987.

[94] For phantasia as pictorial or imagistic representation Ross 1906; Hicks 1907; Hamlyn 1968a; Sorabji 1972; Modrak 1986, 1987. 32-35, 81-108; Wedin 1988; Everson 1997. 165-178; Bloch 2007. 67-70; Scheiter 2012. Against the image-view see Nussbaum 1978; Schofield 1978; Caston 1998a 281-284. For phantasia representing in virtue of causal powers, see Caston 1996, 1998a. Nevertheless many acknowledge that *phantasmata* are material, physiological devices: e.g. Nussbaum 1978; Wedin 1988; Everson 1997; Bloch 2007. Bolton 2005 even argues that *phantasmata* are the material causes of perceiving.

[95] Caston 1996 answers his question by claiming that phantasia is needed esp. to account for error in cognition, as it is suggested by the opening part of the chapter (*DA* 3.3. 427a17-b14), usually neglected.

and from the ordinary Greek use.[96] That is, he does not need to invent this conception or term; what he does is incorporating phantasia into his own psychological theory. He does need it, however, in the sense that it allows him to explain a wide range of psychological phenomena. These include after images,[97] imagination,[98] illusion,[99] hallucination, dreaming,[100] memory,[101] experience (*empeiria*),[102] moving by desire,[103] and it also plays a necessary role in thinking.[104] But again, Aristotle, in his *De Anima* 3.3 does not introduce phantasia as something (a faculty) that is required to explain some of these phenomena. Rather, he asks whether phantasia is the same as the faculties that had been distinguished (*DA* 3.3. 428a1-5) – the well-known cognitive capacities – and he shows it to be distinct from all of them (*DA* 3.3. 427b17-428b9).[105] By doing so, he presumes that the audience already knows what phantasia is, at least in the sense to what things the word 'phantasia' is applied and applicable: what are the phenomena that are called phantasia. So at least in *DA* 3.3 phantasia is presented rather as an *explanandum*.

Much of the confusions and uncertainties about phantasia are due to the fact that Aristotle does not identify the relevant phenomena at the outset, but instead supposes

[96] On the connection between Aristotle`s account and Plato`s view on phantasia see Lycos 1964; Watson 1982; Schofield 1978. 257-258; Scheiter 2012.

[97] See note 84.

[98] Cf. *DA* 3.3. 427b17-21. Since imagination is just one specific activity that phantasia covers, it is too restrictive, hence misleading, to translate 'phantasia' as the traditional 'imagination'. The term is in more intimate connection with a passive appearing, see Schofield 1978; Hamlyn 1968a 129-132. But 'appearance' too would restrict the scope; and it misleadingly suggests a kind of deceitfulness, which in some cases may well characterize phantasia, but it cannot be its general feature. Otherwise phantasia could not serve its important role in thinking or acting.

[99] Cf. *DI* 2. 459b19-24, 460a33-b27.

[100] For dreams see the whole *DI*, esp. Chap. 3. For the claim that dream is to be explained on analogy to hallucination or illusion, cf. *DI* 1. 458b25-28. For a certain type of hallucination cf. *DM* 1. 451a8-12.

[101] Cf. the whole of *DM*.

[102] On phantasia in experience, see *Met.* 1.1. 980b25-981a3; *AnPost*. 2.19. 100a6-8, cf. Gregorić and Grgić 2006; Sorabji 1992. 201-203, 1993 33-35; Frede D 1992. 292; Modrak 1987. 157-180. Everson 1997. 221-228 interprets *empeiria* as an ability to apply perceptual concepts in recognising objects or features. It must be noted that Alexander reconsiders the conception of experience, *in Met.* 4.12-5.3, arguing that it requires rational soul, being rational knowledge coming from memory, concerning a multitude of particular instances. Thus for him it is peculiar to humans, and it manifests itself in craft (*technē*) and calculation (*logismos*). A similar view is expressed by Wedin 1988. 144-146.

[103] *DA* 3.9-11; cf. *Mot*. 6-8. The role of phantasia in desire and action is regarded as most important by many: cf. Nussbaum 1978; Modrak 1986. 59-61; 1987 95-99; Frede D 1992. 288-290; cf. Inwood 1985. 9-17.

[104] This is often noted by Aristotle, and most thoroughly discussed in *DA* 3.7-8. Cf. Wedin 1988. 100-159; Frede D 1992.

[105] The fact that Aristotle devotes most of his treatment to show what phantasia is not, and just sketches what it is, makes many commentators claim that the chapter presents no coherent view of phantasia, e.g. Ross 1923. 142-143; Hamlyn 1968a 129-134; Nussbaum 1978. 222, 251-252; Frede D 1992. 280-282.

familiarity with them. I would like to suggest that Aristotle`s aim in his chapter on phantasia is not to introduce a further faculty over perception and above intellect, so to say, or some faculty that could mediate between these two. Rather, before he turns to discuss thinking and intellect he quite quickly gets phantasia over, telling only the basics about it in order not to confuse it with thinking or perception.[106] And these basics do not imply, I would claim, that phantasia itself is a *distinct* faculty of the soul. Moreover, I would presume that phantasia is not even a *faculty* of the soul (Sect. 3.1.3).

Alexander, in contrast, does not merely posit phantasia as a capacity of the soul, but he treats it as a distinct faculty on a par with the faculty of perception, intellect, and the capacities for opinion and for knowing (Sect. 3.2). Partly as a consequence of this he provides a different framework of faculties and parts of the soul (Sect. 3.3). Notwithstanding these differences, Alexander remains faithful to Aristotle in his methodological principles: generally, in accounting for the soul in terms of faculties (faculty psychology, see Sect. 3.1.1), and even in his particular criterion of identity for faculties of soul (Sect. 3.1.2). But the difference between their theories comes from the differing stance on whether there is distinct characteristic object for phantasia; which, with applying the same principles, leads to different status for phantasia (see Sect. 3.1.3).

3.1.1. Faculty psychology

It is quite common in Ancient Greek philosophy to explain psychological phenomena by distinguishing different faculties, or parts, of the soul, which can account for different ranges of phenomena. It is well known that Plato argued for tripartition of the soul (*Republic* 4; *Timaeus*; *Phaedrus*); Aristotle also posited three distinct parts and defended his particular division against the Platonic one;[107] or to mention just one later example, from the Hellenistic Age – the Stoics distinguished eight parts of the soul.[108]

In most instances such an account is construed with an ethical interest: the phenomena to be explained are mostly related to contexts of action.[109] This might restrict the range to moral psychology; but often, despite of this focus, a comprehensive account of psychological

[106] Cf. Osborne 2000. 264-270; Johansen 2012. This also fits with the introduction of the chapter, cf. Caston 1996.

[107] *DA* 3.9. 432a23-b4; cf. Corcilius and Gregorić 2010. 106-108.

[108] The division they propose is spatial, see Sect. 3.2.2.2 and 3.3.1. In a comprehensive historical account Epicureans, Galen and Middle Platonists too should be mentioned as possible predecessors of Alexander.

[109] Such as the phenomenon of conflicting motivations of a person. We might see this tendency in Alexander as well, *DA* 27.5-8.

phenomena is offered. The Peripatetic approach, however, is one exception from this. The starting point for Aristotle himself (at least)[110] is rather biological,[111] hence he aims at explaining all kinds of psychic operations by offering a systematic theory.

The *psychē* (the mind or the soul of humans or of all kinds of living being), surely, can be treated theoretically in several ways. One prominent methodological assumption is to distinguish several *faculties*, each of which explains a restricted, but thoroughly defined range of phenomena by being (causally) responsible for it.[112] This provides a framework for a comprehensive account of the soul. One further assumption of faculty psychology is *economy*: only as many faculties to be posited as many are inevitable to adequately account for the phenomena. The lower the number of faculties, the neater the theory is.[113] This goes hand in hand with a distinction between basic faculties (or *parts*, *morion* or *meros*, in the Ancient parlance), and *capacities* (*dynamis*) that depend on the basic faculties.[114]

Faculty psychology in this sense is quite a broad term. A particular theory has to answer several questions: concerning the identity conditions and status of the faculties, their exact explanatory role, possible and actual relations between different faculties – in a word, the question: what is a faculty.[115] There might be significantly different answers to this set of questions, defining different kinds of theory. In what follows, nonetheless, I do not aim at a

[110] Even though Alexander follows Aristotle, his avowed focus is more restricted: in line with the Pythian command of 'Know Thyself' to *human* psychology, *DA* 1.4-2.4; cf. Caston 2012. 71-74.

[111] Aristotle`s biological orientation is recently emphasised. This does not merely point to the obvious fact that he had a strong interest in biology, but more specifically that his psychological works are to be taken as introductions to, or at least preliminary conceptual groundwork for the biological treatises – which makes the traditional order of Aristotle`s works intelligible. See e.g. Lloyd 1992; Falcon 2007; Johansen 2012. 43-46, 258-267.

[112] E.g. Fodor 1983.

[113] E.g. Johansen 2012. 4. Johansen adds (p 79-82) that the lower limit of the number of capacities is provided by the categories of change the living being may undergo.

[114] In the dissertation I use the following terminological distinction: I use 'part' only for parts of the soul, distinguished by the author in question, and use 'capacity' and 'faculty' interchangeably for capacities of the parts, i.e. capacities that depend on the parts or that constitute those parts. Since a part of the soul is either a capacity or a collection of capacities, sometimes I use 'faculty' (but not 'capacity') for either a part or a capacity. I do so in the first part of the present section, in introducing the idea of faculty-psychology. Once I turn to the summary of Aristotle`s view, I put the distinction into use. At some points the terminological distinction becomes crucial: e.g. in distinguishing the perceptual part and the perceptual capacity of which the part consists (together with other capacities), even though in Alexander or Aristotle the same terms may be used for both.

[115] See Aristotle`s own questions concerning partitioning the soul in the preface to his treatise on the soul, *DA* 1.1. 402b9-11; and returning to it in discussing the locomotive capacity at *DA* 3.9. 432a15-b4; cf. Corcilius and Gregorić 2010. 81-82, 106-108.

systematic account or a taxonomy of what is a faculty of the soul. It is sufficient for us to consider one main basic distinction. Faculties might be treated either as quite independent of each other, being able to operate autonomously on their own; or as contributing to the activities of the soul as a whole, being able to do their job only together. In other words, faculties might be *modular* or *holistic*.[116] This is not a sharp and exclusive distinction: it might well be argued that faculties exhibit more or less independence, and on different levels.[117] As my argument will suggest Alexander might be taken as moving from a more holistic approach of Aristotle`s to a more modular one (though I shall not aim at defining the borders, cf. Sect. 3.3). Let us then have an overview of Aristotle`s account on what is a faculty, to have it as a background for assessing Alexander`s theory.[118]

Aristotle takes the soul to be the *nature* of living beings, that is, the inner principle of their characteristic life-behaviours.[119] He finds clusters of behaviours that can be explained more or less independently of each other,[120] thus he is able to distinguish parts of the soul that are responsible for these hierarchically structured clusters. The division into parts is *taxonomical*, serving a specific role of classifying living beings,[121] distinguishing broad types among them – plants, animals and humans – and at the same time explaining the differences. The three parts – the *nutritive*, the *perceptual* and the *rational* part – can serve this role by defining each kingdom of living being respectively. The result is a hierarchically ordered series of parts – any higher implying the possession of each lower: nutrition is separable from the

[116] Johansen 2012. 4-5; Caston [Unity].

[117] E.g. Fodor 1983 argues for modularity only on the most basic level of cognition, treating higher levels as holistic, in contrast to e.g. Dennett 1991, who applies modularity throughout.

[118] My overview derives much from Johansen 2012 and Caston [Unity]; cf. Corcilius and Gregorić 2010; Wedin 1988.

[119] Thus psychology is part of physics; see e.g. Johansen 2012. 85-89, 119-122, 128-134; cf. Bolton 2005; Wedin 1988. 3-22. On soul as nature see Alexander *in Met*. 390.30-35; nature as the inner principle of behaviour, the form, see e.g. *in Met*. 359.7-360.15.

[120] Caston [Unity] argues that the identification of the clusters (the finding) is empirical. This might be admitted as a claim about the source of the idea; but certainly there are conceptual relations between the parts, they imply the presence of other parts as well, so the criterion of identity for parts is not empirical.

[121] Cf. Caston [Unity], who identifies the criterion for being a part as *taxonomical separability*. For taking the separability in question as *definitional* – i.e. the parts of the soul are capacities that may be defined without reference to any other capacities – see Corcilius and Gregorić 2010. Johansen 2012. 7, 53-62 adds *causal* separability to the definitional – i.e. the parts operate as independent causal modules. Menn 2002 emphasises the teleological relationships between the parts: a lower part is for the sake of the higher ones. In general, we should admit that parts are differentiated more robustly (cf. Aristotle *DA* 2.2. 413b32-414a3; 3.9. 432a19-b7) than the traditional view takes it as any capacity merely differing in account is a part, e.g. Barnes 1971; Sorabji 1972. 78, 1974; Polansky 2007. 8; Gregorić 2007. 19-27.

other parts; perception presupposes nutrition but separable from intellect; and intellect presupposes both the former parts[122] – defining a scale of beings. The hierarchical series of parts makes it possible to sustain the *unity of the definition* of each different kingdom of living being, the definition containing only the most specific part the given genus possesses (e.g. animal is defined by the perceptual part, and the possession of this defining part implies the possession of the lower part: the nutritive).[123]

Taxonomical division is not incompatible with that in each individual living being there might be one single soul, which may not be divided (e.g. in place or magnitude, i.e. physically). For this indivisibility is required in case of individuals to provide the *unity* of the composite thing (cf. Aristotle *DA* 1.5. 411a26-b14). The unity is provided by the *form* of the thing, which is the soul in living creatures,[124] so it is the soul that holds the individual body together. Indivisibility of the individual soul (holism on the level of the individual) does not imply in turn the indivisibility of the soul of the kind.[125]

The three parts distinguished can in turn be used in explaining further activities. In this way they can be *divided further conceptually*, into (so to say) sub-faculties (see Sect. 3.1.2). The operations of the sub-faculties are explained ultimately with reference to the faculties on which the sub-faculties depend.[126] Thus, whereas the sub-faculties might be taken as *capacities* explaining certain range of behaviour, the *parts* are the basic faculties irreducible to other faculties, in terms of which all behaviour is ultimately explainable. Hence these parts may be taken as operating independently as modules;[127] but it seems that the capacities of the parts

[122] With the exception of divine souls that are imperishable, and consist solely of intellect. On the nature of the series see Johansen 2012.63-72; Caston [Unity]; cf. *DA* 2.3. 414b31-415a11.

[123] Since the taxonomical division is the most important for Aristotle`s main goal – biological enquiry – he has much difficulty with the capacity for locomotion (or action, in humans). It turns out not to be a part in the taxonomical sense, though Aristotle has some hesitation over it in *DA* 3.9-10. Corcilius and Gregorić 2010 show that it is not a part; cf. Johansen 2012. 246-257; however Whiting 2002 argues for taking it as a part of the soul; cf. Modrak 1987. 11.

[124] On Aristotle`s account of soul as the form (as first actuality) of the body of living beings see *DA* 2.1. It is unnecessary to touch upon the vexed issues concerning this general account of soul, see e.g. Ackrill 1972/1973; Bolton 1978; Everson 1997. 60-78; Mirus 2001. Equally unimportant to consider Alexander`s parallel account at *DA* 11.13-26.30, esp. 15.26-17.8.

[125] Caston [Unity]. Some think that the issue of unity necessitates the indivisibility of soul, e.g. Hicks 1907. 299; Shields 1988. 122-127; Gregorić 2007. 25-26.

[126] The definition of the sub-faculties makes reference to the part of which they are sub-faculties, hence it is not independent in definition. E.g. phantasia, pleasure/pain, desire follow from having perception (*DA* 2.2. 413b22-24).

[127] Johansen 2012. 6. However, Caston [Unity] suggests that the operation of a lower part in a creature that have also a higher part is influenced by the higher part. E.g. the mating behaviour of animals is significantly different

may not. Rather, they function *holistically* as being capacities of the whole part (and eventually the whole soul).

The explanations through parts involve the Aristotelian scheme of four causes: *formal*; *efficient*; *final*; and *material*. The soul and its parts are supposed to be the first three of these causes;[128] and the body is the material cause. That is, an Aristotelian faculty (part or any capacity) is such that it can explain a given range of psychological activity as the formal, efficient and final cause of the phenomena.[129]

Let me give an overview of the architecture of Aristotle`s soul. At the bottom there is the nutritive part, which defines plants and exists separately in them, *DA* 2.4. This faculty consists of three sub-faculties: nutrition meant as self-maintenance, growing (and diminution) of the body, and reproducing. These functions of the nutritive soul-part can be distinguished on account of there being different *clusters of activities* to which these functions correspond.[130] That is, the nutritive soul-part can be *divided conceptually* to these sub-faculties, which however do not and cannot exist in separation of each other.

type of reproducing activity than the reproduction of plants, and certainly it is to be explained by having perceptual soul in addition to nutritive. Cf. Wedin 1988. 10-12. Johansen 2012. 276-286, in admitting this, suggests that Aristotle turns to a more holistic view of parts in his biological works, though this does not affect the definition of the parts or the project of *DA*. Everson 1997. 60-78, 139-156 argues that the capacities require a whole physiological system as a whole to operate, cf. Gregorić 2007.40-51; Kahn 1966.

[128] Aristotle *DA* 2.4. 415b8-28; cf. Alexander *DA* 24.11-15. From the general account of the soul in *DA* 2.1 it is obvious that the soul is *formal cause*; also that it is final cause for the body, because the body/matter is determined by the function it should serve – i.e. by the form. Again, it is arguable that it is efficient cause, most clearly of nutrition see e.g. *DA* 2.4. Cf. e.g. Johansen 2012. 11-19, 128-145; although Frede M 1992 argues that this would involve that the soul is an agent that does something. The most problematic claim is the efficient causality of the perceptual capacity, for perception is primarily an affection triggered by the perceptible object. Johansen 2012. 137-145 argues that the perceptual capacity is a *contributing efficient cause*, insofar as it is 'highly informed with the perceptible object'. What he means is that the perceptual capacity is mainly developed through the efficient causality of the individual animal`s (nutritive) soul when it was in foetal state. And the triggering effect of the perceptible object could not be effective unless the capacity is present in its developed state, in a high level of potentiality to perceive. In short, Johansen considers the *readiness* for perceiving as contributing as efficient cause.

[129] The causal role of faculties is emphasized by Marmodoro 2014; Johansen 2012. esp. 73-92; Everson 1997; Wedin 1988. In general, it might be said that faculties are causal powers either to act or to be acted upon, i.e. to initiate change (*kinēsis*) or to receive it, cf. Aristotle *Met.* Δ12, Θ1.

[130] The maintenance-function involves taking in nourishment (food and drink), digesting it in turn, thus transforming it into the materials of the body, transporting the transformed materials to the appropriate place, incorporating the materials into the body, etc. The point is that the other functions, growth and reproduction involve *different activities and processes*. On the relationship between the sub-faculties of the nutritive part see Sect. 3.1.2.

At the top of the hierarchy, there is the rational part of the soul, *logos*, thinking (*nous*),[131] *DA* 3.4-8.[132] It is responsible for several activities: inference (*syllogismos*), calculation (*logismos*), reasoning (*dianoia*), deliberation (*bouleusis*), practical thinking (*phronein*) opinion (*doxa*), supposition (*hypolēpsis*), contemplation (*theōria*), etc.[133] What is common in them is that all these activities involve some reasoning or inferential relations.[134] The most estimable kind of these aims at grasping and knowing true propositions, whereas others just approximate this. Again, *EN* 6.1. 1139a3-15 (cf. *DA* 3.9-11) distinguishes theoretical functions from practical ones depending on whether the object is necessary or contingent (cf. Sect. 5.2.2).

Finally, in between, the perceptive soul-part defines the animal, *DA* 2.5-3.3. This again has sub-faculties, the five special senses, into which the perceptual soul can be divided conceptually. In this case, Aristotle complicates the issue. Even though animal is defined by the special senses,[135] they are able to perform far more diverse and complex activities than simply perceiving proper perceptibles.[136] Thus Aristotle posits further devices that enable animals to do these things. *Common sense* (the senses used not separately, but together as forming a unity) makes the animal capable of perceiving more than one object simultaneously, being aware of its own activity of perceiving, being awake or sleeping, etc. (see Sect. 5.1.4). The common sense is not a separate faculty independent of the five senses, rather it is constituted of them: conceptually divisible into them. Moreover, there are even more phenomena that the perceptual part can explain. By invoking a *further activity* of the perceptual faculty, the process labelled as *phantasia*, Aristotle is able to account for the wide range of psychic phenomena mentioned earlier. Even if phantasia should be taken as a capacity, it remains to be *highly dependent on perception*, although I prefer interpreting it as not being a capacity (Sect. 3.1.3).

[131] On the rational part of the soul in Aristotle see e.g. Wedin 1988. 160-208; Modrak 1987. 113-130; Charles 2000. 129-146.

[132] Even though it is treated as part of the soul, its status as natural capacity is threatened by its peculiarity that it does not have a bodily organ (notwithstanding it is dependent on bodily processes through phantasmata). Cf. Johansen 2012. 226-245; Wedin 1988. 172-177.

[133] *EN* 6.3 identifies five types: knowledge (*epistēmē*), treated in that chapter; technical expertise (*technē*), *EN* 6.4; practical thinking, *EN* 6.5; intellect, *EN* 6.6; and wisdom (*sophia*), *EN* 6.7.

[134] See e.g. Miller 2013; Johansen 2012. 221-226; Osborne 2000. 253-257; Sorabji 1992. 200, cf. 1993. 67-71, 78-93. There is a close relationship between *logos* and language, cf. Labarrière 1984; but Wedin 1988.141-159 argues that *logos* as reason and discourse is the more fundamental in Aristotle.

[135] On perceptibles and the role of proper perceptibles in defining the senses see Sect. 5.1.2.

[136] Johansen 2012. 170-198; Modrak 1987.

It can be seen that Aristotle needs quite few faculties of the soul to explain all psychic phenomena: only three parts are sufficient to distinguish the kinds of living being and explain their respective behaviour. When it comes to more specific phenomena, he is able to make further *conceptual* divisions to provide appropriate explanations. Moreover, he has the further tool of identifying *secondary activities* of faculties that enables him to explain even more diverse phenomena than those in virtue of which the parts themselves are defined.

As we shall see (Sect. 3.3), Alexander modifies this scheme considerably. He proposes a sort of *independence* or *autonomy* of the different capacities constituting the soul-parts. He admits that the soul is divisible into three parts which define the different kinds of living being, but he conceives of these parts as a *collection* of interrelated, though fairly *autonomous capacities*. That is, Alexander seems to adopt the division into parts of soul as *taxonomic division*, but he offers a different relation between a part and its capacities.

The clearest example of the difference between Alexander`s and Aristotle`s accounts is the perceptual part of the soul. Phantasia for Aristotle is not a capacity, but a further activity of the perceptual part. For Alexander phantasia is a distinct capacity of the perceptual part. This implies that phantasia can function autonomously, being concerned with its distinct object. Thus, Alexander restructures the perceptual part of the soul considerably, and (partly) as a result of this he revises the status of capacities as having a sort of autonomy, and thereby reconsiders the type of division that is operative in distinguishing capacities, see Sect. 3.3. The next step is to consider the identity criterion of a faculty or capacity.

3.1.2. The identity of a capacity: Object Criterion

In case of cognitive[137] soul-parts (perception and intellect) the different capacities are distinguished just as the sub-faculties of the nutritive part: by different clusters of *activities*. These activities involve their own *objects*, to which the activities are directed. So two different cognitive capacities will have different objects, hence they might be distinguished by reference to their respective objects. Notwithstanding, for Aristotle, there are objects of non-cognitive capacities too. The capacity of nourishing is indeed defined through the identification of its object: nutriment – though it is rather complicated to identify it (see below). Since my thesis concerns *cognitive* capacities (actual and putative) – perception and phantasia – I formulate the

[137] I use 'cognitive' in the sense of receiving or processing some information (mainly about the environment), irrespective of the wider goal of the item – e.g. in producing knowledge or in action.

identity criterion (Object Criterion)[138] for them (bearing in mind that a case may be made for including non-cognitive capacities as well[139]):

OC: Two cognitive faculties of the soul, A and B, are different if and only if the characteristic object of A is different from the characteristic object of B.[140]

OC depends on Aristotle`s methodological principle: the Faculty/Activity/Object condition (FAO).

FAO: A cognitive (or any) faculty of the soul is to be identified by prior identifying the activity the faculty is for. An activity is to be identified by prior identifying the object with which the activity is concerned.

It is not my aim here to assess the theoretical merits of this methodological principle. I do not even try to analyse it any further. My point is only to stress that Aristotle takes FAO so seriously that he pursues his enquiry on the soul according to the manner it implies. He proceeds from identifying the objects, then describes the activities concerned with these objects, and finally states which capacities are operative in the activities. Thus he proposes a *tripartite scheme* for any capacity: the *capacity* itself, its characteristic *activity*, and the characteristic *object* (cf.

[138] This criterion Aristotle most probably inherited from Plato, who e.g. distinguished opinion and knowledge insofar as the objects of the first are contingent things, the object of the second are necessary (*Republic* 5. 477c-478c).

[139] Johansen 2012. 93-115 emphasises that OC obviously applies for nutrition. For one thing, FAO is introduced in discussing nutrition, *DA* 2.4. However, apparently the core case is cognitive capacities, which are treated as relative to their object, cf. Aristotle *Met.* Δ15. 1021a28-b3; cf. Alexander *in Met.* 324.34-325.7, 402.8-14, 406.25-407.1; cf. Dooley 1993. 161-165; cf. For an argument for the priority of object from the priority of agent see *in Met.* 315.36-316.11; Everson 1997. 103-137; Broackes 1999; compare Marmodoro 2014. 91-102.

[140] On this principle in Aristotle see e.g. Everson 1997. 22-29. Modrak 1987. 29-32 derives FAO from the principle according to which a faculty is potentially what its object is actually, for the actuality is prior epistemologically than the potentiality. Wedin 1988. 11-18 restricts OC to cognitive capacities (or one might say he does not consider the nutritive part, not being interested in it), connecting definitional priority to priority in actuality. He focuses on *efficient* causal (cf. Everson 1997. 30-55) and temporal priority, though acknowledges the importance of formal account. Observing that unlike the perceptual soul (which is passive) the nutritive part is the active, efficient cause of nutrition by acting on the food in digestion, Johansen 2012. 93-106 connects the definitional priority rather to the *formal* cause. I shall discuss the sense of object operative in the definition of capacities in Sect. 4.2.1 and 5.1.3, focusing on cognitive capacities, esp. perception and phantasia – hence emphasising efficient causality, but eventually I acknowledge formal and final causal explanations too. And since the formal cause in general comprises the final and the efficient too, there is no huge difference. Indeed, Johansen 2012. 134-137 acknowledges that the object of nutrition (=nutriment) has some efficient causal efficacy on the body as an instrument of the nutritive soul.

Sect. 2.1). Hence for Aristotle there cannot be a distinct faculty unless there is a distinct characteristic object of it (OC).[141]

Aristotle introduces FAO in *DA* 2.4, before his account of nutrition *DA* 2.4. 415a14-22 (cf. *DA* 1.1. 402b9-16). He uses FAO to define the nutritive part, and it can also serve to distinguish several capacities of the nutritive part itself (*DA* 2.4). He does so with the perceptual part too (*DA* 2.5-12), though providing a more complicated story. It both requires a preliminary specification of the kind of change involved in perception (viz. a sort of alteration) (*DA* 2.5), and the identification of the kind of object that may serve as defining any perceptual capacity (*DA* 2.6; cf. Sect. 5.1.2). Moreover, the object of perception comes in five irreducible types, that in turn define five special senses (*DA* 2.7-11); so that the perceptual part is divided from the start. Notwithstanding Aristotle made efforts to provide unity for the perceptual part – by clarifying its object in general in *DA* 2.12; by showing that it may have its further functions only if it is a genuine unity in *DA* 3.1-2 (cf. *Sens.* 7; *Somn.* 2);[142] by identifying its goal (*telos*) in *DA* 3.12-13 – but he did not do this in terms of identifying one type of object (cf. Sect. 5.1.4). A somewhat less clear-cut application of FAO may be seen in his treatment of the intellect as well (*DA* 3.4-8); and certainly in discussing the locomotive capacity (*DA* 3.9-11).

Since FAO is applied not only to distinguish parts of the soul (by dividing it taxonomically), but capacities of parts too, the questions arises (1) what is the relation between a soul-part and one of its capacity; and (2) among the different capacities of one and the same soul-part. (1) I suggested that a soul-part may be *conceptually* divided into capacities. For there are several non-overlapping ranges of activities that can be identified in the phenomena the given soul-part is to explain. These activities, again, involve their own objects, as FAO requires. But conceptual division is different from taxonomical division. This implies not merely that the capacities *may not be defined* without reference to the part of which they are capacities, or that they *may not exist apart* from the part, but also that they *do not operate in themselves*, they are not the subject of their activity in their own right; rather it is the part in virtue of which the characteristic activities of the capacities are executed.[143] Hence the

[141] Since OC follows from FAO, and Aristotle formulates FAO explicitly, herefrom I use 'FAO' for both principles.

[142] Marmodoro 2014. 199-211 argues that the unity of the common sense must be explained metaphysically, and that it is a further capacity beyond the five senses; not merely a common capacity of all, as Johansen 2012. 183 or Gregorić 2007. 205-206 take it.

[143] Strictly speaking it is not a soul-part or the soul itself what is responsible for doing the activities, but the composite animal *in virtue of its soul*, Aristotle *DA* 1.4. 408a34-b18. My point is only that the part is more properly called the subject than the capacity.

capacities are *aspects* of the parts – the parts considered in a certain way.

(2) Since the division of parts into capacities is different than the division of soul into parts, the relation among the capacities should be different than the relation among the parts. The soul-parts form a hierarchical series (see Sect. 3.1.1); the capacities of the parts do not. All capacities are found in all living beings that have the kind of soul-part the capacities are capacities of. That is, if a soul-part A is divisible into capacities A1, A2 and A3 (and not others); a kind of living being that has A *ipso facto* has all of A1, A2 and A3. This is the clearest in case of the nutritive part, and the most problematic for the perceptual, as I show below.

The capacities of the nutritive part – nutrition, growth and reproduction – are conceptually different capacities, but identical on the general level of the part. They are different, since they have their own characteristic objects. These objects, however, have a common or general feature that makes them the one object of the nutritive part[144] – let this be the kind of material similar to the material of the living body.[145] The three activities and capacities differ in that they *are related to this object in different ways*, hence thereby having different objects on a more specific level of description. Nutrition is the capacity that creates this kind of material through its activity and maintains the individual with it. Growth is the capacity that increases the size by adding this kind of material to the body. And reproduction is the capacity that from this kind of material creates the seed that has the appropriate form.[146] These capacities are required for the production of individuals of the species, for its development and for its persistence through maintenance. Thus, the three capacities are found in all beings that have the nutritive part.

[144] One might argue that it is not the unity of the object on a general level that unifies the nutritive part, but rather the goal of the activities, the *final cause*: all of these life-functions are for the sake of maintaining the kind of living being through maintaining, developing the individual, and producing a similar one. Cf. Menn 2002. 117-127.

[145] It is quite difficult to identify this unitary feature. According to Johansen 2012 100-111 the one object is the nutriment that already has the *form* of the living being, for the defining object is the *formal cause* of the activity concerning it (i.e. the material that has been transformed from the food into the proper material of the living being – such as blood in blooded animals), cf. *DA* 2.4. 416b11-20. Alternatively, the object might be taken to be the food, the 'unlike', the material before digestion, as having the capacity to be transformed into the matter of the living being. For my claim it suffices if there is a single account of this unitary object, no matter what it is exactly.

[146] The most difficult task is to identify the object of reproduction. Probably it is the seed that is created in the reproductive process (and in case of females the menstrual blood – or its analogue in bloodless animals – serving as the matter for the embryo). Johansen 2012. 107-110 emphasises the difference between nutrition and reproduction as producing the kind of form within one individual and in another.

Moving to perception, we find a more clear case of adopting FAO, but also a problem for conceptual division. Defining perception through defining the different special senses – by the five distinct types of proper object – is reminiscent of defining soul through defining the parts of it. Indeed, there is a sort of hierarchical relation among the senses too, for touch is separable from the distance senses, and exists alone in most basic stationary animals.[147] This poses the problem. It seems that touch and the distance senses (collectively) on Aristotle`s criteria (see Sect. 3.1.1) should not be capacities of the perceptual part, but two parts of the soul on a par with the nutritive and rational parts. So that there would be four general kinds of living being – plants, stationary animals, locomotive animals, and humans – defined by the four parts: nutrition, touch, distance senses, and intellect. Aristotle does not have a neat answer to this worry.

As I mentioned, Aristotle moves towards a general description of the object of perception after he has defined and described in the appropriate detail the five special senses. He identifies a common characteristic of the activity of perceiving: 'receiving the perceptible form of the object without (its) matter' (*DA* 2.12. 424a18-19).[148] The idea is that both the contact senses (touch and taste) and the distance senses are concerned with perceptible forms of external things, though with different aspects of it. Thus, just as in case of the nutritive part, there is a general description of the object that applies to the part, and it has five different special cases defining the capacities. To apply this for the problem, it could be said that touch is not a part of the soul but a capacity of the perceptual part, for it may not be defined without reference to the perceptual part, since its object – the tangible – is a kind of perceptible object, i.e. an aspect of the perceptible form. But this solution is inadequate, for it is circular. For it is the perceptual capacity which is defined through defining the special senses, not *vice versa*.[149] In contrast to Aristotle, as we shall see, Alexander`s account of the issue might be construed quite simply (see Sect. 3.3). I think that at the end we should adopt this account for Aristotle too, although his framework of division makes its formulation difficult.

[147] Aristotle suggests that some animals that have only contact senses (touch) may move, though indistinctly, *DA* 3.11. 433b31-434a5. For the sake of convenience I use 'stationary animal' as equivalent with 'animal having merely touch'.

[148] δεκτικὸν τῶν αἰσθητῶν εἰδῶν ἄνευ τῆς ὕλης. The interpretation of this locution is quite problematic, the discussion of it would require a separate study. Just to mention one pressing issue: it is not uncontroversial whether this refers to the material account of perception or to the formal. This obviously makes a huge difference. Cf. Sect. 5.1.4.6.

[149] Cf. Aristotle *Met*. Z10. 1035b4-25 for the claim that parts of the definition of the form are prior to the definition of the whole form; cf. *in Met*. 386.31-38.

Now, the five special senses, differing according to their characteristic objects, make up the perceptive part of the soul. Again, these special senses can perceive the other types of perceptible objects as well (or at least some of them). For one can see a circular shape – *common* object – and one can see Diares` son – *accidental* object (provided that one knows him).[150] Thus even though the special senses are defined as capacities for perceiving one or another proper perceptible, they can do other things as well in virtue of being senses, namely they can perceive the other types of perceptibles.

What the special senses are unable to do by themselves, i.e. in virtue of being the special sense they are (e.g. being sight), is quite a few further functions of the perceptual faculty subsumed under the name common sense.[151] Common sense is by no means a distinct capacity on a par with the special senses. Aristotle proves this by showing that there is no logical space or physical device for a further type of proper perceptible and special sense beyond the five, *DA* 3.1. It is rather the perceptual capacity of the soul in virtue of being a *unity*; in contrast to the special senses that are the perceptual capacity of the soul in virtue of being *related to one type of object*, and also *one type of sense-organ*. For the moment we need not go into the controversies about common sense, see further Sect. 5.1.4.

Aristotle is certainly not unique in adopting OC, though his application of FAO is significant. Alexander follows Aristotle in this. He also puts forward FAO and pursues his account along its lines. He discusses FAO before his treatment of the nutritive part, claiming that it depends on the more general principle that everything must be understood from things that are *more clear*. And since the activity is more clear than the capacity, and the object is more clear than the activity, FAO should be followed (*DA* 32.23-28, 33.7-9). The same conclusion follows from the fact that the object is *prior in definition* than the activity, which is prior than the capacity (32.28-33.11). Alexander`s procedure is even more meticulous than Aristotle`s.[152] Alexander in almost all cases explicitly characterises the objects, comments on the type of activity concerned with the object, and states that the capacity is such. His procedure in case of phantasia, however, is somewhat peculiar, as we shall see in Sect. 3.2.1.

[150] On accidental perception see Sect. 5.1.2.1.

[151] The term 'common sense' is not Aristotle`s, cf. Gregorić 2007. 65-125. It is used by commentators (ancient and modern) to designate the item in virtue of which the animal (the soul) is capable of those further functions.

[152] He even repeats FAO before turning to the objects of perception, *DA* 40.15-19; cf. *in Sens.* 41.15-21.

FAO is particularly important to deny the capacity status for phantasia in Aristotle, and affirm it in Alexander.[153] According to Aristotle it is an additional process (*kinēsis*) of the perceptual part, which enables the animal to do and suffer further things. My aim in the next section is to motivate that this interpretation of Aristotle is plausible, without attempting a thorough defence of it. Rather, my account summarises and builds upon the interpretation of Johansen 2012.[154] I reject, in addition the suggestion that *phantasmata* could serve as objects of phantasia.

3.1.3. Aristotle – no distinct object for phantasia

For the first sight it might seem that Aristotle in *DA* 3.3 distinguishes phantasia as a separate cognitive faculty. This is suggested by his procedure of systematically distinguishing it from the cognitive capacities of the soul. Now I am to show that phantasia should not be taken as a capacity in Aristotle. First, even though he does not call phantasia a capacity (*dynamis*),[155] this proves nothing in itself. However, as I have adduced, (1) he does not posit a distinct object for phantasia – not using the term for it: *phantaston* (Sect. 2.1).[156] Rather, he emphasizes that the object is shared with perception[157] – they have the same three kinds of object (*DA* 3.3. 428b17-30) – or rather phantasia occurs 'relative to objects of perception'[158]. They are *similar in content*[159] (*DA* 3.3. 428b12-14, 429a4-6), they are concerned with the *same perceptible form* (*DA* 3.2. 425b23-25). This is reinforced by the account of memory, claiming that the *phantasma* retains what is perceived, and is an affection of the common sense (e.g. *DM* 450a11-14), as well as by the account of dream, and illusion (e.g. *DI* 3. 461b22-29; 2. 460a32-b3).

[153] Wedin 1988. 255-259 adds the case of Chrysippus and Proclus, who posited a faculty of phantasia with emphasising that there is a type of object that defines it, i.e. *phantaston*.

[154] This does not imply that I agree with everything he claims, but these are mostly irrelevant for now.

[155] Although he uses the term with the faculty-ending: *-ikon*, i.e. *phantastikon*; but from this no conclusion can be drawn, see note 60. Again, Aristotle`s introduction to *phantasia* (*DA* 3.3. 428a1-5) is often taken as implying that it is a capacity by means of which we have *phantasmata*. But as Johansen 2012. 200-201 shows this is only one option left open by the passage; cf. Wedin 1988. 47-49.

[156] Cf. Wedin 1988. 59-63.

[157] Johansen 2012. 202-203; cf. Nussbaum 1978, Schofield 1978. 256-266, Everson 1997. 17-30. Caston 1996, 1998a argues that the content of phantasia is a token of the perceptible type, whereas perception is about a given individual of a perceptual type, yet the intentional object is a perceptual type in both cases.

[158] Wedin 1988. 26-28.

[159] Cf. Wedin 1988. 24-28; Modrak 1987. 81-107. Cf. *DA* 3.3. 428b17-29. The similarity might be interpreted differently: it might involve the similarity of the phenomenal character of the states: probably that both are pictorial in appearing, as Caston 1996. 47-51, although he argues that similarity of character depends on similarity of causal powers. Or it may mean that both perception and phantasia are able to cause action, cf. King 2009. 57-60.

Hence phantasia fails to meet the most important condition of capacityhood: FAO. Even though this fact in itself is sufficient to demonstrate that phantasia is not a capacity,[160] I cite further reasons from Johansen 2012 to reinforce the conclusion. Even if one sticks to the claim that there must be a capacity the activation of which is phantasia, i.e. a phantasia-capacity, I submit nonetheless that it is by no means a distinct capacity from perception – though I prefer saying that it is not a capacity at all. Let us now see the further reasons to deny capacity-status, and then dismiss the suggestion according to which there are objects of phantasia: the *phantasmata*.

(2) Johansen 2012. 202 cites the claim that *phantasia* is a change (*kinēsis*) (*DA* 3.3. 428b10-17) – an incomplete activity – not a capacity for a change.[161] Surely, this could involve a corresponding capacity of phantasia. But Aristotle insists that phantasia is the result of the perceptual-change or the activity of perception.[162] So phantasia seems to be a *further activity* or process of the perceptual capacity, rather than an activity of a distinct further capacity.[163]

Again, (3) phantasia has no *final cause* of itself (Johansen 2012. 205-210). It is for perception to be useful (a) in locomotion/action and (b) in thinking in rational beings.[164] (a) Phantasia presents the object of desire or avoidance – by anticipating *future* pleasure and pain – that triggers desire or avoidance and in turn the motion of the animal (cf. *DA* 3.9. 433b27-30; 3.10. 434a3-5; *Mot*. 8. 702a15-19). Even though perception sometimes is sufficient to motivate e.g. selection of food – for the relevant pleasure is presently perceived – but it is unable to motivate any locomotion. Hence, phantasia is for making animals capable of locomotion, making the perceptual capacity useful in serving locomotion (Johansen 2012. 210-218). It might be agreed that phantasia is required in cases when the object of desire is not present – e.g. the animal is seeking food – but I do not see compelling reason to require phantasia when the food is being perceived.

Further, (b) phantasia plays a crucial role in concept acquisition, making contents

[160] See e.g. Wedin 1988.

[161] Cf. Turnbull 1994.

[162] This might be articulated as: the objects of phantasia are not the agents that bring about phantasia-activity, cf. Everson 1997. 167n61 – i.e. not causal objects, cf. Sect. 4.2.1. But since what defines a capacity is its causal object, this amounts to saying that phantasia is not a capacity, *pace* Everson.

[163] One problem may arise here. It seems that not only phantasia is a *kinēsis*, but *phantasma* as well. For *phantasmata* are clearly affections in the body (see below). Probably it should be said that whereas *phantasma* describes the phantasia-activity in physiological terms, phantasia picks out the appearance-aspect, the content. But there does not seem to be a clear-cut distinction between the uses of the terms. Wedin 1988. 39-63 argues for such a distinction, identifying *phantasmata* as representational structures acquired through phantasia-change.

[164] Cf. Turnbull 1994.

available for accumulation and further processing in the absence of the perceptible things (cf. *AnPost*. 2.19; *Met*. 1.1). Moreover, in thinking about general features one must have a *phantasma* present to oneself from which the irrelevant particularities may be abstracted (*DM* 449b30-450a13). *Phantasmata* are required for all thinking (*DA* 3.8. 432a3-10). In short, perception is useful for thinking by means of phantasia. (Johansen 2012. 218-219).[165]

One might argue that Aristotle does posit distinct object for phantasia: *phantasmata*. Accordingly in any act of phantasia there is (at least) one *phantasma* to which phantasia (or a capacity grounded in phantasia, such as memory) is *directed immediately*. It follows from this that phantasia may be directed to the external things just indirectly, through *perceiving* its immediate object: the *phantasma* (*DM* 1. 450b14-18, 28) which is in the soul (*DM* 450b7-11; *DA* 3.7. 431a14-17). Roughly, this is the claim.[166] As we shall see this seems to be close to Alexander`s theory.[167] Or the interpreter could say: to Alexander`s interpretation. Thus, since Alexander has a high prestige as a truthful Aristotelian commentator, this interpretation seems to be tenable. In the remainder of this section I would like to show that it is not.

First, as I have noted above, Aristotle emphasized that as long as we talk about the object of phantasia, it is the same as the perceptible object (*DA* 3.3. 428b12-13). This makes it functional for him: in many cases when the external object is no more present a mental state can yet be directed at that object. This happens in memory and also in thinking. It might be agreed that if the mental state has *content*, there must be something – a *representation* – that makes this possible. But as Aristotle observes, the intentional object of the mental state is not the representation itself (at least normally), but rather the thing that is represented by that representation. He poses the problem for memory:

[165] Johansen 2012. 204-205 adds (4) that phantasia is not an efficient cause, but an effect of perception, an affection (*pathos*), cf. Wedin 1988. 49-50 on *DA* 3.10. 433a20-21. But we can add that the efficient causal efficacy is problematic for the perceptual capacity as well, as I remarked in note 128. However, phantasia seems to be an efficient cause of certain affections and activities of the animal (*DA* 3.3. 428b16-17). And it is argued by Caston 1996. 47-51, 1998a 272-279 that *phantasmata* are secondary causal powers to produce appearances whose phenomenal features are determined mainly by the perception which created them originally and partly by the distorting effects during their presence in the animal body. I return to this issue at the end of this section.

[166] E.g. Bloch 2007. 61-70; Modrak 1987 esp. 7, 81-108, 2001. 227-239; Sorabji 1972. 14-17. Again, Wedin 1988 and Frede D 1992 argue that Aristotle did take *phantasmata* to be images. Invoking mental images, though, suggest to consider them in turn as object as it is apparent in Themistius, cf. Todd 1981.

[167] This agrees with the crucial point of Alexander`s account that phantasia has a distinct object, hence it is a distinct capacity. But from a closer inspection it turns out that the internal object of phantasia for Alexander is not an intentional object (despite the fact that it is described as 'perceptible'), i.e. phantasia is *not directed at its object*; but rather its object is *causal object* serving to trigger the activity of phantasia and to provide content for it. See Chap. 4.

> But if this is the sort of thing that happens in the case of memory, is it, then, this affection that one remembers, or the object from which the affection came to be? For if we remember the affection, we would not remember anything that was absent; but if it is the object, how do we, in perceiving the affection, remember the absent object, which we are not perceiving? And if the affection is something similar to an impression (*typos*) or an inscription (*graphē*) in us, why should the perception of this be memory of something else, but not of this itself? For the man who actualizes his memory contemplates this affection and perceives this.[168] (Aristotle *DM* 1. 450b11-18)

The affection referred to here is presumably a *phantasma* generated by perception. Aristotle has already mentioned the similes with picture (*zōgraphēma*) and impression (*typos*) (*DM* 1. 450a27-32, see Sect. 2.2). The first simile presumably should be understood as illuminating the phenomenological character of the state: a state involving phantasia appears to be similar to a picture; which character is probably inherited from the perception from which the *phantasma* came it be. But the second simile is used in a physiological account describing the *causal mechanism* involved in memory (*DM* 1. 450a32-b11). Phantasma, as an impression, can *preserve the perceived form* and is *capable of reproducing the information* later if needed and the required conditions are appropriate. It seems to be plausible to claim that a *phantasma* represents an object that is its causal ancestor, precisely because of this causal relation (being *typos*), while it has a perceptual character (*zōgraphēma*) (when it appears to the animal) resembling the phenomenology of the original perception.

Aristotle`s solution to the problem is that the *phantasma* is something in itself – a physiological movement[169] –; though besides this it is something different – an *image* (*eikōn*) *of another thing*[170]:

> For just as the picture painted on a board is both a picture and an image, and this – being the same and one – is both, although the being is not the same for both, and just as it is possible to contemplate it both as a picture and as an image, so it must also be

[168] ἀλλ' εἰ δὴ τοιοῦτόν ἐστι τὸ συμβαῖνον περὶ τὴν μνήμην, πότερον τοῦτο μνημονεύει τὸ πάθος, ἢ ἐκεῖνο ἀφ' οὗ ἐγένετο; εἰ μὲν γὰρ τοῦτο, τῶν ἀπόντων οὐδὲν ἂν μνημονεύοιμεν· εἰ δ' ἐκεῖνο, πῶς αἰσθανόμενοι τοῦτο μνημονεύομεν οὗ μὴ αἰσθανόμεθα, τὸ ἀπόν; εἴ τ' ἐστὶν ὅμοιον ὥσπερ τύπος ἢ γραφὴ ἐν ἡμῖν, ἡ τούτου αἴσθησις διὰ τί ἂν εἴη μνήμη ἑτέρου, ἀλλ' οὐκ αὐτοῦ τούτου; ὁ γὰρ ἐνεργῶν τῇ μνήμῃ θεωρεῖ τὸ πάθος τοῦτο καὶ αἰσθάνεται τούτου.

[169] Wedin 1988. 138-140 argues that the phantasma represents an abstracted form in itself, just as a picture is about animal in general, not about a particular animal. But then it is difficult to see why memory would be of intelligibles only accidentally, cf. *DM* 1. 450a10-14.

[170] Everson 1997. 193-203 argues that a picture as well is of something else, though this does not imply that something has brought it about, as in case of an image.

> supposed that the phantasma in us is both something in itself and of something else. Thus, qua something in itself, it is a contemplation or a phantasma, and qua being of something else it is something like an image and a memory impression.[171] (Aristotle *DM* 1. 450b20-27)

This other thing is the object of memory, the content and cause of the *phantasma* (cf. *DM* 450b27-451a2). This passage shows also that there is no place for a distinct object of phantasia. It has an object, i.e. it is an image (*eikōn*) only insofar as it occurs in a memory-state. Hence there is no place and no need for a different object beyond the external object that caused the perception from which the *phantasma* came to be in the first place.[172] In other words, phantasia is not an activity of a faculty on its own; rather it occurs as the *causal mechanism* supporting representation of the external (past) object in remembering.[173] The *phantasma* is *in us* not on account of being a mental object, but *qua* a physiological movement (i.e. process) in our body. The *phantasma* is rather the means by which representation is supported, the having and appearing of which constitutes memory.[174]

Thus, the case of memory shows that if phantasia had a different object than that of perception, yet memory were explained in terms of phantasia, memory as such would not even be possible. For then we could only remember something present (viz. contemporaneous with remembering it). This is clearly not what we mean by remembering or memory.

To be sure, Aristotle`s phantasmata could be seen, for the first sight, as internal objects of perception. Aristotle did speak about *phantasmata* as if they were internal images of things, which seem to be mental objects. E.g. in the case of recollection, someone chases them (*De Memoria* 2 453a10-14),[175] or in dreams there is no obvious external object. In both cases, however, Aristotle has a physiological story to tell, that can explain why and how these motions

[171] οἷον γὰρ τὸ ἐν τῷ πίνακι γεγραμμένον ζῷον καὶ ζῷόν ἐστι καὶ εἰκών, καὶ τὸ αὐτὸ καὶ ἓν τοῦτ' ἐστὶν ἄμφω, τὸ μέντοι εἶναι οὐ ταὐτὸν ἀμφοῖν, καὶ ἔστι θεωρεῖν καὶ ὡς ζῷον καὶ ὡς εἰκόνα, οὕτω καὶ τὸ ἐν ἡμῖν φάντασμα δεῖ ὑπολαβεῖν καὶ αὐτό τι καθ' αὑτὸ εἶναι καὶ ἄλλου [φάντασμα]. ᾗ μὲν οὖν καθ' αὑτό, θεώρημα ἢ φάντασμά ἐστιν, ᾗ δ' ἄλλου, οἷον εἰκὼν καὶ μνημόνευμα.

[172] See Wedin 1988. 53-54.

[173] The postulation of an activity is connected to the postulation of a distinct object, both of which Aristotle denies, see Wedin 1988, esp. 45-63. Thus Wedin 1988. 55 compares phantasia as an incomplete act to a part of an illocutionary speech act (e.g. referring). Just as referring might not occur by itself, only in the context of an illocutionary act, phantasia may not occur by itself, just in the context of e.g. remembering or thinking. Wedin takes phantasia to be involved also in perception, but his evidence is not convincing. His analysis of perception (p 30-39) seems to support that *aisthēmata* can do the job he assigns to *phantasmata* in perception.

[174] Cf. Caston 1998a 257-263.

[175] But Aristotle immediately specifies that the *phantasmata* are in body, they are bodily movements (*DM* 2. 453a14-16, cf. 453a21-23).

bring about the experiences in question.[176] This shows that *phantasmata* are not the objects in these cases either.

One might insist that even though *phantasmata* are not intentional objects in these and other cases, yet they are the *causal object* for phantasia: they trigger the phantasia-activity and provide content for it (Caston 1996, 1998a).[177] If this were allowed, Aristotle`s theory would be closer to Alexander`s, as I argue in Chap. 4. Even in that case, Alexander`s account nevertheless would be quite systematic compared to Aristotle`s, and most importantly, Alexander could be credited with pointing out the consequence of the fact that phantasia has a distinct object: that it is a distinct capacity. As we have just seen, this is by no means explained clearly by Aristotle.

However, it shall turn out that in Alexander`s account the object of phantasia – *phantaston*, *residue* – has some features that set it apart from Aristotle`s phantasma anyway. (1) Residues are constantly present in the central organ, whereas there are *phantasmata* that travel there only when they appear (Sect. 3.2.2). (2) Most probably residues are physiologically different than perceptual-changes, whereas *phantasmata* are not necessarily (Sect. 4.1.2). Again, it seems that residues are efficient causes of phantasia-states, whereas phantasmata seem to be the physiological changes occurring in mental states that involve phantasia. (3) Even though both residues and *phantasmata* establish causal continuity between external object and mental state directed at it when it is no more present, and both of them preserve the content from perception, but whereas *phantasmata* may be deformed only by physiological changes in the animal body,[178] residues may be manipulated by the soul (the phantasia-capacity) in order to have the appropriate type of content: residues may be completed when some gap occurs in them (Sect. 4.2.3.3). That is, residues may bear representational content independently of perception, whereas this seems not to be the case for *phantasmata*.

Thus, it turns out that the only prima facie candidate for being the object of phantasia in Aristotle is not the object of it, it is rather part of the physiological story that explains that through phantasia the animal/human can have mental states directed at objects not present in the environment.

[176] Aristotle emphasises that dreams ultimately originate in external stimuli.

[177] On the notion of causal object see Sect. 4.2.1.

[178] Cf. Caston 1996, 1998a.

3.2. Alexander: phantasia as distinct faculty

3.2.1. Distinct object for phantasia (*phantaston*)

Let us now turn to Alexander, and start with quoting his statement about distinct objects for phantasia:

> For to the capacity of phantasia the residues that came to be from perception in action are as a sort of internal perceptible objects, as to the capacity of perception the perceptible objects are external.[179] (*DA* 68.31-69.2)

In referring to the object of phantasia Alexander applies the crucial term: *phantaston*; that Aristotle never used (Sect. 2.1). This terminological difference with Aristotle`s exclusion of object for phantasia makes Alexander`s claim significant. Alexander describes the object as a sort of internal perceptible (*tina aisthēta entos*), which is a residue (*enkataleimma*) from perception in action (*kat' energeian aisthēsis*).[180] In order to evaluate the difference in their views and to find Alexander`s motivations for departing from Aristotle`s theory, let me first sketch Alexander`s account and the way he arrives at it.

Alexander first distinguishes phantasia from the judging (*kritikē*; cf. Chap. 5) faculties of the soul (*DA* 66.9-68.4). Thus, phantasia is different from perception, opinion, knowledge and intellect. But Alexander nonetheless treats it as a faculty of the soul on a par with these capacities. We have seen in Sect. 3.1.2 that Alexander, as well as Aristotle, endorses FAO. Hence, for identifying phantasia as a distinct capacity, it requires a distinctive object. Moreover, the definition of the capacity is to be spelt out in terms of its object. This procedure seems to be what Alexander follows. As *perception* is the faculty of the soul that is concerned with the recognition (or judgement, *krisis*) of perceptible things – and as intellect is the faculty that is concerned with intelligibles – so phantasia: it is the faculty of the soul that is concerned with things that can be (let us say) phantasized. This comparison is adduced in the passage invoking the Aristotelian tripartite scheme of faculties (faculty, activity, object; see Sect. 2.1) preceding the previous quote:

> But plausibly [phantasia] is as is the case with perception. For as is the case with the latter, i.e. that there is a perceptible object (*aisthēton*), and a perceiving capacity

[179] ὑπόκειται γὰρ τῇ φανταστικῇ δυνάμει τὰ ἀπὸ τῆς κατ' ἐνέργειαν αἰσθήσεως γινόμενα ἐγκαταλείμματα ὡς ὄντα τινὰ αἰσθητὰ ἐντός, ὡς τῇ αἰσθητικῇ τὰ αἰσθητὰ ὄντα ἐκτός.

[180] Cf. *in Met.* 312.1-5, Sect. 2.2.

(*dynamis aisthētikē*), and[181] also an activity of the capacity concerned with the perceptible object (*peri to aisthēton*), which we call perception (*aisthēsis*), (the same holds in the case of intellection as well […]), it must be supposed that the same holds in the case of phantasia, that there is some object of phantasia (*phantaston*) – this should be the residue that came to be from perception in action, being analogous to the perceptible object and to the intelligible object – and there is a capacity of phantasia (*phantastikon*) – itself being analogous to the perceiving capacity and to the intellect – and there is phantasia – itself being analogous to perception (*aisthēsis*) and intellection (*noēsis*), being the activity of the capacity of phantasia concerning the objects of phantasia.[182] (*DA* 68.21-30)

But this is not the starting point for Alexander, he arrives at this conclusion through two lines of argumentation. First he distinguishes phantasia from the judging capacities (just as Aristotle); second, and most importantly, upon citing Aristotle`s description of phantasia in relation to memory (*DA* 68.4-69.20) he refutes a Stoic account, and thereby posits a distinctive activity of phantasia (*DA* 68.10-21). This move in turn calls for positing distinct object of phantasia, and coordinate phantasia into the tripartite scheme of capacities (*DA* 68.21-30). However, once he has shown the need for this capacity, he starts to describe its object as internal perceptible (*DA* 68.30-69.2); and elaborates the account as object that is no more present[183] (*DA* 69.10-15). Moreover, it is difficult to see what could count as an obvious starting point for distinguishing the object of phantasia (as it is clear for perception and knowledge – the one concerned with particulars, the other with universals). To distinguish the object, he would need to show that it is *distinct* from the object of other faculties, and that it is an object that has a *unity*.

Since it is not peculiar to Alexander to distinguish phantasia from the cognitive capacities, but something Aristotle did as well, we should look for Alexander`s reason to identify phantasia as a capacity in his polemic against the Stoics (*DA* 68.10-21), to which now I turn.

[181] For the addition of δέ by Bruns, see [AD] 241 confirming by Michael of Ephesus *in Parva Naturalia* 3.17.

[182] ἀλλὰ εἴη ἂν ὡς ἐπὶ τῆς αἰσθήσεως. ὡς γὰρ ἐπ' ἐκείνης ἐστὶ μέν τι αἰσθητόν, ἐστὶ δέ τις καὶ δύναμις αἰσθητική, ἐστὶ <δέ> καὶ ἐνέργεια τῆς δυνάμεως περὶ τὸ αἰσθητόν, ἣν αἴσθησιν καλοῦμεν (ὁμοίως δὲ καὶ ἐπὶ τῆς νοήσεως· […]), οὕτως δὲ ὑποληπτέον ἔχειν καὶ ἐπὶ τῆς φαντασίας τὸ μέν τι εἶναι φανταστόν (τοῦτο δ' ἂν εἴη τὸ ἀπὸ τῆς κατ' ἐνέργειαν αἰσθήσεως γινόμενον ἐγκατάλειμμα, ἀνάλογον ὂν τῷ αἰσθητῷ τε καὶ νοητῷ), τὸ δὲ φανταστικόν, ἀνάλογον ὂν καὶ αὐτὸ τῷ αἰσθητικῷ τε καὶ τῷ νῷ, τὸ δὲ φαντασίαν, οὖσαν καὶ αὐτὴν ἀνάλογον τῇ αἰσθήσει καὶ τῇ νοήσει, ἐνέργειαν οὖσαν τῆς φανταστικῆς δυνάμεως περὶ τὰ φανταστά.

[183] It might seem that not all cases of phantasia are concerned with absent perceptibles – notably in illusion – hence this might be taken as an objection to the interpretation I propose, see Sect. 3.4.3.

3.2.2. Alexander`s argument

> It is this sort of residue and this sort of impression that they call phantasia. This is the reason why they define phantasia as imprinting in the soul and as imprinting in the ruling faculty. (A1) But perhaps not the impression itself is phantasia, but rather it is the activity of the capacity of phantasia concerned with this impression. For, if the impression itself was the phantasia, we would be in [the state of] phantasia even when we were not active concerning it, but only having it; and at the same time we would be in as many [states of] phantasiai as many things there were of which we preserved an impression. (A2) Again, they call phantasia either (i) the ongoing impressing (*ginomenēn*);[184] or (ii) the one that already had been completed (*gegonuian*) and exists. But if (i) the ongoing, perception they would call phantasia in action, for perception is the coming to be of the impression. But there are phantasiai also in separation of perceptual activities. And if (ii) the completed and preserved, memory they would call phantasia.[185] (*DA* 68.10-21)

Alexander argues that phantasia can be neither the impression itself (*typos*), nor the imprinting activity (*typōsis*) creating the impression, i.e. the printing process. If it were the *impression* (A1), then one would be in a state of phantasia even without being active concerning that impression, by merely 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 *activity* concerning an impression, it would be either an *ongoing* activity or one that has been *completed*. Alexander claims that neither is admissible, for the first defines perception, the second memory (68.16-21).

Alexander presents this argument as a polemic against *them*, whom we can safely identify as the Stoics.[186] He takes them – after refuting (A1) – to claim that (A2) phantasia is the impressing process that results in an impression, and investigates the possible interpretations of this proposition – (i) the imperfect and the (ii) perfect form. Then he rules

[184] Literally: coming to be, being generated.

[185] I inserted the labels to ease reference. τὸ <δὲ> τοιοῦτον ἐγκατάλειμμα καὶ τὸν τοιοῦτον ὥσπερ τύπον φαντασίαν καλοῦσιν. διὸ καὶ ὁρίζονται τὴν φαντασίαν τύπωσιν ἐν ψυχῇ καὶ τύπωσιν ἐν ἡγεμονικῷ. (A1) μήποτε δὲ οὐχ ὁ τύπος αὐτὸς ἡ φαντασία, ἀλλὰ ἡ περὶ τὸν τύπον τοῦτον τῆς φανταστικῆς δυνάμεως ἐνέργεια. εἰ γὰρ ἦν αὐτὸς ὁ τύπος ἡ φαντασία, ἦμεν ἂν ἐν φαντασίᾳ καὶ μὴ ἐνεργοῦντες περὶ αὐτόν, ἔχοντες δὲ αὐτόν, καὶ ἅμα ἂν ἐν πλείοσιν ἦμεν φαντασίαις καὶ τοσαύταις ὅσων τὸν τύπον σώζομεν. (A2) ἔτι ἤτοι (i) τὴν γινομένην τύπωσιν φαντασίαν λέγουσιν ἢ (ii) τὴν γεγονυῖαν ἤδη καὶ οὖσαν. ἀλλ' εἰ μὲν (i) τὴν γινομένην, τὴν αἴσθησιν ἂν λέγοιεν τὴν κατ' ἐνέργειαν φαντασίαν. αὕτη γὰρ ἡ 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.

[186] I write 'Stoics', for I think we may not identify a particular Stoic view in the background, see Sect. 3.2.2.1.

out both of them. It is noteworthy that some of his arguments closely resemble debates within the Stoic school.[187] Notwithstanding his conclusion for a distinct activity, and hence for a distinct faculty cannot be accommodated within the Stoic framework, which attaches various activities to one and the same faculty: the *ruling faculty* (*hēgemonikon*), that Alexander himself mentions. In what follows I shall summarize the Stoic views on phantasia, focusing on the features relevant to my enterprise here (Sect. 3.2.2.1); then I analyse the argument, identify its presuppositions and evaluate its force (Sect. 3.2.2.2).

3.2.2.1. Overview of the Stoic theory of phantasia

According to Alexander`s argument, the Stoics identified phantasia as imprinting (*typōsis*) in the soul, or rather in the ruling faculty (*hēgemonikon*). This description of the Stoic view is not unreasonable, however it lacks the accuracy and clarity needed in order to evaluate Alexander`s opposition to it. I provide here a summary as uncontroversial as it may be of this much debated issue, focusing on the basic contrast to Alexander`s view, on features relevant to the present argument and other discussions of the Stoics.

Let me start with an overview of the Stoic account of the soul. Accordingly, the soul is the active principle in animal beings, a corporeal entity holding together the body of the creature.[188] Soul, being a principle for several complex behaviours, is a specific kind of stuff: it is *pneuma*. The term pneuma is not restricted to the animals` active principle, every bodily thing has pneuma. (i) Mere non-living things have a low-level pneuma – tenor, *hexis* – that is responsible only for holding the thing together and making it able to be affected by external forces. (ii) In plants a higher-level organization of pneuma – nature, *physis* – is present, that additionally to the former capacity enables plants to grow as well. (iii) Animals have even more complex pneuma that enables them to perform more diverse behavior. The pneuma on this level is called soul, *psychē*.[189]

According to the orthodox Stoic view the soul has eight parts: the five senses, the part for reproduction, the part responsible for producing voice, and the ruling part of the soul

[187] [BD] 315; [AD] 240-241.

[188] Everything that exists is bodily. Each body is constituted of an active and a passive principle. [LS] Chap. 44-45.

[189] On the Stoic view of the soul as body, pneuma and on the scala naturae presented in this paragraph, see [LS] 45C, 53A-B; cf. Chap. 47; *SVF* 1.134-140, 484, 518, 2. 637, 460, 714-715, 774, 787; cf. *DA* 19.6-9, 26.15-17. Cf. Annas 1992. 37-46, 50-56; Inwood 1985. 18-27; Long 1982; Todd 1976a 34-49; Hahm 1994. Additional to the levels of pneumatic organization, humans have reason (*logos*), which is taken to be pneuma on the highest level of complexity.

(*hēgemonikon*) ([LS] 53G, H; *SVF* 1.143, 2.827-828, 830-831). These parts, unlike in the Peripatetic tradition, are separated *locally* ([LS] 53K1),[190] they are most plausibly *distinct portions of the pneuma* ensouling the animal.[191] That is, the seeing part is the pneuma stretching from the heart to the eyes, the hearing part is that stretching from the heart to the ears, etc. ([LS] 40Q; *SVF* 1.150, 151). And the *hēgemonikon* is the pneuma in the centre of the body, in the heart.[192]

Again, the *hēgemonikon* is further divided into a few capacities: the capacity for phantasia, for assent (*synkatathesis*), for impulse (*hormē*) and reason (*logos*) ([LS] K2; *SVF* 1.142; 2.826).[193] All of these dispositions are states of the pneuma in the heart, all of them are the *hēgemonikon* disposed in a certain way (*pōs echon*).[194] By this theory the Stoics are able to account for the unity of the soul of the living being in straightforwardly physical terms.

The *hēgemonikon* is central not only locally, but also insofar as it exerts control over the other seven parts; that is, the other parts can function only as means or equipment making the operation of the *hēgemonikon* possible in the specific way they are for ([LS] 53M; *SVF* 1.141, 2.57). E.g. seeing is not a function that sight – the pneuma stretching from the heart to the eyes – performs alone. Rather, it is the *hēgemonikon* that sees, sight being the physical constitution making this possible. That is, seeing (being aware of visible things) is the ruling part in a certain state (*pōs echon*). More precisely, seeing is an *affection* of the *hēgemonikon* which is due to an affection of the seeing part. What is crucial is that in the explanation of mental states only the *hēgemonikon* – viz. the pneuma in the heart – is relevant, other soul-parts enter into the explanation only of the coming to be of the mental states. Hence, according to the Stoics every mental state, capacity or occurrence, is a disposition or an event (*pōs echon*) of the *hēgemonikon*; other parts serve only as instruments. There is no perceiving without the

[190] Aristotle forcefully argues against spatial separation, *DA* 2.2. 413b16-29; cf. Alexander *DA* 30.26-31.6.

[191] On the Stoic division of the soul see Inwood 1985. 27-33; Annas 1992. 61-70. Cf. *DA* 18.25-19.1; cf. Caston 2012. 102.

[192] The Stoics had several arguments for the cardiocentric thesis; against the best contemporary medical theories, e.g. [LS] 53D, U, 65H; *SVF* 2.836-839; cf. Annas 1992. 20-26, 69-70; Inwood 1985. 38-41.

[193] The account is complicated by the fact that only rational animals (i.e. humans) have all these capacities. Notwithstanding all animals are equipped with a *hēgemonikon*, though non-rational kinds have only phantasia and impulse, [LS] 53P; *SVF* 2.821.

[194] The notion of *pōs echon* (cf. [LS] Chap. 29; *SVF* 2.399-404) is crucial for the Stoics, this allows them to provide a physicalist account of the world, by broadening the scope of bodily entities: covering soul capacities, virtues, knowledge etc. Basically, a given item, x, being in a certain state – i.e. x *pōs echon* – gives further qualifications of a thing already qualified. Cf. Menn 1999; Brunschwig 2003.

ruling part being involved and indeed being the subject of the event.[195]

Perceiving is the *hēgemonikon pōs echon.* Indeed, it is one capacity of the *hēgemonikon* which is involved: phantasia.[196] As noted (in Sect. 2.1) 'phantasia is an affection occurring in the soul, which reveals itself and its cause [a *phantaston*]' ([LS] 39B2). Thus any occurrence of perceiving is actually an occurrence of phantasia, caused by an external object in the environment. Seeing is phantasia when the information about the environment is gathered through the eyes and the object is something visible.

But phantasia is not to be identified with perception. It is broader, perception is only a subset of phantasia, cases when we acquire information from external sources, about the environment, through the senses. 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, [LS] 39A4). These phantasiai are not caused exclusively by external factors, their formation depends on the creativity of the mind.[197] So it might be claimed that according to the Stoics phantasia covers all mental states, in general, that have a content representing something.[198]

Let us turn now to our main concern: phantasia in the sense of *occurring* mental state with content: it is the *hēgemonikon pōs echon*, made possible by the capacity of the *hēgemonikon* for just being in this kind of state – i.e. phantasia. Alexander picks up the definition of this in his argument: 'as imprinting in the soul and as imprinting in the ruling faculty'. This vague description may pick out a general Stoic view, but it is worth noting that

[195] E.g. *SVF* 2. 806, 858. Indeed, all enduring dispositions and all occurring mental states, and in general any affection one has and any action one does – including walking (cf. [LS] 53L) – is the *hēgemonikon pōs echon* (at least for Chrysippus; however even for Cleanthes it is the pneuma in the heart). Cf. Inwood 1985. 36-37. On the Stoic theory of perception see Annas 1992. 71-85, cf. 89-102 on action; cf. Inwood 1985.

[196] Quite a few sources attribute a view to the Stoics, according to which perception (*aisthēsis*) is assent (*synkatathesis*) – or even cognition (*katalēpsis*) – to a perceptual (*aisthētikē*) phantasia: cf. [LS] 40B1; *SVF* 2.72-75. 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, most cases are like this: we usually trust our senses, and follow their report 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, taking into account the ordinary cases, but we must be aware that strictly speaking perception is experiencing a phantasia. Cf. Annas 1992. 75-78.

[197] The status of universals is complicated, for universals are supposed to be *phantasmata*, figments of the mind, without any real object corresponding to them ([LS] 30A1, C2). So it seems that reason also is involved in having concepts.

[198] The Stoics believe that rational creatures (adult humans) have only rational phantasiai, non-rational beings (children and animals) non-rational. This poses a difficulty for identifying the type of content of these states, to which I turn in note 409.

the theory was interpreted differently even amongst the earliest Stoics.[199]

According to Zeno, phantasia is *typōsis* in the soul (*SVF* 1.58; [LS] 39A3). In the literal sense it is *impressing*, physically, just like a seal impresses its *shape* into a piece of wax (see Sect. 2.2 and 4.1.2.1). Presumably the same idea is expressed by Cleanthes, claiming that phantasia is impression involving depth and protrusion (*kata eisokhēn te kai exochēn*) (*SVF* 1.64, 484). This terminology is picked up by Alexander (*DA* 72.5-13), taken to be the basic meaning of impression (*typos*), that finally confines the typos-terminology to be used only metaphorically for Alexander`s favourite item, the *residue*.

This crude theory is rejected by Chrysippus, on at least two grounds. (1) Having a phantasia of two objects with contradictory attributes at the same time would involve the same body (the *hēgemonikon*) having two contradictory attributes simultaneously, which is absurd (*SVF* 2.56 = SE *M* 7.229).[200] (2) Further, it would not allow for having but one impression at a time (*SVF* 2.56 = SE *M* 7.373; cf. [LS] 39A3). For the literal impression of one shape would abolish the literal impression of another, if they are impressed in the very same bodily part. Since impression is taken to be into one body, the *hēgemonikon*, this consequence indeed follows. Moreover, as a corollary, cumulation of phantasiai would be impossible on Cleanthes`s theory. And since memory, according to the Stoics, presupposes many similar phantasiai (*SVF* 1.64; 2.56), memory too would be impossible.

Thus, instead of the literal account, Chrysippus proposes an alternative definition, according to which phantasia is an *alteration* (*heteroiōsis*, *SVF* 2.56; *alloiōsis*, [LS] 39A3) of the pneuma constituting the *hēgemonikon*. This is not a literal impressing, nevertheless it must be a *physical affection*,[201] for there is no room within Stoicism for a non-physical change.

[199] Due to the vagueness of Alexander`s reference I do not aim at identifying ideas of later Stoics.

[200] According to [AD] 240 (cf. Todd 1976a 23) this argument is reiterated in Alexander`s argument at 68.15-16. However, as we shall see, the two reasoning are quite different, cf. Lautner 1995. 35. Rather, this is the same worry as the Problem of Opposites (Sect. 5.1.4.3) bothering Alexander, and earlier Aristotle too.

[201] This is the feature of the change that allows Sextus Empiricus *M* 7.383-387 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. Alexander takes another route to refute this theory, his argument at *DA* 68.10-21 does not depend on the materiality of the change.

Notice that both of Chrysippus` arguments presuppose an interpretation of the theory according to which there might not be several physical parts of the *hēgemonikon*, into which the (even simultaneous) impressing of different or even contradictory qualities and shapes could be distributed without the absurd consequences: i.e. the Indivisibility of the Central Organ (ICO).

ICO Impressions modify the central organ as a whole, rather than parts of it.

This is all the more remarkable, as Alexander`s solution for the problem indicated by (1) Chrysippus` first argument – the Problem of Opposites – for the phenomenon of simultaneous perception, postulates exactly that the central organ must have several parts to receive opposite perceptual movements (see Sect. 5.1.4, esp. 5.1.4.6). In course of his discussion Alexander himself poses the same problem for the Stoic account (*in Sens*. 167.4-9; cf. *Mant*. 4. 118.6-9). Accordingly, the *hēgemonikon* could not be in opposite states at the same time, only successively. For perceiving F is just the *hēgemonikon* being in state F*, and perceiving non-F is just the *hēgemonikon* being in state non-F*; and plausibly as F contradicts non-F, also F* contradicts non-F*; but the *hēgemonikon* cannot be in incompatible states at the same time; hence it is impossible to perceive F and non-F at the same time, *a fortiori* for opposites.[202]

So it seems that despite of his objection to the literal account of impressing, Chrysippus` own solution is liable to the same problem of opposites (at least according to Alexander). The problem for Chrysippus follows from two premises: (1) ICO, and (2) that the kind of modification Chrysippus proposes does not allow that the same thing is modified in different ways simultaneously. Of these, Chrysippus apparently adopts (1) ICO himself. Probably Chrysippus admitted ICO, for he wanted to ensure the unity and simplicity of the soul and its ruling part.[203] Nevertheless he wants to deny (2), 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. Alexander probably believed that the Problem of Opposites is applicable to Chrysippus` doctrine, because the alterations are nevertheless physical changes.

[202] This 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] Chap. 47), that Alexander takes to be successive phases, as Towey 2000. 187n505 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 capacity (cf. *Mant*. 4. 118.29-35).

[203] Cf. Annas 1992. 115-120. Inwood 1985. 33-41 connects the requirement of unity to the Stoic theory of action that should not allow conflict with the *hēgemonikon*; yet at the same time emphasises that the capacities of the *hēgemonikon* are distinct.

3.2.2.2. The argument

Let us start with (A1) the first part of the argument, against the identification of phantasia with the *impression* (*typos*) itself. Alexander here puts forward two unacceptable consequences of the view. The first (PH) claims that we would be in a state of phantasia *without being active* on our part, simply by having the impression. This might seem question-begging, for apparently relies on the fact that phantasia is an activity that we do. But we shall see that it is not that bad reasoning. The second consequence (PH`) is that we would not only be in the state of phantasia simply by having an impression, but we would be in *as many states* – with various content – *as many impressions* we had. This consequence follows from the same premises as the former with an additional claim, which might be seen from the use of 'at the same time' (*hama*). And obviously: if from the fact that s has an impression φ it follows that s is in phantasia-state φ; it is also true that from the fact that s has impressions φ and χ it follows that s is in phantasia-state φ and phantasia-state χ etc. So we may concentrate first on PH, then we can move to PH`.

PH if s has an impression φ, s is in phantasia-state φ

Alexander does not specify what *having an impression* amounts to, but we may extract the sense from his initial account presented immediately before the argument (*DA* 68.4-9, see Sect. 2.1). He claims that the impressions – that he calls residues – are *seated in the primary sense-organ*, i.e. in the heart, as remnants of the perceptual motions that created them. This implies that the residues remain in their place in the heart, without the possibility of moving (see further Sect. 4.1.1). Call this claim the Presence of Impressions (PI):

PI for s to have an impression φ is for impression φ to be present in the central-organ of s[204]

The Stoics accepted PI. As we saw in Sect. 3.2.2.1, impressions – i.e. phantasiai – are the *hēgemonikon pōs echon*, the ruling faculty in a certain state, which indeed applies to every mental state. 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. Note that this is true both for

[204] Both terms: impression and central-organ should be taken as variables. Impressions should not be understood in a specific theory (say the Stoic), but it should cover any item which a theory posits to account for the relevant phenomena: Alexander`s residues or Aristotle`s *phantasmata* included. Central-organ too should cover the Stoic *hēgemonikon* as well as Alexander`s and Aristotle`s primary sense-organ.

Cleanthes` view – which identifies phantasia with the literal *impression* – and for Chrysippus` identification as *alteration* (*heteroiōsis*).

From PI the undesirable consequence PH will follow if it is added that having an impression is sufficient for being in phantasia-state. Thus we may identify the problematic condition as the Sufficiency of Presence (SP):

SP if an impression φ is present in the central-organ of s, then s is in phantasia-state φ

Alexander`s problem with SP is that it leaves the subject without any activity concerning the impression, it requires only a physical item being present. That is, the Stoic account implies that for a psychological state (phantasia) occurring it is sufficient that a bodily item occupies a certain position in the body of the living being. For Alexander this does not constitute an explanation of the psychic phenomenon.

The Stoics also accepted SP. Again, if impression is the *hēgemonikon* in a certain state, the presence of an impression in the appropriate place, in the *hēgemonikon*, already entails the occurrence of the particular state which constitutes phantasia with the particular content. An explanation how a state of phantasia may occur with the relevant content does not require further factors. Again, this applies if the impression is a physical affection taken literally (Cleanthes` account), and also if it is an alteration (Chrysippus` view). What is crucial is that impression is a state of a particular type of the relevant bodily structure.

Now, PH` requires a further premise. It states that we are in as many phantasia-states as many impressions we preserve. Now, a *preserved* impression does not necessarily mean an impression that we *have*, i.e. according to PI 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 – or being preserved in the central-organ may constitute less than being present in it (e.g. it may be present there only *potentially* – to use Aristotelian terminology). To rule out these possibilities, the Constant Presence of Impressions (CPI) has to be supposed:

CPI every impression that is preserved by s is always present in the central-organ of s

As it is clear from the above description of the Stoic view, the Stoics adopted CPI. For impressions may only be in the *hēgemonikon*, so if an impression is preserved, it is in the *hēgemonikon*. It is noteworthy that neither does Alexander himself question the validity of CPI (*DA* 68.4-9, see Sect. 2.1); it has to be seen (in Sect. 3.2.3) why he does so.

Hence, Alexander`s argument works only when these claims are accepted: PI; SP and CPI. Alexander`s solution is to deny SP while admitting PI and even CPI. But let me elaborate

a bit further on these conditions through considering possible denials of them.

Let us recall Aristotle`s account of dreaming: both SP and CPI seem to be denied here. First, Aristotle denies CPI. His *phantasmata* (the items taking the analogue role of impression) are not always in the heart or primary sense-organ (where they can appear), but they are in potentiality somewhere in the vascular system or in the peripheral sense-organs (cf. *DI* 3. 461b11-21); and they are taken (down) into the heart by the movement of the blood in sleep (*DI* 3. 460b32-461a8).[205] But Aristotle also denies SP. Having arrived into the primary sense-organ, the *phantasmata* do not automatically appear, but further physical or *physiological* conditions are necessary to be met.[206] That is, the presence of *phantasmata* is not a sufficient condition for appearing (for the dream-phantasia). Nonetheless the physical conditions taken together constitute a *sufficient* condition, as Aristotle does not mention other factors. This is the crucial point. It follows that for Aristotle no further condition must be met for the *phantasmata* to appear; *a fortiori* there is no need for a specific activity of phantasia.[207] Hence, Aristotle`s account operates on the level of *physiology*. This is not a description of an activity of a faculty – which would be a genuine psychological account. As we can see Alexander requires precisely this: to cite an activity of phantasia in the explanation of why an impression

[205] Even though it is not stated explicitly, but the account is clearly about *phantasmata*. First, dream is identified as *phantasmata* appearing in sleep (*DI* 1. 459a18-20, 3. 462a29-31). Second, the passage is about the *movements that come about from aisthēmata* (*DI* 3. 460b28-29), which cannot be but *phantasmata*, for *phantasmata* come about from the perceptual changes, i.e. from *aisthēmata*. Cf. Wedin 1988. 34-39.

[206] These further conditions are (*DI* 3. 460b32-461a8): (1) no larger movement be present, (2) disturbance be absent. (2) The absence of disturbance obviously refers to the absence of intensive motions caused by getting to sleep (461a5-6; cf. *Somn*. 3). If the heart were 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 (461a8-25). One might argue, however, that (1) 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 to the heart, for all movements compete with each other, and only the larger may win. This is certainly one plausible option. But if we consider 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 (*DI* 3. 461a1-3). The important point is that the smaller fire may not be perceived even if it is present together with the larger (i.e. 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 (see Sect. 5.1.4.1), posing difficulties for the possibility of simultaneous perception of two proper objects in one sense-modality (e.g. two colours), *Sens*. 447a14-b6. The reason is the same (and formulated with the same terms as in the case of the dream). There it is presupposed that the two movements are co-present.

[207] It might be objected that in *memory*, though, an activity seems to be involved on behalf of phantasia – *taking* something *as* an *image* (*eikōn*), *DM* 1. 450b20-27; see King 2009. 78-80. This, however, is needed not for the mere appearing of the *phantasma*, but for it to be memory (see further Sect. 4.2.3.1). So all *phantasma* can appear without an act of *phantasia* (if there is any act of it).

appears in a state (involving) phantasia. This also implies that Alexander does not appeal to such a physiological account as Aristotle (I return to this issue in Sect. 3.2.3).

So Alexander argues that PI; CPI and SP together entail absurdity, thus one of them must be dismissed. Alexander moves on in (A2) to discuss what sort of activity phantasia could be for the Stoics; so he continues the investigation on the assumption that PI and CPI are accepted but SP is denied – which is Alexander`s position, as we have seen. So much for the first part of the argument.

In the second part, (A2) there are two candidates for the phantasia-activity, neither of which is acceptable. For if either option is taken, phantasia will be identical with perception or with memory. If it is (i) an ongoing activity, 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 of coming to be of the residue is perception itself.[208] Actually this is not so far from the Stoic theory, according to which perception is an experience by means of a phantasia; even though they did not restrict phantasia to the perceptual case. But Alexander cannot accept this. For he has already distinguished phantasia from perception (*DA* 66.24-67.9, see Sect. 5.2.3). And phantasia for him is not a process or activity that creates residues,[209] but rather one that *uses* them. More importantly, he wants to explain a wide range of mental phenomena by phantasia, and this 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 using perfectum: *gegonuian*), it would define memory. Again, memory is only one phenomenon that phantasia is to explain, and the remainder cannot be explained by memory. Memory is too restricted for this role: it is concerned only with the *past*, with experiences that have been perceived. Unfortunately we do not possess Alexander`s account of memory, only some notes on it (see Sect. 4.2.3.1). From what he says it is clear that the simple fact that a residue (or impression) has been completed is insufficient for memory. What is required in addition is that the residue is an image (*eikōn*) – or truthful preservation – of the perception of the past event. The present remark, however, seems to pick out the Stoic conception of memory, according to which it is the storing of phantasiai (*SVF* 1.64; 2.56). The completed impressions constitute a set of impressions that remain still and supposedly *available* to the agent. So if the remark is taken

[208] Even if perception is not defined with reference to this effect.

[209] Contrast Aristotle *DA* 3.3. 428a1-2: that phantasia is that in virtue of which phantasmata arise for us.

as specifically against the Stoic account, it suffices to be said that they themselves gave a wider role to phantasia than to memory.

Alexander concludes from the argument that phantasia must be a distinct activity. It is not (i) the creation of an impression – or perception; nor (ii) the completed impressing as it is in memory; yet it is necessarily related to the impression. He does not specify this relationship and the activity further – implying only that it is analogous to perception: note his remark that the object is a sort of *perceptible* (*tina/hōsper aisthēta*, *DA* 69.1, 10). I shall give an account of the phantasia-activity in Chap. 5, by identifying it as a kind of judgement. It might be said about the relationship to the impression (residue) that phantasia *uses* it in making its judgements (Sect. 5.2.4); for the residue is its causal object that triggers phantasia-activity and provides content for phantasia (Sect. 4.2.1); in some cases phantasia *modifies* the residue – completes when it is incomplete (Sect. 4.2.3.3). Though the impression is not the intentional object of the phantasia-activity.

Rather, Alexander supposes the existence of such an activity by invoking Aristotle`s tripartite scheme of faculty/activity/object, that he uses as framework for his investigation. But once he has accepted the scheme, in the spirit of FAO, he must identify the object postulated for phantasia. He accomplishes this next by saying it is an inner object of perception (*DA* 68.30-69.2).

Now, it is clear that Alexander had no other option than positing internal object for the capacity of phantasia. For the most important feature of the phenomena labelled as phantasia is that it occurs only in circumstances when the *corresponding perceptible object is not present,*[210] so that perception properly speaking is impossible (See Sect. 3.2.3). Thus, all cases of phantasia have a common element: the external object to which the mental state is directed is not present (*DA* 69.2-11). But something must be present to the subject that makes her mental state about the absent object: an internal item in the body (the central-organ). For Aristotle the internal item is a *phantasma*, a means of representation, but not an object in the specific sense of object required for facultyhood (Sect. 4.2.1). For Alexander it is a residue (*enkataleimma*), which is also the object of the phantasia-activity. It triggers the activity, provides content for it, thus it makes it the kind of activity it is – a phantasia-activity with the particular content. This can work, because the residue contains in itself the information about its cause, the perception that was eventually caused by the external object.

So, for Alexander, phantasia and perception differ in that they have different objects.

[210] The problematic case of illusion will be dealt with in section 3.4.3.

Perception has external objects, phantasia functions when the external object is no more present. Phantasia has, then, an object in the body of the person. Perception gathers information of the external world immediately, but phantasia does so only indirectly (insofar as it *preserves* the character of the perceptions), but in many cases it is an unreliable representation and the source of error.[211]

3.2.3. Alexander`s possible motivation

As it stands, Alexander proposes an activity of phantasia concerning the impressions (the residues of perceptions) in criticizing the Stoic theory of phantasia. His argument hits the target, since the Stoic theory presupposes CPI and SP, the two principles on which Alexander`s argument relies. As a consequence, Alexander denies SP while maintaining CPI, so that his further condition for the phantasia to appear is an activity on behalf of the soul.

As we have seen, however, Aristotle did accept neither CPI nor SP. Hence the argument does not apply to his theory. Why did not Alexander accept the Aristotelian solution? What reasons could he have for appealing instead of physiology to psychological activity? Why did Alexander press that the impression is indeed the *object* of phantasia, and not only a means of representation, when Aristotle argued against such a view? And in general, why Alexander stuck to CPI? To understand Alexander`s motives we have to see first the last point concerning CPI. I would like to suggest that the acceptance of this lies at the heart of his divergence from Aristotle.[212]

Let us start with identifying what phantasia is to explain. Recall that a wide range of psychic activities constitute the phenomena covered by the theory: imagination; dreaming; illusion; hallucination; after images; memory; moving by desire; and probably a necessary role in thinking.[213] We have seen that what is common in these states is that their intentional object is not present at the time of their occurrence.[214] There are other common features of these – some characterizing all, others just few of them. In some of the activities we seem to be passive, undergoing a certain experience without contributing to the content: dreaming about

[211] Note that error can occur and should be explainable in perception proper.

[212] It must be noted that Alexander does not depart from Aristotle explicitly.

[213] Alexander unambiguously denies that experience is to be explained by phantasia (*in Met.* 4.12-5.3), unlike in Aristotle.

[214] This is obviously the case with imagination, dreaming, hallucination, after images, memory, and thinking. However illusion and moving by desire towards a thing perceived seem to be cases when the object is and indeed needs to be present. We could not have an illusion of something if we are not aware of it. This problem will be discussed in Sect. 3.4.3.

something, having after images or illusion, hallucinating, or remembering something. In other cases we clearly play an active role in determining the content of the state: imagining or thinking something. But it seems not unreasonable to say that we (or our mind) partly determine the content even of our dreams, illusions or hallucinations. Or that in remembering we are at least selective in accepting our representations as being truly about a past event or being deceptive.[215] I do not think these diverse activities could be identified as the activity of phantasia. What is relevant for us is that in all cases we have more or less *access* to the content of the states: the contents our states can have are *available* to us. This access is one thing that phantasia has to explain. Let me elaborate on this.

This access is more apparent in the more active cases. If I am to imagine something, I can do so only if the content of my imagination is accessible to me. It seems that I may imagine nearly everything – certainly some past experience of it is required. In Alexander`s terminology: when I am to imagine something, I use my phantasia to access the content in question. I can do this by activating my phantasia with respect to a residue that represents that content. I can imagine whatever of which I have a residue; and since the residue is created by perception, I have residue of things that I have perceived. I have access to the content for imagining it due to the fact that I have access to a residue representing that content.

Let us see the more passive cases. E.g. in dreaming,[216] I seem to be experiencing something passively. In the Aristotelian account (which Alexander presumably follows) the content of my dream is determined by past perceptions of mine (cf. *DI* 3). That is, whatever is responsible for the content of the dream, it has access to at least part of my past experience. It seems that according to Alexander partly phantasia is responsible for the dream-content – through picturing (*anazōgraphein*) (*DA* 69.25-25, 70.17-18 see Sect. 4.2.3.3.3). Hence phantasia has a sort of access to preserved past experiences, viz. to residues.[217]

The case of illusion is a bit different. Then one is aware of a thing present in one`s environment, but it appears different than it is in reality. It is not clear to what one needs to have access here. I suppose that illusion should be explained as a case when perception of the

[215] As I have already mentioned, Aristotle`s account of memory too seems to involve a certain active factor: taking the phantasma to be an image or resemblance of a fact. Sect. 4.2.3.1.

[216] The same story applies to hallucination: the two cases are discussed in parallel by Alexander and by Aristotle too.

[217] The case of memory is similar. But in that case access is required only to contents that can be remembered, that are representations of real past facts. This shows that the residue applicable in memory may and indeed has a certain characteristic that residues in general do not have: it is not merely a full preservation but it must be an *eikōn*, a truthful preservation of a past event perceived. See Sect. 4.2.3.1.

object is not possible due to certain circumstances (probably sub-optimal perceptual conditions), so that phantasia is called for to complete the content (see Sect. 3.4.3). Since the completion is not grounded solely in the external object, the outcome is often an erroneous representation – illusion. Clearly, phantasia has access to the content with which it completes the perception. And it has access by means of having access to the residue representing the content.

Now, it is clear that we (or our phantasia) have access – conscious or unconscious – to the content of these mental states in the sense that it is available to us whenever we want to use them or in some cases whenever they might be made apparent to us by some cause. What I suggest is that this access is most easily explainable by assuming that the items making this possible (the representations of the contents) are *present* to the person or the capacity that uses them to make the contents apparent to us. Since the representing items are supposed to be physical items, the access is to be explained by the physical presence of these.[218]

We have seen that according to all parties to the present debate – Aristotle, the Stoics and Alexander – admit that the item relevant in representation, what we called *impression*, is a physical, bodily item, providing among other things a causal connection to the external object that had been perceived. Aristotle`s *phantasmata* are physical changes in the blood (e.g. *DI* 3. 461a25-b13),[219] Stoic impressions are states of the pneuma in the heart, and Alexander`s residues are physical remnants of perceptual changes (cf. Sect. 4.1). Being so, since a physical item is accessible only when it is *physically present* (being at the *same place* as the subject which has access to it, or being *in contact* with the subject), accessibility of impressions presuppose their presence. Since the impressions are used by the psychological capacities, they have to be present where the capacities are seated: in the central-organ. Thus it seems that accessibility is best explained by CPI.

If this is so, one may wonder why Aristotle did not accept CPI, and how would he explain the access to impressions. Certainly, he admitted that the presence of *phantasmata* in the primary sense-organ is a necessary condition for appearing. He appeals to this requirement for memory (cf. *DM* 450b11-451a2). But he also emphasized that the *phantasmata* are

[218] As Caston 1998a 257-268 formulates: the explanandum is *presence in absence*; one prominent feature of intentionality.

[219] Cf. e.g. Modrak 1987. 72-75; Gregorić 2007. 43-45. Even though others argue that it is pneuma that is responsible for transmission of perceptual changes and phantasmata, e.g. Webb 1982. 25-34; Freudenthal 1995. 106-148. But since Aristotle is interested in physiology only in general, insofar as his point is justified, cf. Lloyd 1978, it is unnecessary to decide this question; cf. Johansen 1998. 91-92, though in preference of the pneuma-view.

potentially present at the appropriate place (*DI* 3. 461b11-21), and he appealed to a mechanism of blood-influx to the heart that transmits them into this place upon call – at least in case of dreaming. Probably he thought that this account is sufficient to explain our access. However, one might say that this story is only about dreaming,[220] where our access to the content is not so obvious anyway.[221] Thus Aristotle may submit that in other cases – cases of obvious access: e.g. imagining – *phantasmata* are actually present in the heart. However, this split in the place of *phantasmata* would be *ad hoc*. Moreover this would create a problem for the account of dream: why *phantasmata* have to travel to the heart if at least some are already there – and again: why do not the *phantasmata* in the heart appear constantly when the physiological conditions are met. Perhaps it would be better to interpret the account of dream as not involving the travelling of *phantasmata* in the blood either. But this seems to be contrary to the evidence.

All in all, Alexander had good reasons to suppose the validity of CPI, for it seems to explain access more easily than the *potential presence* of impressions. Since his argument shows that SP should be denied, the next question is: why suppose that the further condition (beyond presence) for appearing is not a physiological one as Aristotle supposed, but an activity of the soul. My answer to the question will be highly conjectural, lacking clear evidence to decide.

To proceed, let us recall Alexander`s argument, and see how it could be modified so that it would be applicable to Aristotle. As I showed here, CPI explains our psychological access to contents that are not available for perception at the moment. If CPI is supplemented with SP, unacceptable consequences will follow: by the presence of the impression, we would always be in the corresponding phantasia-states. That is, the presence of impressions would not only explain our access to the contents, but it would ensure that we are always aware of all contents that we have access to; i.e. to all contents that we can be aware of. But the phenomenon I called 'access' requires that there are contents possible to access that are not actually accessed. Thus, SP should be rejected.

Suppose that Aristotle adopts CPI. Certainly, he does not admit SP. But we can grant he admits the Sufficiency of the Physiological (SPH):

[220] Cf. Schofield 1978. 254 warns against generalising from *PN*.

[221] Not only access is not clear in case of dreaming, but it is certainly a quite particular, unreliable, deceptive phenomenon. So that on might claim that from the isolated account of dream it is problematic to generalize to other (more normal) cases of phantasia.

SPH additional to the presence of a *phantasma* in the heart there are necessary physiological conditions that together constitute a sufficient condition for *phantasmata* to appear

Then the following argument may be construed. CPI and SPH together lead to the unacceptable consequence that one, simply by having impression φ and being in certain physiological states, would be in the phantasia-state φ. Obviously, this is not so neat and forceful argument, for there might be great differences in the physiological states one has. But let us see how could such an argument pose a difficulty for Aristotle, and why could have Alexander proposed it.

Necessary physiological conditions in the set of conditions constituting the sufficient condition could be of three types: (Type-A) general conditions necessary for the occurrence of any appearance; (Type-B) specific conditions necessary for the occurrence of some specific appearance; or (Type-C) particular conditions for one particular appearance. Type-A conditions do no better job than the simple SP. For suppose condition SPH-A consists of presence (P) and a Type-A condition: Ca. Whenever both P and Ca are met, all impressions appear; and whenever Ca is not met, none of them does (we supposed CPI, hence P is always met). It seems that some of Aristotle`s further physiological conditions are of Type-A: namely the absence of disturbance in the heart in the account of dreaming.

Type-B conditions are not much better. Again: SPH-B would involve presence (P) and a Type-B condition: Cb (it may involve Type-A conditions as well, but this does not make a difference). Then again, whenever both P and Cb are met, all impressions for which Cb is necessary appear together; and whenever Cb is not met, none of them does. But it does not seem to be the case that there are such clusters of appearances; and even if there is any, it does not seem to be necessary that they appear together as such a theory would entail. Again, Aristotle`s condition that no larger movement should be present seems to be Type-B condition, for it is supposed that the larger movement is of the same character as the lesser.

Again, suppose that SPH-C involves a Type-C condition: Cc – sufficient for a particular, maximally specific appearance φ. Then, if Cc is met (with P), the corresponding impression φ can and does appear. In this theory there will be one specific physiological condition (Cc-φ) for each particular content, and thereby for each impression φ representing that content. Hence, the physiological items are apparently doubled, for the impression itself is a physiological item. Even though there might be Type-C conditions for any impression to appear, but these conditions cannot explain any better than the mere presence of the impressions why some impressions appear, some do not; and why this impression appears rather than another.

As I suggested in the previous section, one reason for opting for activity is that a psychological phenomenon is better explained by a strictly psychological account. Once a physiological account is given, as I have shown, one can yet ask 'but why does it appear?' A psychological account, as appealing to an activity of a psychic faculty, can close this question.

Apart from this, the physiological account Aristotle provides may work for cases when we are passive, like dreaming or memory. In such cases it may be physiological processes totally out of our control that determine what appears to us. But when it comes to imagining or the use of phantasia in thinking, it seems that our activity needs to be grounded in an activity of our capacity of the soul which is involved in these kinds of state. And if we grant the activity in these cases, it is better to have a unitary account and grant the activity in all cases.

Again, even though Alexander presses the need for an activity, this activity of phantasia can involve physiological changes in the appropriate bodies. It may yet involve the kinds of condition Aristotle suggested. There might be Type-A conditions that are necessary for the functioning of phantasia in general; Type-B conditions making some contents available while hindering the appearing of others. But probably there is no need for Type-C conditions beyond the residues themselves that accompany the appearance of particular phantasiai. The point is that the physiological story does not give the kind of explanation that is required for the occurrence of the psychological states.[222]

3.3. Reconsidering the division of soul

As noted, the status of phantasia as distinct capacity makes some difference to Alexander`s view on the division of soul into parts and esp. the division of parts into capacities. As I sketched in Sect. 3.1.1 and 3.1.2, according to Aristotle the soul has a strong unity; although it can be divided taxonomically into three parts that define the different kingdoms of living being in the hierarchical scale of beings. These parts, in turn, may be divided further conceptually into capacities. These capacities, however, do not have an autonomous status and operation, it is rather the part which is responsible for a kind of activity that a capacity of the part is for. E.g. it is the nutritive part that is responsible for reproduction, but if we want to specify we can say *qua* reproductive capacity.

[222] Relying exclusively on physiology seems to make the theory reductionist, materialist, closer to the Stoic view that Alexander criticises. Hence, one might want to say that Alexander does not so much modify Aristotle`s account, but rather makes it complete with specifying the need for an activity of phantasia. As I noted in Sect. 1.3 I am happy with such a conclusion. My aim was to present Alexander`s view as much different from Aristotle as it is possible granted a plausible interpretation of Aristotle.

Let us see how Alexander modifies this scheme of parts and capacities of the soul. I argue that although Alexander follows Aristotle`s taxonomical division of the soul into three parts; he proposes another relation between part and capacities: *a part consists of its capacities*, it is a collection of capacities; rather than the capacities are merely aspects of the part as the result of conceptual division. As a corollary, the capacities are fairly *autonomous* both from the part and from each other: they have *independent activities* that may be activated at different times – concerning their *distinct objects* (in line with FAO), which are distinct not merely in description. In other words, Alexander may be considered as proposing a more *modular* view of capacities instead of Aristotle`s more holistic approach. However, most of the capacities of a part may not exist apart from the others. A notable exception is the reproductive capacity: it develops late in the life of an individual, and the development may be hindered (in maimed individuals).

It has to be noted that Alexander is not consistent in using the terms part (*meros* or *morion*) and capacity (*dynamis*) in referring to the different relations of division I identified. Most of the time 'part' is used for the three main clusters of capacities (that I called 'part'); although occasionally he refers to these as 'capacities' or 'souls'. On the other hand, what I called 'capacity' of a part is termed mostly 'capacity' by Alexander (even though sometimes only a feminine form of the faculty-word is used, *-ikē*, which can indicate 'soul' too); but there are places where they are called 'parts'.[223] These problematic uses can be explained by reference to the context. What is important is that he sets out the framework quite clearly, and it is secondary that he does not reflect it in a strict terminology, but uses different terms at different occasions.

Alexander provides a general introduction to parts and capacities of the soul at *DA* 27.3-33.12, which is followed by the treatment of the parts: the nutritive (33.13-38.11); the perceptual (38.12-80.15); and the rational part (80.16-92.15). Once the parts of the soul are described, Alexander summarizes the findings with additional notes on the order of the capacities (92.15-94.6). I first (Sect. 3.3.1) discuss the soul`s division into parts, relying on the introductory treatment. Then I turn to the relation between a part and its capacities. I provide a case study of the nutritive part (Sect. 3.3.2), for two reasons. First, it is the clearest and most

[223] Problematic cases: 'capacity' used for a part: e.g. *DA* 29.2, 38.18; 'part' used for a capacity: *DA* 32.22; *Mant.* 4. 118.12-13. Apart from these, since any soul is constituted of parts, which are constituted of capacities, at times Alexander calls one capacity a 'soul': e.g. the nutritive capacity is called 'soul' at *DA* 32.7, 35.24, 38.13; the capacity for growth at 36.18, 96.9; or the capacity of phantasia at 69.24, 71.26-27, 93.25-94.1, 97.11-12. Cf. Caston 2012. 127-128.

simple case: it consists of three capacities only, without complicated relations between them (not like the perceptive part, the basic capacity of which is further divisible into the five senses). Second, Alexander`s treatment of nutrition is short, and focused esp. on the relations among the capacities and between the part and its capacities (unlike the treatment of the rational soul, which is concerned with more pressing issues about the intellect). After examining the nutritive part I turn to (Sect. 3.3.3) some most important issues concerning the perceptual part: the problem of touch as separable from the distance senses. Before that, I overview the composition and structure of the perceptive soul, showing how the relationships between part and capacity and among capacities that I identified in the treatment of the nutritive soul are applicable to it. I suggest that this framework of parts and capacities is in great part the consequence of distinguishing phantasia as a distinct capacity of the soul.

3.3.1. Soul and parts

Alexander adopts Aristotle`s division of the soul into the three parts defining the different kinds of living being with diverse complexities (*DA* 30.6-17, cf. 29.2-30.6; 92.12-94.6). Alexander distinguishes the parts just as Aristotle, by taxonomically dividing the soul into them.[224] Thus there is one soul in each individual living being, yet the soul is divisible into three parts in the most developed, rational kind of being (humans); so that the three kingdoms of living being can be defined: plants, animals and rational animals.[225]

This can be seen from the fact that Alexander himself emphasizes that this kind of division preserves and reinforces the unity of the soul (*DA* 30.2-6). Again, the parts of the soul are not separate things that compose the soul. Neither are they continuous quantity (i.e. extended body) nor discrete quantity (number) (30.26-31.2). As Alexander says:

[224] It is noteworthy, though, that Alexander prefaces his account of the division of soul with a Platonic suggestion (cf. *Republic* 436B-437A): there should be two distinct parts (or capacities) wherever there may be conflict between the content of the capacities, *DA* 27.5-8; *Mant*. 4. 118.6-9, 31-35. But this might be just a preliminary; or quick argument against the Stoics, as Caston 2012. 118-119 suggests. The idea of the impossibility of conflicting content reappears, e.g. in the solution to the problem of simultaneous perception, see. Sect. 5.1.4.5.

[225] Alexander provides a thoroughgoing explanation of the hierarchy found among living beings by supporting it with the hierarchical order of the parts of the soul at *DA* 28.8-29.1; cf. Caston 2012. 120-123.

> Rather, we divide the soul by enumerating the capacities it has and by ascertaining the differences between them, just as if one were to divide an apple into its fragrance, lustre, shape, and flavour. For dividing an apple in this way is not like dividing a body, even though the apple is certainly a body, nor is it like dividing a number.[226] (*DA* 31.2-6)

Thus the soul has several capacities that differ on account of having different activities. The analogy apparently serves to clarify the relation between the several parts and the one soul. That is, dividing the soul is just distinguishing its capacities: it seems that each capacity is to be counted as a soul-part. But this account need not be taken that strictly. For it is clear that it is suggested as a reply to the views according to which the parts of the soul are divided as a magnitude (spatial parts, the Stoic view, cf. Sect. 3.2.2.1), or divided as number into separable components.

It is indeed the Stoic context that suggests the analogy with the apple.[227] According to the Stoics one spatially distinct part of the soul – the ruling faculty (*hēgemonikon*) – has four capacities differing as the qualities of the apple, yet being qualities of the same body. The Stoic view has an additional premise: the qualities themselves are bodies.[228] Now, Alexander seems to adopt the analogy,[229] but at the same time expresses some reservations. [230] The problematic point in the Stoic view is certainly the latter: taking the qualities to be bodies. Alexander`s remark that dividing the apple is 'not like dividing a body' might be taken to pick out this feature: dividing a body creates several bodies, but the qualities are not bodies. So we might say that since Alexander introduces the analogy as illuminating, he accepts its point: that the several capacities of the soul that we enumerate are of a single subject: the soul.

But instead of identifying a soul-part as any distinct capacity, the account suggests a general procedure: enumerating the distinct capacities of the soul as a first step in dividing the

[226] ἀλλὰ τῇ τῶν δυνάμεων ὧν ἔχει καταριθμήσει καὶ τῇ τῶν διαφορῶν αὐτῶν εὑρέσει τὴν διαίρεσιν αὐτῆς ποιούμεθα, ὡς ἂν εἰ τὸ μῆλόν τις διαιροίη εἴς τε εὐωδίαν καὶ εἰς εὔχροιαν καὶ εἰς σχῆμα καὶ εἰς χυμόν. ἡ γὰρ τοιαύτη τοῦ μήλου διαίρεσις οὔτε ὡς σώματος γίνεται, εἰ καὶ ὅτι μάλιστα σῶμα τὸ μῆλον, οὔτε ὡς ἀριθμοῦ.

[227] The analogy is attributed to the Stoics in Iamblichus (SVF 2.826 = [LS] 53K); cf. [BD] 265-266; Caston 2012. 126; Inwood 1985. 30-32.

[228] E.g. [LS] 28K, L. Caston 2012.126 finds this latter premise crucial for the Stoics and attacked by Alexander; cf. *Mant.* 6; Kupreeva 2003. This is right, but the main point of the analogy is the former claim (adopted by the Stoics too): that the division of one part into several capacities is not a spatial division.

[229] Adopting the analogy certainly does not imply to take capacities and the soul to be attributes of a material substance, as Barnes 1971 interprets Aristotle`s theory.

[230] He cites the analogy for a different purpose at *in Sens*. 165.25-166.4; although distinguishing the analogy from the Stoic view, *in Sens*. 167.4-9.

soul into parts. A second step – not mentioned here, but implied by the preceding considerations and the following treatment of the nutritive part (*DA* 31.7-32.23) – should involve arranging the capacities into clusters according to how they occur together, in such a way that these clusters of distinct capacities may serve as to define the different kingdoms of living being. This is in line with Alexander`s remark about the serial order of souls: each higher soul is more advanced because it has capacities in addition to the capacities of the lower souls (*DA* 16.18-17.1). Again, Alexander does not say that the enumerated capacities are all parts of the soul. What he says is a methodological remark: that we make the division of the soul *by* enumerating the capacities. The point Alexander is making is that the soul consists of capacities that are distinct, yet may not be separated into distinct bodily parts (cf. *DA* 96.10-25).[231] That is, there are real differences between the capacities, they are not merely the result of conceptual division (cf. *Mant*. 4. 118.27-29).

3.3.2. Part and capacities – the case of the nutritive part

The nutritive soul-part consists of three capacities, each of which exists in mature individuals of a species and hence each exists in the species itself: nutrition as maintaining oneself, growth, and reproducing another individual of one`s species (*DA* 32.8-23; cf. 9.1-4, 11-14; *Mant*. 1. 105.6-12, 26-27). These capacities, even though mutually imply each other (in Alexander`s terminology each one is *linked* (*synezeuktai*)[232] to all the others),[233] can clearly be distinguished by the time of the activity, by their functions (35.9-10); or by their differing extension – some (reproduction) being restricted to fully developed individuals (35.19-20), which involve difference in the development of the capacity (35.20-23) – thus they can *operate independently*. *Nourishing* oneself is transforming 'nourishment ingested from outside by cooking it, thereby assimilating and incorporating it into the body whose form and capacity is' the nutritive soul (34.27-35.2). The aim of this activity is to preserve the living being, to keep it alive, hence it is always operative throughout the life of the creature (35.10-16). *Growing* is productive of an

[231] However, compare Alexander`s explanation of detached parts of animals *DA* 37.11-38.4.

[232] On the term 'being linked' (*syzeuxis*) as the converse relation of separability, see Caston 2012. 123 ad loc.

[233] Growth and reproduction are linked to nourishing, 29.1-3; the account of reproduction is linked to the account of nourishing, 32.8-9. [AD] 155-156 argue that since the capacities enumerated belonging to the nutritive soul all imply each other, there is no *real difference* between them, and indeed they are different descriptions of one and the same capacity, the nutritive capacity (or part). This would make Alexander`s view identical to Aristotle`s. Caston 2012. 123 too admits the possibility of this interpretation, though he has reservations as to what would count as a 'really distinct power'. He allows only sameness in number, though emphasizes difference in being. I show in the text that it is right to take the capacities to be autonomous, hence really distinct.

increase in size of the body by adding transformed nourishment to the magnitude. It does not operate always, but there are species which shrink as they age (35.8-17).[234] *Reproducing* has clearly a different function, 'leaving something behind like oneself' (35.17-18; cf. 36.4-9). Further, it operates at different times than the two previous ones, for it is developed even later in the individuals (or it may even be lacking in a 'maimed' individual) (35.17-23; cf. 32.11-19). Hence, since these are distinct activities, they involve different capacities too (35.24-36.5).

The distinctness and autonomy of the capacities, however, requires that they have *different characteristic objects*, on which their activities operate. It might seem that there is no such difference in their objects, for Alexander describes only one object, *nourishment*, as the object of the nutritive soul, without explicating how it might be different for the three capacities (33.13-34.26). In this account, he distinguishes only two kinds of nourishment, the one that has been transformed to be like the body of the living being, the other that has not. The passage in which he describes the capacities themselves (35.23-36.5), and his description of the activities I cited above, however, allows for a conjecture about the different objects. The nutritive capacity is active 'in response to the presence of nourishment' (35.26-27). This activity has two stages: (1) transforming nutriment to be like the body, and (2) incorporating the transformed nourishment into the body. The object of the first stage is obviously the nutriment that is unlike the body of the living being. Again, growth increases the body obviously by adding to it nourishment which is already transformed to be like the body of the living being. For in case of growth, a transforming activity is not mentioned. And finally, it is told that 'the seed by means of which reproduction occurs is the end product of the final stage of nourishment' (36.3-4, cf. 92.20-21). This suggests that the capacity for reproduction operates on an even more refined nourishment. Hence, we may identify the objects on which the activities of the nutritive capacities operate as *different stages* in the processing of nourishment. These stages are not merely different descriptions of one and the same type of thing, but actually *different types of material*. Hence it cannot be said that the three stages are the result of conceptual division of the one kind of object: nourishment. This seems to set Alexander`s theory apart from Aristotle`s.

[234] However compare *Mixt*. 233.23-238.23, where the distinction between the capacities for nourishing and for growth seems to be demolished, or at least reduced to difference in degree: if the bulk of nutriment is more than what is lost, it is growth, if equal it is maintainance (236.18-26), if less it is shrinking. Todd 1976a 245 releases the tension by pointing out that in the contect of this passage the thorough distinction of the two capacities is irrelevant. Cf. Kupreeva 2004.

3.3.3. The perceptual part

Just as in Aristotle, the structure of the perceptual part is more complicated in Alexander. The basic capacity of it is further divisible into parts: the perceptual capacity is divided into the five special senses. As we saw this poses some difficulty for Aristotle (Sect. 3.1.2): if touch is separable from the distance senses in the same way as parts of the soul are separable from other parts, why touch is not a part of the soul. I shall discuss this issue at the end of this section. Before that, let me set out the structure of the perceptual soul-part, focusing on the relations among its capacities that are analogous to the relations that we found among capacities of the nutritive part.

We might set the analogy by pointing to the fact that just as the *nutritive* part and its most basic capacity share one name (*threptikē*), the perceptual part and its most basic capacity are both called perceptual (*aisthētikē*). This is reasonable, for the further capacities depend in some way or another on the basic capacity. In case of nutrition: growth and reproduction use as their object the end-product of the nutritive part (or its further refinement): the assimilated nourishment. We can find a similar structure in case of the perceptual part: phantasia, desire (*orektikē*) and impulse (*hormētikē*) (the other capacities constituting the part, *DA* 29.11-12; cf. 93.24-94.3)[235] depend on the basic capacity: perception.[236] We have seen (Sect. 3.2) that the object of phantasia comes to be in the process of perception; the objects of impulse and desire depend on a mental representation of an external object as to be pursued or avoided (77.16-17). So it depends on perception and phantasia (73.20-23; 75.15-24; 79.21-80.2).[237] This dependence, however, does not entail that all explanation should or could be given in terms of the basic capacity: rather, the independent functioning (and distinctness of the objects) requires

[235] Compare *Mant*. 1. 105. 27-28 (cf. *Mant*. 4. 119.12-13), where the perceptual part consists of perception, phantasia, memory and endorsement (*synkatathesis*); and 105.28-106.2: the capacity for impulse (*hormētikon)* is taken as a distinct part of the soul, consisting of the standard: appetite (*epithymia*); passion (*thymos*) wish (*boulēsis*, or Caston`s 'intention') as kinds of desire (*orexis*), cf. *DA* 74.2-3. 78.22-23. Enumeration of these types already poses a difficulty for the division: wish is apparently rational, involving deliberation, *Mant*. 1. 106.1-2; cf. *DA* 74.3-13. The facts that this is just a brief summary, and not necessarily from Alexander himself renders this evidence quite slim for the part-status of impulse. But perhaps it could be connected to division of soul with a different purpose than taxonomy of animals, see Sect. 5.2.2.

[236] A similar structure of the perceptual part (perceptual capacity consisting of the five senses and phantasia) is postulated by Gregorić 2007. 52-60 for Aristotle, with the difference that he considers them different only conceptually (as we have seen it is indeed the case for Aristotle, Sect. 3.1.2).

[237] For a detailed discussion of the relationship between desire, impulse and phantasia see *DA* 71.21-80.15.

the postulation of distinct capacities.[238] Even though the capacities are distinct, but they are linked together (*synezeuktai*) (29.16-22; 73.26; *Mant*. 1. 105.15-16): they form a cluster that comes 'as a package' for all creatures that have a perceptual soul[239] – viz. all animals.[240] Hence animal may be defined by the perceptual part.

Let us turn to the problem concerning touch. Since the capacity of perception is complex, having five irreducible ways of acting: through the five special senses, Alexander treats the relation between the perceptual capacity and the five individual senses to be the same relation as that between the soul and its three parts. That is, the five senses are *parts* of the perceptual capacity (*DA* 40.4-11; cf. *in Sens.* 162.16-163.3). Indeed, the five senses exhibit a similar hierarchical order as the three parts of the soul. Touch is separable from the distance senses, and exists without them in stationary animals, so apparently defines these (*DA* 40.11-15, 92.23-93.19; cf. *in Sens*. 9.8-10.25). So why touch is not a part of the soul defining stationary animals excluding locomotive animals?

Relying on the previous considerations we can give an answer. The relation among capacities – that they are linked – implies that having perceptual capacity entails having all the other capacities composing the perceptual part as well: phantasia, impulse, and desire. If a creature has all parts of the perceptual capacity (all the five senses), it will certainly have all the other capacities – all the perceptual part. But the crucial point is that another creature, a

[238] E.g. it is the power for impulse (*hormētikon*) that moves the animal body, not phantasia that provides the object of pursuit in representing it, *DA* 79.21-24; cf. *Mant.* 1. 106.5-17. Again, the distinctness of the *hormētikon* is reinforced at *DA* 74.13-75.24. So these are not just further activities of the same capacity, as Johansen 2012 or Modrak 1987 explain the extension of the perceptual capacity in Aristotle, see Sect. 3.1.

[239] The rational soul exhibits a similar structure. It consists of four distinct capacities: deliberation, opinion, knowledge and intellect, *DA* 29.22-24; they have distinct activities and distinct objects – differing in modal properties (contingent vs. necessary); in context of use and status (action vs. in general; principle vs. theorem). Here Alexander emphasises the unity of practical and theoretical intellect (29.24-30.6; see Caston 2012. 124-125), just indicating the distinction by their grouping and by the use of connectives: *te* [...] *kai* [...], *kai* [...] *te kai* [...], 29.24. Later he makes the distinction explicitly, 99.15-26. However, he does not merely talk about practical and theoretical intellect, rather it is the whole soul that is divided into practical and judging (*kritikon*) part. This shows the flexibility of Alexander`s notion of part of the soul – for different explanatory purposes the capacities may be grouped together differently, see Sect. 5.2.2.

[240] Cf. Caston 2012. 124. A problematic case is impulse, and its relationship to desire. Desire (*orexis*) is said to be a kind of impulse (*hormē*) (*pace* Caston), *DA* 74.1; 78.22-23; but the capacity for impulse (*hormētikon*) is said to be linked to the capacity for desire (*orektikon*), 73.26-27. At 29.18-22, however, it seems that *orektikon* is more general, possessed by all animals, including stationary animals; whereas *hormētikon* is required specifically for locomotion, cf. *Mant*. 1. 105.15-25. This issue adds a further desideratum to the problem of stationary/locomotive animals. I discuss this problem below from the perspective of the perceptual capacity itself, hence not taking the present worry into account. This would require a detailed analysis of the capacity of impulse and desire, which I do not provide here.

stationary animal as well, by having touch only, it has a perceptual capacity; hence it has all the other capacities – all the perceptual part. But what makes the difference in classification is the possession of more or less capacities[241] (possession of different parts); rather than having a certain capacity in more or less complex form. Even though the stationary animal has only a restricted form of perception, it has the same capacities, hence the same soul-part as a locomotive animal.[242]

3.4. Objections

3.4.1. Phantasia is a movement (*kinēsis*) caused by perception

The first objection appeals to the fact that Alexander identifies phantasia as a *kinēsis*, i.e. change, process (*DA* 70.2-3, cf. 66.20-21), just as Aristotle: indeed endorsing Aristotle`s wording (Aristotle *DA* 3.3. 428b10-17, 429a1-2, cf. 428a1-3). If in the case of Aristotle this provided a reason to interpret phantasia as being an activity of the perceptual capacity rather than a capacity (Sect. 3.1.3, point (2)), this should apply to Alexander in much the same manner.

This objection, however is not difficult to handle. First, Aristotle defines not only phantasia, but also perception as a kind of change (*DA* 2.5). This, however, may easily concern the activity rather than the capacity, and does not imply that there is no capacity for this change, viz. that there is no capacity for perception. And indeed there is a perceptual capacity, and a distinct term is applied for it: '*aisthētikē dynamis*'. So defining phantasia as a change, in itself does not entail that there is no distinct capacity for this change. What entitled us for this conclusion in Aristotle, is that he does not use the term for such a capacity – *phantastikē dynamis – in propria persona*.[243] But Alexander does use the term emphatically (Sect. 2.1).

Even if the characterization of phantasia as *kinēsis* posed a difficulty for the capacity-status of phantasia, in itself this has not much weight. The fact that apparently there is a distinct

[241] Cf. *DA* 16.19-17.8.

[242] This is certainly a simple answer that must be further explicated to account for the problem that locomotion is connected to impulse, see notes 235, 240. Should it be granted that stationary animals lack impulse, we might say briefly this. If there were a distinct part for stationary and for locomotive animals, it would not be two parts of the perceptual capacity, but two clusters of capacities: perception-phantasia-desire vs. impulse. But since in the case in question the addition of impulse would make the perceptual capacity more complex, the hierarchy of the parts would be disarrayed. For having distance senses in addition to contact senses is not having a different type of activity, but a more diverse application of the same type. However, compare *DA* 92.23-93.24.

[243] Compare note 60.

object for phantasia is much more important, being sufficient for supposing a distinct capacity.

3.4.2. Phantasia and perception are one in *hypokeimenon,* different only in account

Alexander endorses Aristotle`s claim that phantasia is the same as perception, while they are different in being (*einai*) (Aristotle *DI* 459a14-22). So Aristotle allows to talk about a capacity of phantasia (*phantastikē dynamis*) only with the proviso that it is in reality the same as the perceptual capacity, they differ only in account (cf. *DA* 3.9. 432a31). We took this claim as expressing that even though the phantasia-activity is different from perceiving, the same capacity is the subject responsible for both: the perceptual capacity. And their difference lies in that there are two different descriptions for the two activities of this capacity. If it is grasping of perceptual features present in the environment: it is perception. If it is an appearance of something in other cases: it is phantasia. Thus, if Alexander adopts this account, he should admit the sameness of phantasia and perception.[244]

It seems that Alexander`s wording supports this interpretation. Let me quote the relevant passage in detail.

> And the capacity of phantasia is the same [as the capacity of perception] according to their underlying subject, but they differ in account. For it is perceptive, insofar as it is only for awareness of perceptible objects that are separate from the [thing/body] that possesses the capacity and that are present; but it is [capacity of] phantasia, insofar as, just as the perceptual capacity is active concerning perceptible objects that are external, in this way the capacity of phantasia [is active] concerning the objects of phantasia that are in the body that possesses the capacity, as it were its perceptible objects, even if the perceptible objects are not present any more.[245] (*DA* 69.5-11)

Alexander clearly endorses that the capacities of phantasia and perception are different in account (*logōi*). This in turn is reflected in the difference of the activities: phantasia and perception. They may operate at different times, for the object of their operation is present at different times, hence they must be different. But Alexander specifies the sense in which the capacities are the same: according to the *underlying subject – kata to hypokeimenon*. If this

[244] [AD] XX also note this difficulty as an inconsistency in Alexander`s account.

[245] ἡ δὲ φανταστικὴ δύναμίς ἐστιν ἡ αὐτὴ μὲν κατὰ τὸ ὑποκείμενον τῇ αἰσθητικῇ, τῷ λόγῳ μέντοι διαφέρουσα. αἰσθητικὴ μὲν γάρ ἐστι, καθόσον τῶν αἰσθητῶν κεχωρισμένων τε τοῦ ἔχοντος αὐτὴν καὶ παρόντων ἐστὶν ἀντιληπτικὴ μόνων, φανταστικὴ δέ, καθόσον ὡς ἐκείνη περὶ τὰ αἰσθητὰ ἐκτὸς ὄντα ἐνεργεῖ, οὕτως αὕτη περὶ τὰ φανταστὰ ὄντα ἐν τῷ ἔχοντι αὐτὴν σώματι ὥσπερ αἰσθητὰ αὐτῇ, εἰ καὶ μὴ παρείη ἔτι τὰ αἰσθητά.

implies that there is no distinct capacity of phantasia, the underlying subject '*hypokeimenon*' should denote the capacity which is the subject that is *responsible for doing* these activities. This is certainly a possible reading of the passage, but let us see whether it is plausible. I argue that '*hypokeimenon*' here should be taken in the sense of *the item to which something belongs*,[246] and it should refer not to a capacity, but to a *soul-part.* I.e. the capacities of phantasia and perception are the same insofar as they both belong to the perceptual soul-part (cf. *in Sens*. 166.15-167.9; *DA* 93.24-94.2). Let me proceed by considering a few senses in which '*hypokeimenon*' could be understood here, though without being comprehensive.

(1) First, '*hypokeimenon*' might mean the *corresponding object* of the activity, which seems to be Caston`s idea.[247] This is indeed suggested by the preceding claim that residues 'underlie' (*hypokeitai*) phantasia as internal perceptibles (*DA* 68.31-69.2).[248] The proximity of the occurrences then might suggest univocal use of the word. Then, the idea would be that the corresponding objects of phantasia and perception, the objects with which they are concerned, are the same. This one object then is the perceptible object – namely the intentional object; and it differs in account, for in case of perception it is present, in case of phantasia it is absent. But the important point is that even when the external intentional object is absent, when phantasia operates, there must be an *object* present, with which phantasia is concerned. And this has to be different than the external object both numerically (for one is present, the other absent), and in kind: for the one is a self-standing physical object (substance) independent of the animal`s body, whereas the other (the residue) is an internal physical change or structure in the animal`s body. So, it would be curious procedure to state and emphasise the identity of the objects in the context of differentiating the objects.[249]

(2) Second, '*hypokeimenon*' might mean *underlying body*,[250] physical or physiological structure ([BD] 316).[251] Then the claim would be at least that the same organ underlies these activities, or more specifically the same physiological structures and processes are involved. On the one hand it is true that the perceptual capacity resides in the same organ as phantasia:

[246] For this sense see e.g. *in Met*. 324.16.

[247] Caston 2012. 201 enumerates the line in which '*hypokeimenon*' occurs under this meaning in his Index.

[248] Cited above in Sect. 3.2.1, though I rendered '*hypokeitai'* simply as 'are'.

[249] Cf. [AD] 242-243.

[250] It might mean the underlying matter as well, cf. *in Met*. 364.18-40, 369.5-8; and if it denotes a particular piece of matter, this amounts to numerical oneness, cf. *in Met*. 377.22-35.

[251] Note that at *DA* 94.7-10 the soul is said to belong to one substrate in the sense of one bodily part, but difference in being is identified with difference in capacities, so that this passage implies that even if the material substrate is one, there might be different capacities. For Aristotle, see Everson 1997. 157-158, 173; Modrak 1987. 108.

both are present in the primary sense-organ, in the heart.[252] Moreover, the physiologies of the two activities certainly have intimate relationship (Sect. 4.1). But I do not think that this is the main point of the passage. First, there is no hint that this were the operative meaning. 'Body' is mentioned here only to state that the residues are internal to the body, whereas perceptible objects are external. Moreover, close relationship in physiology does not necessarily mean sameness (Sect. 4.1.2.3). But most importantly, the context of the passage gives us further clues for interpreting the sameness thesis.

> For whenever its activity occurs when the perceptible objects are present, a perception comes to be. For the activity of the perceptive soul that occurs in the perceiver concerning the [movement that comes to be] through the sense-organ when the perceptible object is present is perception. For this reason perception and phantasia seems to be the same. But whenever the activity of the perceptive soul occurs when the perceptible object is no more present, concerning a residue as a sort of perceptible object, that came to be from perception in action, it is phantasia then.[253] (*DA* 69.11-17)

(3) Here the sameness thesis is further specified. It seems that the subject of the activities is the item that is *responsible for doing*[254] these activities.[255] This was the meaning required for the objection. Then, the idea would be that since there is only one subject performing the activities, there is no need for distinct, autonomous capacities doing this: only the perceptual capacity. But if this is the correct reading of the passage, then it adds nothing beyond some details to the previous distinction of the activities of perception and phantasia as activities performed at different times due to presence and absence of objects (cf. 69.5-11). Moreover, the proper subject of the activities here is '*perceptual soul*' (*aisthētikē psychē*) rather than perceptual

[252] [BD] 316 contrasts this (being in the heart) to the nutritive soul`s being in all parts of the body at *DA* 75.8-10. But in that passage the difference in substrate (*hypokeimenon*) is connected to difference in activity (75.4), so probably it refers to the fact that the nutritive soul operates throughout the body, but perception only in its very place.

[253] ὅταν μὲν γὰρ παρόντων τῶν αἰσθητῶν ἡ ἐνέργεια αὐτῇ γίνηται, αἴσθησις γίνεται. ἡ γὰρ περὶ τὴν διὰ τοῦ αἰσθητηρίου <κίνησιν> παρόντος τοῦ αἰσθητοῦ ἐν τῷ αἰσθητικῷ γινομένη ἐνέργεια τῆς αἰσθητικῆς ψυχῆς αἴσθησίς ἐστι. διὸ καὶ ταὐτὸν εἶναι δοκεῖ ἥ τε αἴσθησις καὶ ἡ φαντασία. ὅταν δὲ μηκέτι τοῦ αἰσθητοῦ παρόντος ἡ ἐνέργεια τῇ αἰσθητικῇ ψυχῇ περὶ τὸ γενόμενον ἀπὸ τῆς κατ' ἐνέργειαν αἰσθήσεως ἐγκατάλειμμα γίνηται ὡς αἰσθητόν τι, φαντασία τότε.

[254] This is not to say that the subject strictly speaking is the soul or part or capacity, for this is ruled out by Alexander (just as by Aristotle), *DA* 23.6-24; cf. Aristotle *DA* 1.4. 408a34-b18; cf. Caston 2012. 110-111. The point is that what formal item (part or capacity) is more appropriate to be called the subject, *in virtue of which* the animal performs the activities.

[255] E.g. Wedin 1988. 51 takes phantasia and perception to be different functions of the same thing: extensionally same but intentionally different. Cf. Johansen 2012; Modrak 1986, 1987; 1993. 185-186; Caston [Unity].

capacity. To be sure, 'soul' may refer to a single capacity just as to a part of the soul, but here the shift from talk of capacities to talk of soul may indicate something of significance. So I try to identify a further sense of '*hypokeimenon*' by a closer inspection of the context.

(4) The crucial point, I think, is that the sameness of the capacities – phantasia and perception – is indeed said to be *apparent* (69.14-15). Since Alexander wants to show why the two capacities may *seem* to be the same, it is appropriate to talk as if the two activities were performed by the same agent. But again, this agent is not the perceptual *capacity*, but the perceptual *soul*. If this picks out the perceptual soul-part, then we get the following statement: the same thing does the activities of perception and phantasia: the perceptual soul. This is in a sense true, but strictly speaking inappropriate. It is true, because in both cases what is responsible for the activity is a capacity of the same soul-part, the perceptual part. But it is inappropriate, because the agent is more properly identified as the capacity rather than the part (as I suggested in Sect. 3.3). This inappropriateness is justifiable here, for the point is to explain why the two capacities may *seem to be the same*.

The importance of the whole consideration is downgraded, considering that the issue of confusing the capacities comes up as a consequence of the claim that indeed residues may be called 'perception in activity':

> And such residues are called "perception in activity", because these are the products of the perceptual activity, and perception in activity is possessing in itself this impression that [came to be] from perceptible objects that are external.[256] (69.2-5)

Residues may be named so, for perception in activity is *possession of an impression*. As we have seen from the Stoic polemic (Sect. 3.2.2.2) the impressing activity (*typōsis*) defines perception, if it is taken to mean the generation of impressions. Hence *possession of an impression* should be understood thus: the *generation of an impression*.[257] Perception in activity is described as possession, I would submit, for this makes this description easily applicable to phantasia. For phantasia is apparently the possession of a residue – the item taking the role of impression in Alexander. Thus, by applying the term 'possession' for generation, 'perception in activity' can be applied for phantasia and for perception as well.

[256] καλεῖται δὲ τὰ τοιαῦτα ἐγκαταλείμματα κατ' ἐνέργειαν αἴσθησις, ὅτι τῆς ἐνεργείας τῆς αἰσθητικῆς ταῦτ' ἐστιν ἔργα. καὶ τὸ κατ' ἐνέργειαν αἰσθέσθαι ἐστὶ τὸν τύπον τοῦτον σχεῖν ἐν αὐτῷ ἀπὸ τῶν αἰσθητῶν ἐκτὸς ὄντων·

[257] Cf. *Q* 3.7. 92.34-93.2 for identifying perception in activity as possessing the form of the object without its matter.

As it is mentioned, calling the residue 'perception in activity' comes up in the polemic against the Stoics. This brings up Aristotle`s treatment that identifies phantasia with perception in a certain sense, yet keeps different their account or activity. And finally Alexander reflects upon the reason of this confusion of identifying the capacities. The most we can commit Alexander from this reasoning is the claim that the two capacities are capacities of one and the same part of the soul. That is, both perception and phantasia are capacities of the perceptive soul. This however, does not imply that phantasia would lack the status of a distinct capacity.

3.4.3. Phantasia in the presence of the external object

The third objection is most pressing, since it questions even the unity of the object of phantasia. Accordingly, the alleged fact about phantasia, viz. that it occurs in cases when the external perceptible object is no more present, seems to be less than obvious. [AD] 243-247 note repeatedly that in illusion, or more generally in one kind of false phantasia, the presence of the object is presupposed. The falsity in these cases is due not to the fact that the object is not there, but that it is represented inaccurately, in a way that does not accord with how that object is in reality. Hence the unifying mark of the object of phantasia cannot be that it is internal object in the absence of the external object.

The passages to which [AD] refer describe the causes of falsity (*DA* 70.12-23) and the general conditions of falsity (70.23-71.4).[258] In both passages two cases are enumerated: the thing about which the residue is (a) is not present, but it is as if present; or (b) it is present, yet it is not represented to be such as it is. So it seems that case (b), call it *illusion*, on Alexander`s criteria should be a case of perception – indeed misperception – rather than phantasia, for the external object is present to be perceived. Without providing a full account we might try to give an answer based on considerations to be made in Sect. 4.2.3.3.

What makes illusion not to be a case of perception but of phantasia is certainly that the activity is concerned with a residue. The question is, why it is so, if the external object is present there to be perceived. We might say that for some reason – perhaps the external conditions are not conducive to perceiving[259] – the person cannot perceive the object, i.e. she cannot get

[258] One might add *DA* 71.15-21 as cases of phantasia when the object is present: stars; painted pictures; cf. Modrak 1993. 186-187.

[259] Modrak 1987. 83-87 distinguishes two cases of phantasia in Aristotle: when the intentional object is absent, and when it is present, but the conditions are not conducive to veridical perception; cf. Modrak 1986. 48-56. However, she explains the second type entirely externalistically, not mentioning that an internal object is used in the determination of the content; cf. Charles 2000. 118-123. Cf. Osborne 2000. 272-279 takes these to be two presentational roles.

enough information about the object, her experience cannot be as detailed as it is required for perceiving. If perception requires to be a judgement of a certain definite quality,[260] and in some cases such a judgement is not determined by perceiving the object, it might be a case of illusion because phantasia as well is called for in making the judgement. E.g. one cannot judge a present thing to be of a definite colour – e.g. white – but only less specifically as to be of bright colour. Thus phantasia is required to add some information to make the judgement that the thing is say yellow. Then, it is phantasia that completes the judgement by supplying the definite colour-term. Thus, the full object in case of illusion even though depends partly on direct perception (the reference, the subject term), it also involves the contribution of phantasia (the predicate, the such). And phantasia presumably completes the content supplied by perception by means of using a residue (in the example: a residue of a perception of yellow). The case, hence is to be described as phantasia rather than perception, for not only perception is required for the content, but also phantasia.

This is somewhat corroborated by *DA* 50.26-51.4, where a certain optical illusion (*apatēn*) is described that is created consciously by painters to represent depth, exploiting the mechanism of the perception of distance.[261] What is relevant from this is the explanation of how the desired effect is achieved, namely, by means of phantasia[262]:

> For because sight sees nearer things more than those at a greater distance, things it sees are made to appear (*phantazetai*) to be nearer; sight is deceived because this conversion comes about inappropriately.[263] (*DA* 51.1-4)

That is, cases of illusion are cases of phantasia, hence phatasia may occur in the presence of the external object to which the mental state is directed, because in such cases it is not only perception that is responsible for the content of the state, but also phantasia itself. Hence, even though the external object is present, the mental state requires internal objects to concern

[260] For perception and phantasia as judgement see Chap 5.

[261] On painters` technique see *Mant*. 15. 146.13-17 too. On Alexander`s explanation of perceiving distance see *DA* 50.18-26; *Mant*. 15. 146.35-147.5.

[262] However, Ganson 2003. 389 takes the error to be caused by an incorrect inference, so it must have been made by some rational capacity. But Alexander does not mention any capacity here, and '*phantazetai*' seems to indicate only phantasia.

[263] Translation by Ganson 2003, modified at *phantazetai*. ἐπεὶ γὰρ τὰ ἐγγυτέρω ὄντα μᾶλλον ὁρᾷ τῶν ἀπὸ πλείονος διαστήματος, καὶ ἃ μᾶλλον ὁρᾷ ταῦτα ἐγγυτέρω εἶναι φαντάζεται πρὸς τὴν ἀντιστροφὴν οὐ προσηκόντως γινομένην ἀπατωμένη.

them,[264] otherwise there would not be appropriate content for the state. Since this account depends on many premises, I shall justify them in what follows.

[264] Cf. Modrak 1993. 187. Birondo 2001 argues that according to Aristotle cases of illusion involve phantasia, yet without mental images occurring – so without internal objects. However, he takes *phantasmata* to be mental images, and calls all misperception 'illusion'. Hence, according to him all misperceiving involves phantasia, which is certainly not the case.

4. The object of *phantasia*

Let us follow the Aristotelian line of exposition (according to FAO), and examine the capacity of phantasia through its characteristic object: the *internal* perceptible *object* that Alexander calls residue (*enkataleimma*). Up to this point we have seen the general point that Alexander considered phantasia to be a separate faculty, being a constituent of the perceptual soul-part. The main reason for distinguishing phantasia thus was that it has its own characteristic object. This object, the *phantaston*, is a sort of *internal* perceptible, as opposed to the object of perception that is external. The difference between these objects, however, was stated just vaguely, without analysis. My aim now is to give substance to this claim, so that the distinctness of phantasia can be seen in virtue of the distinctness of its object, the distinctness from the object of perception. What has to be understood is: in what sense should residue be taken to be internal object? This question has two parts that may be connected to the two components of the term *enkataleimma* (residue). First, (Sect. 4.1) in what sense the object is *internal*, *en-*; and (Sect. 4.2) what 'being an object' amounts to, connected to what it is to be a *remnant*, *-leimma*? In answering these questions it will become clear (Sect. 4.3) what is the difference between the objects of perception and of phantasia.

I argue (Sect. 4.1.1) that the residue is internal, *in something*, because it is *in the primary sense-organ*. Again, I show (Sect. 4.1.2) that it is a *bodily change*. It is described as impression, but this term may be applied to it only metaphorically (Sect. 4.1.2.1). However, it is certainly connected to the material change involved in perception – which is *assimilation* to the perceptible object (Sect. 4.1.2.2) – for it is the residue from perception in action. I consider (Sect. 4.1.2.3) four ways to construe the relation of the residues to perceptual change, without deciding between the alternatives. We can see that the residue is internal at least in the sense that it is a *bodily change in the primary sense-organ similar to the change involved in perception*. Since Alexander is not interested in the physiological details we have to be content with these details.

Regarding the issue of being an object – after a preliminary distinction between intentional and causal object (Sect. 4.2.1) – I investigate the question: what feature of the residue makes it capable of being a representation of something else. I show (Sect. 4.2.2) that it is necessary for representing that the residue provides *causal continuity* to the external object, but it is not sufficient. What is required in addition, I argue (Sect. 4.2.3), is to be a *preservation*.

I identify three senses of preserving: (Sect. 4.2.3.1) *truthfully*; (Sect. 4.2.3.2) *faithfully*; and (Sect. 4.2.3.3) *fully*. Of these, the first – being restricted to memory – and the second – excluding the possibility of more error – are too strong notions for explaining representation in general. So I identify the feature in virtue of which representation works in preserving fully. I provide an explanation of error cases and the mechanisms underlying them: *impressing further* and *picturing*, so that we get a reconstruction of a powerful account of representation (Sect. 4.2.3.4). Once all this is discussed, we will be in a position to clearly distinguish the object of phantasia from the object of perception in Sect. 4.3.

4.1. Internal *(en-)*

Let us proceed from the question: in what the objects of phantasia are, in what sense they are internal? One may think that an object of cognition is internal insofar as it is *in the mind* of the person. This suggestion, however, for our case, must be dismissed for two serious reasons. First, it presupposes a kind of mind/body dualism that Alexander (as an Aristotelian) clearly rejects (e.g. emphasising the necessity of material change, *DA* 12.9-13.8; or denying the pilot analogy,[265] *DA* 15.9-26, cf. 20.28-21.16; cf. Aristotle *DA* 2.1. 413a8-9).[266] Simply put, there is no point in saying that something is 'in the mind' rather than 'in us', in contrast to being in the external world; for there is no distinction within us that would underlie this. For he takes the living being to be a hylomorphic composite entity, so that there is no point in saying that something belongs to the soul but not to the body. He explicitly claims that 'no soul activity can occur apart from a bodily change' (*DA* 12.9-10).[267] Secondly, and more generally, the idea that something is in the mind requires a clear distinction between the external and the internal

[265] On this see Tracy 1982; Caston 2012. 96-98, 106-107.

[266] Notwithstanding some attribute dualism of one type or another to Aristotle, e.g. Robinson 1983; Shields 1988; Heinaman 1990; Granger 1990; though not a Cartesian substance dualism. Alexander`s insistence on the dependence of soul (and in general of any form) on the bodily constitution – *DA* 2.15-26.30 – rules out even these forms of dualism.

[267] οὐ γὰρ οἷόν τε ἐνέργειάν τινα ψυχικὴν γενέσθαι χωρὶς σωματικῆς κινήσεως. The case of intellect is problematic in Aristotle. It is unclear whether its operation involves bodily change – though its dependence on *phantasmata* suggests that it does. Again, it does not have a peculiar organ (cf. Aristotle *DA* 3.4. 429a24-27, 429b4-5). Alexander is more permissive regarding the organ: even though he admits that intellect may operate on its own without the instrumentality of bodily organs (*DA* 83.10-12; *Mant*. 2. 107.15-20), he argues that intellect is seated in the heart – the same place where the lower parts of the soul are seated, *DA* 94.7-100.17. Moreover, he is unambiguous on that the dependence on phantasia renders thinking (*phronēsis*) involving bodily change, *DA* 12.19-21 – even if this claim is to be restricted to practical thinking, cf. [AD] 125; but for generalizing see Caston 2012. 92-93. Cf. [BD] 242-243. Curiously, however, Alexander does not mention the role of phantasia in thinking, only in reiterating Aristotle`s doctrine of concept acquisition, *DA* 83.2; cf. [AD] XXI; [BD] 338.

world – a distinction according to which the internal world is constituted of subjective (from the first person point of view), mainly conscious states the existence of which depends on a conscious mind; whereas the external world is objective, or intersubjective (third person point of view), usually taken to exist mind-independently. Now, this distinction is shown to be anachronistic in this time, being originated by Descartes.[268] One most relevant point in the argument for this is that our own body is not considered to be part of the external world.[269] Thus, instead of saying that 'internal' means 'in the mind', we can safely claim that it amounts to saying: 'in the body'.

Now, in relation to this we should answer the following questions. Where in the body are the residues seated? What is this particular part of the body like? What role does it have in the theory of perception and theory of soul in general? In what way are residues in it? Once the answers are given (Sect. 4.1.1) we shall turn to the issue (Sect. 4.1.2) of what kind of entities residues are. First (Sect. 4.1.2.1), I review Alexander`s dismissal of being impression (*typos*) in the strict sense. Then (Sect. 4.1.2.2), since residues depend on perception, I outline the material change involved in perception: the *assimilation* of the sense-organ to the object of perception. Finally (Sect. 4.1.2.3) I offer four alternatives to the typos-view for the material aspect of residues.

4.1.1. The primary sense-organ – the seat of residues

So, which bodily part is the seat of residues? This is not a question of interpretation, of course, for Alexander explicitly states that it is the *primary sense-organ* (*DA* 68.6; cf. 69.8-11, 69.22).[270] However, it is instructive to see his reasons and arguments for this view. Again, we shall see what the primary sense-organ is like, what is its role in perception. Finally, in what way residues are in the primary sense-organ.

[268] Cf. Burnyeat 1982.

[269] Burnyeat 1982. esp. 28-30.

[270] However, in one passage, *in Met* 433.2-6, it is told that residues come to be in the sense-organs (in plural, *en tois aistheteriois*), that must refer to the five peripheral organs. The passage occurs in discussing falsity in things, insofar as they cause false phantasiai: the example is dream. We saw that here *phantasma* is used, because of Aristotle`s usage (note 61). And since Aristotle`s explanation of dream is ambiguous regarding the question where *phantasmata* are (whether in the heart and/or in the vascular system or even in the peripheral sense-organs), Alexander may simply pick out the peripheral-organs as their place here, in line with Aristotle *DI* 459a24-b23. For the emphasis is not on the *place* of residues, but on the very fact that they indeed exist physically. Cf. *DA* 63.3, discussed in Sect. 5.1.4.4.

In a long series of arguments for cardiocentrism[271] – the view that the ruling faculty of the soul (*hēgemonikon*) is seated in the heart instead of in the brain, with the corollary that the whole soul and all its capacities are seated there (*DA* 94.7-100.17) – Alexander arrives at phantasia:

> But where the perceptions end, there is the soul of phantasia as well; provided that the activity and the function of it concerns the residues from perceptibles, that come to be in the part [of the body] in which the common sense is.[272] (*DA* 97.11-14)

In the whole argument Alexander proceeds in the following way. He shows that the most basic capacity of the soul – the nutritive capacity – is in the heart (94.16-96.10). Then, applying a general principle – that wherever a given capacity is, there is also the capacity which is more perfect (*teleioteros*)[273] than the previous one (94.11-16) – he shows that all capacities are in the heart, since there is a chain of hierarchy – with ascending perfection – among soul-capacities. In this hierarchy, at 97.11-14, he arrives at phantasia. Thus, his claim that phantasia is where perceptions end involves that phantasia is in a way the *perfection of perception*. Perception, at least partly, operates for the sake of phantasia. This reinforces that the capacity of phantasia is distinct from the perceptual capacity. More importantly for our present purposes, Alexander appeals to the fact that residues – the objects of phantasia – come to be in the bodily part where common sense is.

The idea is very simple. Residues are residues of perceptions, and come to be from perceptions: perceptions end in residues, for perception – as ongoing impressing process – is busy with the generation of impressions, i.e. residues (cf. Sect. 3.2.2.2). Residues could not come to be from perceptions if they did not come to be where the perceptions are. Hence they come to be where perceptions are. Perceptions are in the primary sense-organ, in the heart, since the capacity for perceiving, the common sense – what does the perceptual activity of judging –, is there (cf. Sect. 5.1.4). Hence residues come to be in the primary sense-organ.

[271] This argument is against Galen. Cf. Tieleman 1996; Accattino 1987; [BD] 360-373. Tracy 1983 argues that Aristotelian hylomorphism requires a central place where the soul resides, i.e. cardiocentrism.

[272] ἀλλὰ μὴν ὅπου αἱ αἰσθήσεις τελευτῶσιν, ἐκεῖ καὶ τὴν φανταστικὴν ψυχὴν ἀναγκαῖον εἶναι, εἴ γε ἡ ἐνέργεια αὐτῆς καὶ τὸ ἔργον περὶ τὰ ἀπὸ τῶν αἰσθητῶν ἐγκαταλείμματα, ἃ γίνεται ἐν τῷ μορίῳ, ἐν ᾧ ἡ κοινὴ αἴσθησις.

[273] 'Perfection' (*teleiotēs*) is a crucial term in Alexander`s teleology (Aristotle uses mostly '*telos*'). It is towards which natural things aim, it determines their development and behaviour, for the sake of what they are. It is the *form* in natural things, cf. e.g. *DA* 6.24-7.8, 10.7-10, 15.28-29, 16.5-7; *in Met.* 347.17, 359.12-25, cf. 410.17-412.22. Other translations are considered by Caston 2012. 83: 'completion', and his preferred 'culmination'. Cf Todd 1974. 213-214.

We have seen that residues remain in their place in the central-organ throughout their existence – Alexander adopted CPI (Sect. 3.2.2.2) in preference of explaining the occurring of phantasia by an activity of the soul (Sect. 3.2.3). Thus, since residues come to be in the primary sense-organ, and they do not change place, they always are in the primary sense-organ.

What is this primary sense-organ, and what is it is like? 'It is the body in which the perceptual capacity of the soul resides'[274] (*DA* 68.6-7; cf. 60.6). It is the instrument of perception, where the origin of perception is (*DA* 97.1) – the body in which perceptual activity takes place, where we judge and grasp the perceptible objects. We are told that this central organ is around the heart (or *in the heart*, for the sake of brevity, cf. *DA* 97.14).

> [The primary body] is situated in the neighbourhood of the heart, where the ruling part of the soul is also entirely present, as our discussion will show as it proceeds. For it makes sense that the highest form is located where the being of the animal is present most. But the being of the animal is present most in what is hot and moist, and the region around the heart is like this. For it is an origin and well-spring of the blood with which we are nourished and also of breath, and these are moist and hot.[275] (*DA* 39.21-40.3)

The central-organ – the seat of the perceptual capacity – must be contrasted with the peripheral sense-organs specific to the five individual senses. As Alexander makes clear, perception of any perceptible feature is done at the same place, so not in the different individual sense-organs.[276] This is argued in cases when more than one perceptible object is perceived simultaneously (*DA* 63.12-64.11, see Sect. 5.1.4 and 4.1.2.2), but this should apply also in cases (very rare, if it may happen at all, cf. *DA* 83.17-22) when only one object is perceived.

What is this organ like? What do we know about Alexander`s view of the heart? We have read that the heart is *hot* and *moist*; primarily because it is the origin of the hot and moist bodily constituents: blood and breath (*pneuma*) (*DA* 40.1-3; cf. 94.17-20; *in Sens*. 40.22-23). This is the view of Aristotle.[277] This hot and moist body certainly does not constitute a stable environment. It is liquid or plasmatic rather than solid. It is regularly disturbed by the inflow

[274] τοῦτο δ' ἐστὶ τὸ σῶμα, ἐν ᾧ ἡ αἰσθητικὴ τῆς ψυχῆς δύναμίς ἐστι.

[275] ἔστι δὲ ἐκεῖνο ἱδρυμένον περὶ τὴν καρδίαν, ἔνθα καὶ ὅλως τὸ τῆς ψυχῆς ἡγεμονικόν, ὡς προϊὼν ὁ λόγος δείξει. ἐν ᾧ γὰρ μάλιστα τὸ εἶναι τῷ ζῴῳ, ἐν ἐκείνῳ εὔλογον εἶναι καὶ τὸ εἶδος τὸ κυριώτατον. ἐν θερμῷ δὲ καὶ ὑγρῷ τὸ εἶναι μάλιστα τῷ ζῴῳ. τοιοῦτος δὲ ὁ περὶ καρδίαν τόπος. ἀρχὴ γὰρ αὕτη καὶ πηγὴ τοῦ αἵματος, ᾧ τρεφόμεθα, καὶ τοῦ πνεύματος, ταῦτα δὲ ὑγρά τε καὶ θερμά.

[276] Cf. e.g. *in Sens*. 34.3; cf. Towey 2000. 170n74; for a thorough defence of the attribution see Sharples 2005a. For Aristotle see e.g. *DI* 3. 461a30-b1.

[277] Caston 2012. 142-143 with references; cf. [BD] 274-275.

of blood from the periphery of the body when the animal is getting to sleep (cf. Aristotle *Somn*. 3).

Thus, residues are in the primary sense-organ, let us see in what way they are there. It is worth looking at some of the notions of *being in something* that Alexander recognizes explicitly (in other contexts, though). At *DA* 13.12-14.3 Alexander enumerates eight senses of being in something. Three of these are ways of something *being in a body*. (In-1) 'In the way that a part is in a whole, as a hand is in a body'.[278] (In-2) 'In the way that something is in a vessel or in a place, as we say, for example, that Dion is in the marketplace or wine is in the jug'.[279] (In-3) 'Characteristics which belong to things extrinsically are also said to be in them, as white is said to be in the white body'.[280]

The last of these, In-3, best characterizes the Stoic view (see Sect. 3.2.2.1). Accordingly, each mental state is the *ruling faculty in a certain state* (*hēgemonikon pōs echon*): a characterization of the ruling faculty. Thus, an impression (which is identified as the phantasia, the mental state) is nothing but the ruling faculty in a certain state. Hence the impression is in the ruling faculty. Of course, the ruling faculty itself has a place in the body – it is in the heart – so the impression characterizing it has its *place* there too. But this way of being in the body for the impression is secondary and derivative to that it is a certain state (*pōs echon*).

Clearly, this is not the way residues are in the primary sense-organ according to Alexander. For, as he argues, *in Sens*. 167.4-9, this would restrict the content of perception or phantasia to one feature at one time, ruling out the possibility of simultaneous perception, hence any kind of complex content. Such complexities would be explainable only by making them appear at different times (probably shortly after each other). This is an even worse theory than promoting an analogy with the apple and its attributes, *in Sens*. 165.25-166.4, which at least allows simultaneous perception of heterogeneous perceptibles (from different sense-modalities), but the Stoic account allows only the perception of one quality at one time. Since Alexander finds such a solution flawed, he cannot accept the underlying sense of *being in the body* either.

[278] ὡς μέρος ἐν ὅλῳ, ὡς ἡ χεὶρ ἐν τῷ σώματι.

[279] ὡς ἐν ἀγγείῳ καὶ ὡς ἐν τόπῳ, ὡς λέγομεν Δίωνα ἐν ἀγορᾷ εἶναι καὶ τὸν οἶνον ἐν τῷ κεραμίῳ.

[280] καὶ τὰ συμβεβηκότα δέ τισιν ἐν ἐκείνοις εἶναι λέγεται, ὡς τὸ λευκὸν ἐν τῷ λευκῷ σώματι λέγεται.

The remaining senses are the following: (In-4) as a species is in a genus, (In-5) as a genus is in its species, (In-6) as the whole is in its parts, (In-7) as things that are blended are in the blend made from them, and (In-8) as a form is in matter. The larger context of this enumeration is to show that the soul-body relation is type (In-8).

The difference between In-1 and In-2 is more and less independence. Being in a vessel (In-2) is much external, temporary and accidental relation. Something may or may not be in the marketplace. Again, the marketplace may be full of things or people, or it may be totally empty: its existence does not depend on being occupied. So if A is in B in sense In-2, then both A *exists independently* of B, and B independently of A (or anything else that may be in it). However, if In-1, a whole cannot be what it is, unless it has parts. Certainly it might be a whole without any one of its parts, but it cannot be without any parts whatsoever (cf. *in Met*. 387.14-33). Again, a part, A, of a whole, B, may not be part of B sometimes but not at other times. If A is part of B, then A is always part of B, and A is not identifiable without reference to B the whole. So, A is not independent of B; and even though B does not depend on having A as a part, yet B depends on having some parts.

Now, the relevant sense is certainly not In-2. For this would entail that residues are independent of the primary sense-organ, so that they can exist without it. But the principle CPI implies that residues may exist only in the central-organ. But residues are not (In-1) parts of the primary sense-organ either. For they come about in the existing central-organ, so that they may not constitute it as parts. But the primary sense-organ does have parts – in which the perceptual changes come about. Since residues depend on the perceptual changes, it is plausible that the residues are *in the parts* of the primary sense-organ too. But in what way are residues in these parts? As we shall see, residues are changes as well as the perceptual changes (Sect. 4.1.2), so they should be in the parts of the central-organ in similar way as perceptual changes. Certainly not (In-2) as in a vessel, nor (In-2) as parts of the parts – for the same reasons as before. But there is no problem with In-3 for parts of the organ, being *qualifications of parts of the primary sense-organ*. Then, they are closely and essentially related to the primary sense-organ, for they are related to parts of it. Yet they are not simply qualifying the whole, so the problems with the Stoic account do not arise.

4.1.2. Bodily Change

Let us move to the question what kind of entities residues are; starting with a quote:

> For since it is possible that something which has been moved by something else again itself moves something else – the stick, having been moved by something else, indeed moves the stone – the primary sense-organ too, having been moved by the perceptible objects through the activity concerning them, again itself, through the movement that comes to be in it [caused] by the perceptible objects, moves the soul of phantasia, as perceptible objects [move] the perceptual [soul]. (*DA* 69.20-25)

The *movement* (*kinēsis*) in line 24 should refer to the residue. Thus, residues are *kinēseis*: movements, changes, processes. Change comes in four categories: substance; quantity; quality; place. Perception is a kind of alteration – quality-change. So it is plausible that the residue-change is a kind of quality change too. Even though Alexander does not characterize any further the type of change residues are, let us try to get closer to it.

4.1.2.1. Not typos

The first type of entity that suggests itself is impression (*typos*). We have seen Alexander`s argument against the identification of phantasia with either impression or the impressing process (*typōsis*) (Sect. 3.2.2); we have also seen Alexander`s arguments against explaining sight by appealing to impressions, and that residues might be called impression only metaphorically, and by no means literally (Sect. 2.2). However, it is worth reconsidering why Alexander refuses to take residues to be impressions.

Three general features were identified in the previous discussions of this issue that goes beyond the objections directed specifically at the Stoic doctrine. (i) The scope of applicability of impressions is restricted to *shapes* at the most (*Mant.* 10. 133.28-38). The other types of objects cannot be represented in shapes only. (ii) Impressions are strictly speaking the *negatives* of the thing that makes the impression (*Mant.* 10. 134.11-23). This implies that representation would work through opposite features – as a convex shape is represented in a concave impression, probably a given quality would be represented in an impression with the contrary quality. But this is not a plausible restriction. Indeed it seems that representation involves some kind of resemblance rather than opposition. (iii) And most importantly right now, impressions are *persistent*, non-changing modifications in a *solid* and quite *stable receptor*, once impressed in their way, then hopefully preserving the shape, though occasionally getting deformed or confused (*Mant.* 10. 134.6-9, cf. 133.25-28, 134.9-10; cf. Aristotle *DM* 450a32-b11). In short: they are *static*.

There is nothing much to add regarding (i), but simply that the other types of object might obviously be represented as well, not only shapes. The problem with (ii) being negative, is not merely a pre-theoretical intuition that representation is best explained through similarity. Rather, it is connected to the Aristotelian theory of perception, esp. the kind of material change that is involved in perceiving: a kind of *assimilation*, becoming like the perceived object (Sect. 4.1.2.2). Hence, if perception itself was construed on the analogy with impression, perception would involve not assimilation, but dissimilation. Or perhaps it is only phantasia that works through impressions. But then, phantasia would not resemble perception, contrary to what

Alexander asserts (*DA* 68.31-69.2; cf. Aristotle *DA* 3.3. 428b12-14). Moreover, then a residue would be the negative of an actual perceptual assimilation, hence the opposite of the original external object. But why would this be more favourable to the case when the residue is just similar?

But for the present argument, let us consider (iii): that impression is literally static. To be sure, some sort of *persistence* is required from the representing items, the residues; otherwise there would not be sufficient continuity between the external object and the mental state directed at that object – there would not be causal continuity (Sect. 4.2.2), nor would the residue preserve some relevant features (Sect. 4.2.3). But impression involves not only the preservation and continuity of its own features, but it implies that it is impressed into a *stable material*. But from what we know about Alexander`s view about the material side of the primary sense-organ (the place of residues), and what happens there, it seems plausible to say that it (the heart) is by no means a stable environment (Sect. 4.1.1). But if the heart is unstable, it cannot be a good receptor of impressions in the literal sense – it cannot preserve in itself the relevant features of the impressions unchanged – so that impressions would become distorted on a regular basis. Then, the whole point of explaining persistence and preservation in terms of the concept of impression is lost.

In conclusion, residues cannot be impressions, i.e. static modifications of the primary sense-organ, for it would require that the primary sense-organ itself is stable, but it is not. This claim is intentionally this vague here, for I want to turn back to this point in Sect. 4.1.2.3, once some more evidence is taken into consideration (Sect. 4.1.2.2).

4.1.2.2. Assimilation in perception

But if not impression, what else? It is not only the *place* of residues that follows from the fact that residues depend on perception, but also the *kind of change* residues are. They are said to *be internal perceptibles*, so that they seem to resemble to their originating perceptions, and this should mean – apart from that they share the kind of content (Sect. 5.1) – that they are similar (or the same) type of movement. In this section I summarise Alexander`s account on the material aspect of perception: what kind of movement takes place in the body when we perceive. It turns out that this is *assimilation*, on the most general level of account: *becoming like* the perceptible object in the outside world.

Let me start with Alexander`s account of perception in general, and how a kind of motion or change is involved in it (*DA* 38.20-40.3). In introducing the perceptive soul Alexander writes:

> the soul for perceiving is a capacity of soul in virtue of which whatever possesses it is able – by becoming like the received perceptible objects through a kind of alteration – to judge the perceptible objects with an activity related to them. […] the faculty of perception likewise requires perceptibles [as the nutritive faculty requires nourishment], since its activity concerns them: it is for being aware of them and judging them.[281] (*DA* 38.21-39.5)

Alexander describes[282] perception as an activity of the soul that consists in *awareness*[283] and a *judgement* made by the soul. The judgement is made about the external object that activates perception by affecting the perceiver`s body so that the perceiver receives the perceptible object in a certain sense and is aware of it. It is claimed that the reception occurs by means of an assimilation of the perceiver to the perceived object. This assimilation is said to happen through an alteration.[284]

So there are at least five aspects distinguished here: (i) *judging* and (ii) *becoming aware* of the perceptible object; (iii) *receiving* the perceptible object or form; (iv) becoming *assimilated* to the object; and (v) being *altered* by the object (or going through an alteration). The relationships among these aspects of perceiving are not yet specified here. In what follows, I analyse Alexander`s account of the last two notions – (iv) assimilation and (v) alteration – and the connections between them: for they are – together with (iii) – the different descriptions or phases of the material change involved in perception (call it *perceptual change*). The activity of perception – (i) judgement and (ii) awareness – and its relation to the material aspect is to be discussed in Chap. 5. Since (iii) reception does not seem to add relevant qualifications to the issue, I leave it aside.[285] Let us see, then, how Alexander introduces the perceptual change.

[281] δύναμίς ἐστι ψυχῆς, καθ' ἣν τὸ ἔχον αὐτὴν οἷόν τέ ἐστιν ὁμοιούμενον τοῖς δεκτοῖς αἰσθητοῖς διά τινος ἀλλοιώσεως τῇ πρὸς αὐτὰ ἐνεργείᾳ κρίνειν αὐτά. […] οὕτως καὶ ἡ αἰσθητικὴ τῶν αἰσθητῶν. περὶ γὰρ ταῦτα ἡ ἐνέργεια καὶ ταύτης καὶ τούτων ἐστὶν ἀντιληπτική τε καὶ κριτική.

[282] As Caston 2012. 139n344 points out, *pace* [AD] 175, there is no reason to take this initial account as a definition of perception.

[283] I follow Caston in translating the term *antilēpsis* as 'awareness', and *antilambanein* as 'to be aware of something'; in contrast to the more usual translation: 'apprehension' and 'apprehending'. Caston 2012. 139n346 wants to stress the perceptual, phenomenal, direct character of this activity in contrast to abstractness and the connection to knowledge. I am not sure, however, that the term connotes this feature, see Sect. 5.2.3.

[284] The same elements of this account are reiterated in describing the special senses: *DA* 44.9-13 for sight; 50.8-11 for hearing; 53.27-29 for smelling; 54.18-23, 55.12-14 for tasting; 55.15-17 for touch; 60.1-6 for all.

[285] For this verdict see Caston 2012. 141n350. Although this feature plays an important role in comparing intellectual grasp with perceiving *DA* 83.13-84.10, as also in Aristotle *DA* 3.4, cf. e.g. Charles 2000.

> The perceptible object and the sense are unlike [each other] before the activity [of perception], but in activity they come to be alike, since perceiving is in virtue of a sort of likening that comes about through alteration. For perception in activity is the form of the perceptible object coming to be in the perceiving subject apart from the matter. But if the likening occurs through alteration, clearly they are different and unlike before the alteration, as was also shown to be the case with nourishment. It makes sense, then, to say that the sense is affected by what is like in one way, and in another way by what is unlike, since it is alike [now] because it was affected. [286] (*DA* 39.10-18)

Alexander follows here a general pattern of explanation. Every kind of *being affected* is acquiring a property (in case of qualitative change it is *acquiring a quality*). What acquires the quality is the *subject* of the change, s. s becomes F if it is affected by something that is F: i.e. the *cause* c that affects s and brings about that s becomes F must be such that the affected subject comes to be – c has to be F before and independently of the change. In ordinary cases, being F implies having the ability to change an appropriate subject to become F. A subject is appropriate for such a change if it has the potentiality[287] to become F.[288] Thus, the change 's becomes F' involves the following items: c, the *cause*, which is F in actuality, thereby having the capacity to make something F; s the *subject* of change that is F potentially, but not F in actuality,[289] thereby having the capacity to become F. Whenever such a c and s meet (in the appropriate way), c (in virtue of being F) will cause s to become F (if there is no hindrance, i.e. if the conditions are appropriate).[290]

The theory is developed by Aristotle for the case of ordinary physical bodies and features, such as being hot. A hot thing is capable of making something else hot, insofar as it is hot (or *qua* hot). If something else which is capable of becoming hot is present (such a thing is cold – not hot) then the hot thing will make the latter (cold) thing hot. Now it is clear that this process is *assimilation*. c, which is F, assimilates s, which is not F, to itself, so that s

[286] ἔστι δὲ τὸ αἰσθητόν τε καὶ ἡ αἴσθησις πρὸ μὲν τῆς ἐνεργείας ἀνόμοια, ἐν δὲ τῇ ἐνεργείᾳ ὅμοια γίνεται. κατὰ ὁμοίωσιν γάρ τινα γινομένην δι' ἀλλοιώσεως τὸ αἰσθάνεσθαι. τὸ γὰρ εἶδος τοῦ αἰσθητοῦ χωρὶς τῆς ὕλης γινόμενον ἐν τῷ αἰσθητικῷ ἡ κατ' ἐνέργειάν ἐστιν αἴσθησις. εἰ δὲ δι' ἀλλοιώσεως ἡ ὁμοίωσις, δῆλον ὡς πρὸ τῆς ἀλλοιώσεως ἕτερά τε καὶ ἀνόμοια ἦν, ὡς ἐδείχθη καὶ ἐπὶ τῆς τροφῆς. διὸ καὶ εὐλόγως λέγεται ἔστι μὲν ὡς ὑπὸ τοῦ ὁμοίου πάσχειν τὴν αἴσθησιν, ἔστι δ' ὡς ὑπὸ τοῦ ἀνομοίου. παθοῦσα γάρ ἐστιν ὁμοία.

[287] *Dynamis*, which might be translated as 'capacity' and 'power' as well. On 'dynamis' see *in Met*. 389.1-395.29; cf. Aristotle *Met*. Δ12, Θ; cf. Johansen 2012. 73-92; Makin 2006.

[288] E.g. *in Met*. 405.20-406.3.

[289] E.g. *DA* 6.8-12.

[290] See *in Met*. 389.1-35; *DA* 7.9-13; *Q* 1.21. 34.30-35.1; cf. Kupreeva 2003; Caston 2012. 83-84. On Aristotle`s theory of change see *Phys.* 3.1-3; *GC* 1.7; cf. e.g. Marmodoro 2014. 3-77; Hussey 1983.

becomes F. Before the change, c and s are dissimilar (c is F, but s is not F), and after it they are similar (both of them are F). When F is a quality, the change is qualitative change.

Applying this for perception, it makes perfectly clear sense that there is an *assimilation through qualitative change*. For the most prominent objects of perception are all qualities (or things having a quality), thus perception in the definitive sense is a change of quality (*DA* 40.20-41.10; cf. Aristotle *DA* 2.6; see Sect. 5.1.2). This notion of perceptual assimilation can straightforwardly explain the content (esp. the phenomenal content) of perceptual experience.[291]

However, it does not seem to be evident what the subject of perceptual change is. *DA* 39.1 ambiguously states it is the 'thing that possesses the capacity' (*to echon autēn*), though this presumably refers to the animal.[292] From *DA* 39.10-18 it seems that it is the soul: it is the sense (*aisthēsis*) what is said to become like the object (39.11-13, 16-18). But this is problematic. First, as I have noted, the kind of change that involves assimilation is *physical* or material change – acquiring a quality in the strictly physical sense. But the soul (and its capacities, as perception) is *immaterial*.[293] It is the *form* of the body. But being immaterial, the soul cannot be the subject of any material or physical change.

One may try to save the subject status of the capacity by insisting that the perceptual change is after all not a physical change, but some other kind of change. This might seem to be an option in interpreting Alexander, for he plays with the idea at *DA* 61.30-62.22. But as I shall demonstrate (Sect. 5.1.4.4), this view should not be taken as Alexander`s position. It is in contradiction to his preferred accounts anywhere else; and immediately after suggesting the view he cites phenomena that falsify it (62.22-63.5).

But in context it is sufficient to point to Alexander`s explicit statement in the following paragraph.

[291] Cf. e.g. Marmodoro 2014. 80-86, 158. Charles 2000. 82-84, 110-112; Caston 1996. 29-30, 40; Modrak 1987. 41-42. However Bolton 2005. 222-224 argues that the efficient cause underdetermines the content. The analogous case of assimilation to the cause of thought then by analogy can explain the content of thought, cf. Charles 2000. 129-146; Perälä 2015. 358.

[292] What possesses a capacity is often a body or body-part, but here the point is to contrast having perceptual capacity with having only nutritive soul. This context makes this statement not decisive on the question of the subject of assimilation. On the issue see Lorenz 2007.

[293] Alexander is quite explicit on this: *DA* 17.15-20.26; *Mant.* 3; cf. Kupreeva 2003. Again, both Aristotle and Alexander emphasize that the soul may not be affected materially unless in an accidental sense, viz. insofar as the animal possessing the soul, or its body is affected. *DA* 21.22-24.17; cf. Aristotle *DA* 1.3. 405b31-406a12; cf. Menn 2002. 128-132; Schroeder and Todd 1990. 11-12.

> This affection[294] comes about in the primary body that has the perceptive soul through certain organs, which are of a different nature than the perceptible objects which they serve, because they have a capacity to be affected by the perceptibles; and whenever one is affected in these ways, it relays the affection to[295] [the primary body].[296] (*DA* 39.18-21)

So, in Alexander`s view the assimilation clearly is a material change that takes place in the primary sense-organ.[297] So the previous attribution of the change to the sense as subject might be dismissed as introductory.[298] Again, as we have seen, since the proper objects of perception are qualities, the assimilation is to qualities, and must come about as a result of a qualitative change.

One may think that the assimilation in the primary sense-organ is sufficient for perceiving the object, or at least this is the sufficient material condition for the particular judgement to be made. However, the assimilation happens through the peripheral organs` *relaying* (*diadosis*) the affection caused by the perceptible object to the primary sense-organ. This implies that in the first place the peripheral organ is affected by the perceptible object, and the central-organ is affected indirectly: by means of the peripheral affection having been relayed to it.[299] E.g. when one is seeing something, the object of one`s sight brings about an affection in one`s eyes (the peripheral organ), and through the eyes (and through the appropriate channels) the affection is transmitted (or relayed) to the primary sense-organ, so that causing a certain assimilation there.

This phase of transmission from the peripheral to the primary sense-organ is a *necessary* element in the account of perception. For the primary sense-organ – where the perceptual

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[294] Caston renders pathos as 'modification', but 'affection' reflects the passivity of the state more emphatically. But it clearly does not mean *experience* (*pace* Fotinis and Sharples 2005a. 357), which is the occurrence of the mental state. The analogy with nutrition and ordinary physical change requires that the assimilation is a material change. Cf. Sorabji 1974.

[295] Following [AD] 176; also [BD] and Caston 2012 in reading ἐπ' instead of εἶτ' in line 39.21.

[296] γίνεται δὲ τὸ πάθος τοῦτο ἐν τῷ πρώτῳ τὴν αἰσθητικὴν ψυχὴν ἔχοντι σώματι διά τινων ὀργάνων ὄντων ἄλλης φύσεως τῶν αἰσθητῶν οἷς διακονεῖται τῷ δύναμιν ἔχειν πάσχειν ὑπ' αὐτῶν, ἃ ὅταν πάθῃ ἐπ' ἐκεῖνο τὸ πάθος διαδίδωσιν.

[297] Cf. *DA* 44.2-3, 10 for seeing.

[298] For Aristotle cf. Corcilius 2014. 43-48. However Lorenz 2007. esp. 193-210 argues that the sense also may be the subject in another sense of assimilation though.

[299] The entire causal story of perception starts with the perceptible object affecting the medium of perception, and the medium thereby relaying the affection to the sense-organ, see e.g. 43.11-15, 46.23-47.2. It is worth noting in this regard that both the transmission and the material basis that enables it is described in common terms for medium and sense-organ. For further details see Sect. 5.1.4.4 and 5.1.4.6.

activity takes place – is in the heart, and the object of perception is outside the body of the animal at a distance, and the central-organ to be assimilated to the object a *continuous causal connection* is required between them (cf. *in Sens*. 35.16-24, 36.5-37.5; cf. Aristotle *Sens*. 438b8-16). As the gap between object and peripheral sense-organ is filled by the relaying through the medium of perception, so the one between the peripheral and the central-organ is filled by the relaying through the appropriate channels between them.[300] Were the assimilation in the primary sense-organ sufficient for perception, and perception could happen without the relaying, the affection in the peripheral-organ (if there was any) would not enter into the account of this case of perceiving – it would be *superfluous*. Moreover, perception could come about even *without the presence of a perceptible object* – if a qualitative change somehow came up in the central-organ. This possibility, however, is in plain contradiction with Alexander`s (and Aristotle`s) theory (see Chap. 3).

Relaying has a further explanatory role in the theory: the identification of which sense-modality is operative may be made by identifying from which sense-organ the affection is transmitted to the primary sense-organ (see Sect. 5.1.4.2 and 5.1.4.6). That is to say, the organ through which an affection is relayed to the central-organ does not only provide causal connection to the external object, but the fact that the affection is relayed through that specific peripheral-organ determines that the perception is in the sense-modality that belongs to that organ. If the affection is relayed from the eyes, and through the channels from the eyes, then it is seeing; if through the ears, it is hearing, etc.

So the assimilation is in the primary sense-organ; but not without qualification in the organ as a whole, but different perceptual changes – related to different objects of perception – *in* different *parts of the organ* (see Sect. 5.1.4.6). Even though this theory is proposed to answer the problem of simultaneously perceiving two opposites in one sense-modality (e.g. white and black) – i.e. cases when several objects are perceived –, the account can be generalised to cases when only one object is being perceived. So that the assimilation to any number of perceptible object in any set-up of objects is indeed in a certain part of the primary sense-organ (in contrast to affecting the organ as a whole).

[300] It is unnecessary to specify these channels here. What is relevant for us is that there must be something between the peripheral organs and the central-organ that makes the relaying possible. It is argued that Aristotle himself did not care too much about the exact empirical nature of the channels, he was content with showing the existence of them, so that he could explain the phenomena that he wanted to explain, cf. Lloyd 1978. Cf. *Mant*. 15. 142.31-143.1; *in Sens*. 59.11-14 for the claim that the pores from the eye are of the same matter as the eye itself.

I add two further remarks to this account: (1) the two affections, the one in the peripheral and the other in the central-organ need not be the same in type; and (2) neither of them has to be a literal change that ends in possessing the perceptible feature in the same way as the object of perception possesses. The point of these remarks is that the account given does not require these specifications, which concern vexed issues in Aristotelian theory of perception.

Let us start with (1) whether the two changes in the two organs are of the same type. Apparently they are the same, for relaying an affection seems to be inducing the same effect to a further recipient. But then, is it the case that the affection in question is also of the same type as the change in the medium – for the medium relays the perceptible form to the peripheral organ? Then the sense-organ and the channels from it to the central-organ were nothing but internal media of perception.[301] Even if this worry might be dismissed,[302] what reason do we have for supposing that the changes are the same in kind? Rather, they should be different. There are explicit restrictions for the peripheral organs (esp. for their matter), in order that they may have the potentiality to receive the appropriate kind of affection necessary to perceiving the kind of perceptible to which the organ is fitted (see Sect. 5.2.1.2). E.g. the eyes must be neutral to colours: transparent. But the primary sense-organ is described in different terms (hot and moist), so that it seems that it is unable to receive the very same type of affections that the peripheral organs can.

Regarding (2) the question of literal change, it seems that Alexander`s account is not decisive. On the one hand, the assimilation-model suggests literal change,[303] as in case of becoming hot. But since assimilation takes place in the primary sense-organ, if assimilation was literally acquiring the perceptible feature, it would entail that parts of the organ come to exemplify the features that are perceived. If this is taken the most charitably, it would still imply that there are pictures within the heart (and probably in the eyes) that exactly match the external object.[304] But there is not even a hint in Alexander that this should be the case. Rather, it is sufficient that the perceptual change is similar in certain respects to the object – or that they are isomorphic. What is needed is only that the perceptible feature is somehow *coded* in

[301] CF Johansen 1998. 67-95; Sharples 2005a.

[302] It is arguable that the change in the peripheral organ is of a different type than that in the medium. This is all the more desirable, since the change in the medium may turn out to be a mere relational change, esp. in case of vision. On the issue see Sect. 5.1.4.4.

[303] Cf. Sorabji 1974, 1992; 2001; Everson 1997.

[304] Another consequence of literalism would be in case of heat-perception that literally becoming e.g. hot or esp. cold would be detrimental to the thermoregulating capacity of the animal, cf. Murphy 2005, 2006. 317-318.

the perceptual change,[305] so that it may be decoded by the perceptual capacity.[306]

Let us see an example of the description of the material process in perceiving – the case of hearing. At *DA* 50.11-18 Alexander specifies three stages in the whole process as it happens in the perceiver. (St-1) The air in the ears is moved by the air adjacent to it in the environment (i.e. the external medium), so that (thanks to certain conditions) it receives accurately the *shapes* (*schēmata*)[307] of its mover (50.11-16).[308] Afterwards (St-2) the ear transmits the shapes to the primary sense-organ through the pores stretching from the primary sense-organ to the ears (50.16-17); so that finally (St-3) this becomes the cause of awareness and judgement of sounds (50.17-18). What is most important from this now, is that the ears (and in particular the air in them) receive not sounds properly speaking, but *shapes* or patterns of air – hence it is not a literal acquisition of the perceived feature.[309] Whether this same shape comes about in the central-organ is unclear.

Let us summarize our findings about the kind of change which is involved in an act of perceiving. There is a subject s (an animal or a human) and an object Y (a proper perceptible, e.g. white). The subject, s, has the required potentialities to become Y in the required ways. When s perceives Y the following processes occur. Y causes s`s eyes (in one part) to change into Y^{eye} (the relevant change in eyes in perceiving Y, whether or not it is becoming Y literally). This affection, Y^{eye}, in turn is relayed to the primary sense-organ, so that one part of that organ, part-for-Y, is assimilated to the object Y, so that part-for-Y comes to be $Y^{primary}$ (again, not necessarily literally Y). Up to this point we can identify the material aspect of perception. (We might add that the subject receives the form of the object insofar as this last assimilation takes place.) Then, based on the fact that part-for-Y has become $Y^{primary}$ through Y^{eye} having been relayed to the primary sense-organ (rather than Y^{nose}) – in a word: that it is through the eyes (rather than the nose) – the common sense is aware of that it is seeing (rather than smelling).

[305] Moreover, if the two changes are different in type, it becomes possible that perceptual information is coded homogenously, into the same qualitative spectrum, and then the relevant spectrum may be picked out by the route of transmission.

[306] Those who interpret the *logos*-doctrine of Aristotle as *coding* the perceptual information in non-literal physiological changes include Lear 1988; Silverman 1989; Shields 1995; Caston 2005.

[307] Sorabji 1991. 230-231 argues that in taking hearing dependent on reception of shapes, Alexander moves away from Aristotle`s view that takes it to be dependent on moving blocks of air, esp. *DA* 2.8. 419b25-27, 420a8-9.

[308] It should be added that the shapes are of the ultimate mover (the external object) only if they were not disturbed in the process of travelling from the object to the sense-organ through the air as medium, cf. *in Sens*. 126.3-24; otherwise they are the shapes only of the adjacent air.

[309] It seems that it is not even in the same category of change – for shape does not seem to be a quality. For emphasizing this possibility see Johansen 2012. 166-168. Caston 2005. 312-315 seems to suppose that coding must occur in qualities.

And based on the fact that part-for-Y has become $Y^{primary}$, the common sense judges that 'there is Y', so that *s is seeing Y*.

4.1.2.3. Four alternatives

Now that we have seen what assimilation in perception may amount to, we can explore how residues are related to the perceptual change. We might approach this issue by making two distinctions: residues might be (I) either of the same or of some different types of change as the perceptual change; and (II) quite static or more of a dynamic character.

(I) As noted, residues are caused by perception, and they have some resemblance to the original perception. This similarity might be more or less close. On one side a residue may be of the same type altogether as its cause (or even numerically the same); on the other it can be a secondary effect produced by the perceptual change, of a different kind. In other words, what remains may simply be the perceptual change, or it might be a certain item brought about by the perceptual change, similar in some respect, though not identical to it.

(II) As I mentioned in passing, the residue might be static or some more dynamic entity. The former picks out roughly the effect of the change, the latter a disposition to change into that effect. Let me clarify this distinction. In a change to F, there is a cause; there is a subject changed, s, with the potentiality to be changed into F; and finally the effect, s being F. What remains may be (A) simply the effect: s being F; or (B) it might be the potentiality or disposition to change into F. The former (A) is clear. Let us clarify (B) with an example: learning. As it is well-known, for Aristotle, learning something involves being engaged in the activity one is to learn. Learning to play the flute, one needs to play the flute repeatedly, and by doing so one will acquire the disposition to play the flute. This applies also for other cases like learning technical knowledge, sciences, or how to be virtuous. By doing the appropriate activities one will develop one`s disposition to act in accordance with them. The scheme may be transformed to ordinary change. E.g. by quenching metals, i.e. heating and cooling in the appropriate manner, certain disposition of hardness may be obtained.[310] Though in this process the activities (being heat and cold) involve different type of qualities than the disposition gained (for hardness). But a less well-known example is available: shape-memory alloys may gain a disposition ('memory') to change into a given *shape* by being trained for this shape through certain processes that involve deformation of shape in the appropriate manner and sequence

[310] The process was well known even for Homer, cf. Mackenzie 2006.

together with change of temperature.[311] Thus, the residue, what remains from the perceptual change, may be something like this kind of emerging disposition.[312]

Recall from the scheme of perceptual change (Sect. 4.1.2.2) what the assimilation is. It is part-for-Y changing into $Y^{primary}$. On the basis of the two distinctions in this section – *same type* or *different type*; *static effect* or *dynamic potentiality*[313] – we may identify four alternatives.

(Ch-1) *Static* and *of the same type* – the residue is nothing but the perceptual effect remaining in the very place where it is: $Y^{primary}$ in part-for-Y.[314] This gives the clearest sense of 'remaining', for here the perceptual change literally remains after perception ended. So this option seems to be identical to a decaying sense-perception model[315] familiar from the Early Modern period (e.g. Hobbes *Leviathan* Ch2, Hume *A Treatise of Human Nature* 1.1-3). But, apart from the issues with decaying-sense, the account is vulnerable to these problems. Why would not be *constant perceptual awareness* of the relevant feature? If there was not, why this item did not *hinder perceiving* Y? Both issue stems from the fact that the very same alteration is present in the central-organ as residue that constitutes the original perception as its material cause.

(Ch-2) *Static* and *secondary, of a different type* – the residue is not simply the perceptual change remaining ($Y^{primary}$), but a secondary effect brought about by this, $Y^{residue}$ in part-for-Y. This alternative gives justice to that residues are *caused* by perceptions, and not merely *remnants* of it. Residues do remain in the primary sense-organ on this account, but not as a

[311] See https://en.wikipedia.org/wiki/Shape-memory_alloy (15-10-2016); Cf. Wayman and Duerig 1990.

[312] Especially because Aristotle himself connects perception with changes that happen in learning and of which the paradigmatic example is learning and developing a disposition; cf. Aristotle *DA* 2.5.

[313] This potentiality to change into the quality should not be confused with Aristotle`s account that the *phantasmata* are present in the primary sense-organ only potentially, waiting for to be carried there, see Sect. 3.2.2.2. Aristotle`s potentiality was understood as a potentiality for a place; Alexander`s is a potentiality for a quality.

[314] One might say that the residue need not be numerically the same, i.e. it might be in a different part, say in part-X, in order to answer some worries. This line of interpretation does not seem to be attractive, for two reasons. First, Alexander does not mention such a local difference. Second, and more importantly, as we have seen in Chap. 3, Alexander is aiming at psychological explanations rather than physiological ones, and uses only those distinctions in the material aspect of the phenomenon that are necessary to cope with the issue at hand. But as it is arguable, there is not only this option of supposing a local difference of residues to avoid the problems with alternative Ch-1.

[315] See e.g. Kahn 1966. 62; Sorabji 1972; Annas 1986. 304; Everson 1997. 175-176; Birondo 2001. Wedin 1988. 84-90 insists that decaying sense for Aristotle is the *aisthēma* if anything, and by no means the *phantasma*. But the *aisthēma* is what embodies the form of the perceived thing, and it is in turn embodied by the *phantasma* cf. Aristotle *DA* 3.8. 432a3-10. Wedin 1988. 116-122 also claims that the assimilation should be cashed out in terms of the *aisthēma*.

simple continuation of the perceptual change, as in Ch-1. By this difference some of the previous problems can be avoided: conflation with perception; why perceptual awareness can cease in the persistence of the residual change; and why perception of the quality in question is not hindered. However, problems remain: the problem for typos-view, that the item is *static* (remaining continuously $Y^{residue}$ in actuality), involving a stable environment. And even though this explains why perceptual awareness of Y does not persist, but does not explain why phantasia-awareness of Y is not continuous (if the phantasia-activity is similarly constituted of an actively present alteration).

The latter problem might be resolved by supposing that the residue ($Y^{residue}$ in part-for-Y) is not itself the material condition of the occurrent phantasia-activity, but it causes a material change (e.g. $Y^{phantasia}$) that counts as this material condition. But this creates further problems. Is this change in part-for-Y as well? If it is, what kind of change it is? Is it $Y^{primary}$ as the assimilation to Y in perceiving Y? Then how this phantasia of Y is distinguished from perceiving Y.[316] Probably by the fact that whereas in case of perception the affection has been transmitted, this is not true for phantasia, where its cause was continually there. Note that this account is similar to alternative Ch-3, in that this involves the disposition of part-for-Y to change into $Y^{primary}$. But in addition, the present alternative implies the presence of the active potentiality that can bring about the activity of $Y^{primary}$. Hence it is unexplained why phantasia does not occur continuously. For this reason it is not better to suppose that the relevant change is something different than $Y^{primary}$.

(Ch-3) *Dispositional* and *of the same type* – the residue is neither the perceptual change itself, nor a further effect brought about by it, but a disposition to change into the relevant quality. It is a disposition (potentiality) of part-for-Y to change into $Y^{primary}$. This potentiality, however, is not a new creation. It had to be there even before perceiving Y, for this very potentiality enabled the animal to perceive Y in the first place, by making the required assimilation in the primary-organ possible. So here 'remaining' means *reinforcing*. The residue is the reinforced disposition to change into that quality, even without an external object actually being present. So when this disposition is activated and part-for-Y comes to be actually $Y^{primary}$, s`s phantasia as well is activated, so that Y appears to s, s`s *phantasia* judges accordingly with the content Y. Or, probably, sometimes it is s`s phantasia that somehow activates this

[316] Note, however, that the fact that they are constituted of the same material cause seems to explain that hallucination and dream might easily be confused with perceiving the relevant things. For hallucination and dream are explained in terms of phantasia.

potentiality so that part-for-Y becomes $Y^{primary}$, and the rest follows.

But this has problems. First, it is unclear what would be the difference between the original potentiality – that makes perception itself possible – and the reinforced one – that is supposed to make possible the relevant change without an external cause. Both are disposition of part-for-Y to change into $Y^{primary}$. It is particularly unclear why in one case an external object is required to activate this capacity whereas in the other is not.

(Ch-4) *Dispositional* and *of a different type* – the residue might be a disposition for a different but related effect. It is not a disposition to change into $Y^{primary}$, but a disposition of part-for-Y to change into $Y^{residue}$. This alternative, unlike Ch-3, makes clear the difference between the potentiality that constitutes perception and the potentiality that constitutes phantasia. In particular, this explains the difference between the capacity to perceive Y and the capacity to have phantasia of Y in physiological terms. Moreover, since the constant presence of residues in the central-organ (=CPI) is to explain psychological access to content that has been perceived in terms of physical access to the residues that represent the content by embodying it (Sect. 3.2.3) – i.e. to explain a disposition for having a particular content – it is reasonable that residues themselves are dispositions.

But there is a fundamental problem with this. Supposing that the residue is a disposition for a change, it is unclear how could that be at the same time an active factor triggering or bringing about the relevant mental state. How could it have any causal efficacy, being a passive disposition to change into a given quality? One may wonder, it is not merely a disposition to change into a quality, but a disposition to change something so that it acquires that quality.[317] But, as we have learned, such an active potentiality amounts to having that very property (quality). Something may have the potentiality to change something else to be hot, when it is hot itself. Something may have the potentiality to change something into $Y^{primary}$, by itself being $Y^{primary}$. But this is just alternative Ch-1. Even if it is allowed that it is a different actual quality that can cause the occurrence of $Y^{primary}$, it remains unexplained why the presence of the active and passive potentialities together does not create constant awareness of Y, as we saw under alternative Ch-2.

Perhaps, since phantasia is more active than perception (voluntary, depending on us and not merely on the external object acting on us), partly our efforts activate phantasia, by

[317] Caston 1996. 46-52, 1998a 272-279 argues that *phantasmata* for Aristotle are causal powers to bring about an effect similar to the effect of perceptible objects – i.e. a mental state with the same phenomenology and representational content. Caston insists that for such a causal role phantasmata need not instantiate the represented property, need not be a replica of the perceptible object.

activating such a physical disposition. E.g. in imagining something, certain physiological changes concur with our attention, which in turn activate the disposition of part-for-Y to change into $Y^{residue}$. Again, in more passive cases of phantasia (e.g. dreaming) some other physiological changes activate the same disposition, e.g. flow of blood. Then, this activation of the residue-disposition triggers the phantasia activity.

As a concluding remark, it seems that neither alternative can explain all features of phantasia-activity clearly without problems, yet it seems that the best of these is probably Ch-4. However, it must be noted that Alexander does not aim at specifying the physiology of residues, he seems merely to suppose these internal devices, and focuses on psychological explanation (cf. Chap. 3), hence all this reasoning is conjectural.

4.2. Object (*-leimma*)

As residues are internal *objects*, we have to see clearly what is involved in being an object. First, it should be settled, in general, what it is to be an object of cognition, to have a framework of investigating Alexander`s own contribution (Sect. 4.2.1). Since the goal is this latter: interpreting Alexander`s theory, I shall restrict the general discussion to highly relevant features of cognition, without going into the controversies over them. This leads us to the main question of this section: *in virtue of what feature does a representation represent its content?* Investigating how Alexander is answering this will put us in a position to distinguish clearly the object of phantasia from the object of perception in Sect. 4.3.

The concept of an object may be approached by that the residue is actually a remnant, *-leimma,* of something. That is, Alexander appeals to *causal continuity* – between the external object of the original perception and the mental state later when the external object is no more present – as a factor for providing content about something else, for being a representation (Sect. 4.2.2). But since causal continuity is insufficient for representation, I turn to investigate what further features are required. It turns out that (Sect. 4.2.3) it is *preservation* that Alexander uses as a concept to explain representation. In analysing this conception, I identify three modes of preserving: (1) *truthfully*, (2) *faithfully*, and (3) *fully*. First (Sect. 4.2.3.1) I investigate preserving truthfully, and Alexander`s treatment of memory, where it is used in the explanation. Then (Sect. 4.2.3.2) I describe the notion of preserving faithfully to the original perception. These two modes of preserving, even though explain representation in some cases, prove to be too strong for covering all kinds of states that involve representation. Thus, (Sect. 4.2.3.3) I identify the feature in virtue of which representation works as preserving fully. The

discussion of this notion will involve cases when the preservation fails due to some deformation or loss of information.[318] This will shed light on certain *mechanisms* involved in phantasia that Alexander postulates to explain that phantasia is highly prone to error. These mechanisms are the creative aspects of phantasia: *picturing* and *impressing further*. Finally (Sect. 4.2.3.4) I show how the notion of preserving is useful to explain representation in general.

4.2.1. Intentional vs. causal object

Let us move on by distinguishing two senses of being an object of mental states.[319] First, a mental state has *content*, what is grasped in being in that state. This is mostly a *state of affairs* that captures how things are in the environment.[320] That is, mental content is mostly (if not in all cases[321]) propositional: at least *predicating something of something else*, 'S is P'. [322] Now, this content is clearly *about* something: it is about S (the subject of the predication). Hence the mental state also is about the same thing: S. Thus, we can call this item, S: the object of the mental state. S is an object, for the state is *about* S – so S is the *intentional object*[323] of the state.[324] It is also possible, however, to take the proposition (S is P) itself to be the intentional object of the state. This is suggested by taking mental states on the analogy with speech acts involving force over the propositional content. E.g. believing that S is P or imagining that S is P. In this account the mental state is about the proposition, S is P.[325] However one takes it, there

[318] I use information non-technically in the ordinary sense as a synonym of content: that which is grasped by being in the given cognitive state.

[319] Although one of these (causal object) applies also to nutrition in Aristotle and in Alexander. Indeed, Alexander introduces the treatment of the object of perception on the analogy with the object of nutrition *DA* 39.3-5. This is important to bear in mind, so that the temptation to immediately see intentional object in cases of cognitive capacities might be avoided.

[320] 'Environment' is broadly understood, including universal statements about the environment as a whole, so that necessary truths (e.g. laws of nature or statements about the essence of species, etc.) figuring in Aristotelian science might be included. 'State of affairs' picks out just how things are in the environment; cf. Sect. 5.1.1.1.

[321] There might be exceptions, or rather modification of this – with regard to attitudes – but nonetheless even in those cases there seems to be *some* propositional content.

[322] In what follows I grant that Alexander (as well as Aristotle, but for our purposes this is not relevant) takes cognitive states – including perception (and *phantasia*) – to have propositional content, see the argument in Sect. 5.1.

[323] I call intentional object simply the item *about which* the mental state is, the content of the mental state. In particular, this does not involve a curious type of mental existence: intentional inexistence, Brentano 1874/1911/1973; Meinong 1904.

[324] E.g. Dretske 1981. 153-171.

[325] E.g. Stalnaker 1998.

is an item the mental state is about – which is (at least part of) the content of the state – so this is the intentional object of the state.

On the other hand, there is a sense of being an object, especially in causal theories of cognition (and of perception in particular), the item with which the state (or activity) is concerned, in virtue of which the state (or activity) comes about. That is, the cause of the (mental) state is its object – the *causal object*. This kind of object is not merely what brings about the state, but it is what makes the state what it is, it makes the state such as a state of that kind must be. In case of cognitive states, the causal object is not merely the efficient cause of the state, but it is the item that makes the state such as it is: a *cognitive* state (of a certain type). Since a cognitive state is cognitive insofar as it has content (as we just saw), the causal object of the cognitive state is the item that makes the state having content, i.e. being about something, being about its intentional object. So the causal object is the *cause* of the mental state, and it is the item that *provides content* to the state.[326]

Now, it is possible that the causal object coincides with the intentional object. I.e. the causal object provides content to the state *about itself*, becoming the intentional object of the state. Indeed, this is the case with perception. Perception is caused by the perceptible object, and it is about that very object.[327] And since the cause must be present to bring about its effect, perception requires the presence of its intentional object as well.[328] When one is seeing a white wall (in a room), this is possible because the white wall is present there.[329] However, the intentional object need not be present in all cases of cognition. One is able to recall the white wall even after one has come out of the room, or one can imagine the wall to be pink. But, in order for the mental state to come about in the first place, its causal object must be present to bring it about. Thus in these cases the causal object cannot be identical with the intentional object (the former being present whereas the latter being absent). Instead, the causal object provides content to the mental state (not about itself, but) about something else, about the intentional object that is absent. It is able to do so by being able to make a reference to the intentional object. That is, *the causal object has to be able to represent the intentional object*.

[326] The former feature picks out the efficient cause, the latter the formal cause in the Aristotelian framework. See Sect. 5.1.2 for clarification and for the final cause.

[327] For Aristotle cf. e.g. Corcilius 2014. 34; Charles 2000. 82, 115-116; Caston [Content], 1996. 40, 1998a 255-256, 289.

[328] This is something Alexander (as well as Aristotle) repeatedly emphasizes. Presence, in this regard, means local, physical presence, the kind of situation that is required for being a cause.

[329] This is not to say that error is impossible in perceiving. It is certainly possible, but the explanation of this is another story.

The question is, what it is that makes the causal object the representation of something else, in virtue of what feature a representation represents.

Once this question is answered we will be in a position to distinguish adequately the object of phantasia and the object of perception. In case of perception: the causal object is the same as the intentional object, the cause of the state provides content about itself. In case of phantasia: the causal object differs from the intentional object (the former is an internal bodily item, the latter is an external perceptible thing) – the cause of the state provides content about the external thing, insofar as it represents that. Let us see how this representation works.[330]

4.2.2. Causal continuity

As a first step, consider the case when the intentional object is present: perception. Then this object is able to bring about the mental state directed at it, since it is present. By causing the state, the object provides content for it: indeed it makes the state being about itself.

We have learned that residues (the objects of phantasia) are remnants of the original perception, remaining in the primary sense-organ for an indeterminate time. Moreover, it is told that residues bring about states of phantasia. So residues provide *causal continuity* (CC) between the external perceptible object and the mental state directed at it later (when the external object is no more present).

CC If y is a remnant of x; and y causes z; then y establishes *causal continuity* between x and z

Since the Aristotelian theory of cognition is a kind of causal theory,[331] the object of a given type of cognition is the cause of the mental state. If this object is a representation of something else, it still provides content for its corresponding state insofar as it causes it. But this object itself might be said to bear the content it represents (and provides for the mental state). This again should mean that it has this content insofar as its cause made it to bear that content. In other words: mental state Z could not be about the absent external object X, if an item Y did not represent X for Z. Again, Y could not represent X (for Z or any other state) if X was not a causal antecedent[332] of Y. Thus, Z could not be about X if there were not a causal connection

[330] In this and the following sections my analysis should be compared esp. to Caston`s account of phantasia in Aristotle in Caston 1998a.

[331] This is true for the other theory as well that influenced Alexander: the Stoic, Sect. 3.2.2.1. On causal theory of perception see Grice 1961.

[332] X need not be the particular cause of the representation Y, otherwise many cases could not be explained. It would amount to Y being a truthful or faithful preservation of X, cf. Sect. 4.2.3.

between X and Z: that is, X has to be a causal antecedent of Y, and Y has to be the cause of Z. Since Y is a persisting item (=remnant), this might be called *causal continuity*.

It is clear from this that causal continuity is *necessary* for representation.[333] If this is the whole story, the role of the residue is nothing but sustaining a causal link between the external object and the mental state: the internal object is just a causal intermediary, persisting until it provides the relevant content to a mental state.

But it can be shown that causal continuity is not sufficient for representation. Consider that so far it has been assumed that the external object provides content about itself *insofar as it is the cause* of the perceptual state. Moreover, it provides the particular content about itself in virtue of having the particular qualities it has.[334] E.g. an orange firethorn-shrub provides the content for someone seeing it that 'this is orange' (or 'this firethorn-shrub is orange') in virtue of being orange (see Sect. 5.1.2 and 5.1.5). Again, the only factor relevant in determining the content is the perceptible object and the qualities it possesses.

This suggests in turn that the residue should also provide content about itself (and about its qualities) if it is also the cause of the mental state. But the residue represents something else: the object of the original perception; it does not represent itself. The external object, in contrast, may be said to represent itself, not something else. But since in their causal role (namely: causing a mental state with content) they are similar, this difference cannot be explained merely in terms of causality. Hence it is insufficient for being a representation to causally link the mental state to the external object.

This is apparent from a more general consideration. There are numerous cases when something links two things by establishing a causal continuity without thereby being a representation of one thing for the other thing. E.g. the flow of electric current establishes causal continuity between pushing the light switch and the light being on; but it is not a representation of the pushing for the light being on.[335] So causal continuity can only be a necessary condition for representation.

Let us see how Alexander appeals to causal continuity in explaining the representational function of phantasia.

[333] Cf. e.g. Sorabji 1972. 10-12; King 2009. 9; Corcilius 2014. 35-36. Caston 1998a 290 denies that a *phantasma* of Aristotle could only represent something that is a causal ancestor of them.

[334] Extending the account for common and even accidental perceptibles it might be said: 'in virtue of having the properties it has'.

[335] Cf. Dretske 1981. 30-39, 153-171.

> For since it is possible that something which has been moved by something else again itself moves something else – the stick, having been moved by something else, indeed moves the stone – the primary sense-organ too, having been moved by the perceptible objects through the activity concerning them, again itself, through the movement that comes to be in it [caused] by the perceptible objects, moves the soul of phantasia, as perceptible objects [move] the perceptual [soul].[336] (*DA* 69.20-25)

What seems to be clear from this passage, is that something in activating phantasia plays an intermediary role between the external perceptible object and the occurrence of the phantasia-activity. It is claimed that the perceptible object brings about a change in the primary sense-organ, so that it gains the capacity to cause a further change, similar in kind, in phantasia. That is, Alexander secures that the intermediate item supplies the necessary causal continuity.

But if this is the point of the passage, the analogy he draws is misleading at the best. The stick moves the stone *at the same time* when it is moved by one`s hand. The residue, however, is supposed to move the faculty of phantasia especially *at later times*, when the object of perception is unable to do so due to its absence (e.g. *DA* 69.11-17). (This problem is most pressing, for Aristotle did not use the example in the passage to which Alexander alludes here, *DA* 3.3. 428b10-16; cf. *DI* 459a25-b5, so Alexander`s inclusion of it cannot be explained as a mere attempt for accuracy to Aristotle`s text.[337]) [AD] 244-245 also claim that phantasia is activated by the primary sense-organ *immediately*, once the affection in the primary sense-organ is made by the perceptible objects.[338] They take the repeated reference to 'perception in activity' as a justification of this.

First, the reference to 'perception in activity' is explicitly a reference to the production of residues (*DA* 69.2-5) and not to the phantasia-activity concerning these residues (see Sect. 3.4.2). But most importantly we can identify two important features of the example that make it analogous to the case of phantasia though. First, as the stick is a *moved mover*, an

[336] ἐπεὶ γὰρ ἐνδέχεταί τι ὑπ' ἄλλου κεκινημένον αὐτὸ πάλιν ἄλλο κινῆσαι (ἡ γοῦν βακτηρία κινεῖ τὸν λίθον ὑπ' ἄλλου κεκινημένη), καὶ τὸ πρῶτον αἰσθητήριον κινηθὲν ὑπὸ τῶν αἰσθητῶν διὰ τῆς περὶ αὐτὰ ἐνεργείας αὐτὸ πάλιν διὰ τῆς ὑπ' ἐκείνων γενομένης ἐν αὐτῷ κινήσεως κινεῖ τὴν φανταστικὴν ψυχὴν ὡς τὰ αἰσθητὰ τὴν αἰσθητικήν.

[337] A similar example is used by Aristotle at *MA* 8. 702a32-b6, to which [AD] 243-244 refers. That case, however, is significantly different, so that the purpose of it also differs. There is no mention of the stone moved by the stick, only of the stick. The point is that the stick is clearly not ensouled, and since the stick is analogous to the hand, the soul (that which moves) is not in the hand.

[338] [AD] 244 consider another option: that the process described is the original formation of the residue that later can serve as a basis for the activity of *phantasia*. However they do not pursue this line of interpretation any further. I submit that something similar is meant here by Alexander.

intermediary between the hand and the stone, the residue as well is an intermediary between the perceptible object and the activity of phantasia. What makes them being a mover, a cause, is that they have been moved by something else. So they are movers in virtue of being moved: the eventual mover also enters into the full explanation of the case. The stick was not a mover without being moved by the hand. It communicates, in a way, the causal effect to the stone, so that the stone is moved (eventually) by the hand.[339] Similarly, the residue is a mover only because it has been moved (brought about), without the perception (and the perceptual object) it could not be a mover, it could not bring about any effect (it would not even exist). So the residue, in a way, communicates the causality of the perceptual object to the activity of phantasia.

On the other hand, probably the example also shows that without the intermediary the effect could not have come about. Without the stick, I suppose, the person could not reach the stone to move it.[340] She uses the stick in order to be able to reach the stone. Thus the stick is an intermediary also in the sense of *filling a spatial gap* between the agent and the object. Similarly, the residue fills a gap, indeed a temporal gap. Without such an intermediary the perceptible object could not bring about an effect in the perceiver at a later time, for the presence of the object (as cause) is required. Thus the residue is similar to the stick in that both fill a certain gap between the subject and the object, without which it would not be possible to cause the relevant effect. The difference is that the stick fills a spatial gap, *the residue fills a temporal gap*.

I presupposed above that the intermediary item in case of phantasia is the residue, although this is slightly problematic. Grammatically, it is the primary sense-organ which is moved by the perceptible objects, and also which moves the soul of phantasia. This is emphasized by [AD] 244-245, arguing that the primary sense-organ as subject gives coherence to the entire passage (with the following four lines). This is the more surprising, for they find the idea that the primary sense-organ moves anything, especially the soul very obscure and mysterious.

But the formulation is more complicated. Even though it is the primary sense-organ that is said to be affected, but this is qualified: 'through the activity concerning them', διὰ τῆς περὶ αὐτὰ ἐνεργειίας. This 'activity concerning them' is perceiving the *perceptible objects*, i.e.

[339] The same example is used by Aristotle at *Phys.* 8.5. 256a3-12, and his point is the one I identified above.

[340] It must be noted that at the *Physics* passage (in the previous note), Aristotle claims the opposite. Without the intermediate mover the first (unmoved) mover would still move (the hand, or rather the man, would move without the stick, but not *vice versa*).

perception. So the 'movement of the primary sense-organ by the perceptible objects' (line 22-23) does not refer to perception itself, but rather to a movement caused by, or coming to be through, perception. This movement is the residue, since the residue comes to be from (by/through) perception in action (cf. Sect. 3.2). And then it is perfectly clear why the primary sense-organ is said to move the soul for phantasia in turn *through this item*. Because this is the theory already set out. The residue is the object of phantasia, so that it is what activates phantasia. It can be said that the primary sense-organ moves through the residue, meaning that it is the residue that moves, and that it is seated in the primary sense-organ as a modification of it. The mention of and emphasis on the primary sense-organ may serve the role of clarifying the nature of the change involved in this process, that it is a material change.

So, it is clear that an important element in the explanation of the representational role of the residue is that it establishes causal continuity between the external perceptible object and the activity of phantasia. But it is not sufficient, because the residue carries the content that it represents not on account of instantiating the properties in question (then it would represent itself, like the perceptible object). So it provides content to the mental state in a different way as the perceptual object (the comparison at 69.25 does not imply that it is in the same way). Let us move to this distinctive way.

4.2.3. Preservation

Alexander in introducing his positive account of phantasia, relying on Aristotle`s remarks on memory, claims that the residue 'remains and is preserved (*sōzetai*) even when the perceptible object is no longer present, being like a sort of image of it (*eikōn tis*), and which, being preserved (*sōzomenon*), becomes also the cause of memory in us.'[341] (*DA* 68.8-10) The remaining of the residue is what accounts for causal continuity (Sect. 4.2.2). What is added here is that it is also *preserved*. Since the residue is a bodily change, what is preserved is at least some physical features of it if it is to represent the perceptible object which caused it. But what interests us is exactly *how content may be preserved* (and be represented). And this question might be discussed in separation of what physical feature is it in virtue of the preservation of which the given content is preserved – i.e. what physical feature embodies the given content. So the issue of this section is in what way the *content* of the residue is preserved. Only from this passage it is clear that preservation can be of different types: one is explanatory

[341] ὃ καὶ μηκέτι τοῦ αἰσθητοῦ παρόντος ὑπομένει τε καὶ σώζεται, ὃν ὥσπερ εἰκών τις αὐτοῦ, ὃ καὶ τῆς μνήμης ἡμὶν σωζόμενον αἴτιον γίνεται.

in general of cases when the perceptible object is absent (in line 9), the other explains especially memory (line 10).

Thus, I shall identify three modes of preservation in Alexander`s *De Anima* in relation to the residue.[342] (a) *Preserving fully*, i.e. not leaving out information so that it is possible to recover content with the relevant specificity from the residue itself (*DA* 70.12-23, cf. 68.9), see Sect. 4.2.3.3; in addition to this, (b) *preserving faithfully*, to the original perception, i.e. preserving the particular piece of information that was given to the residue by that perception (this is implied by the fact that truth and falsity of phantasia depends on that of perception when the residue is preserved, *DA* 70.5-12), see Sect. 4.2.3.2; and additionally, (c) *preserving truthfully*, in cases of veridical representation, memory, when the residue is also an image of the perceived fact (*DA* 68.10, 68.20), see Sect. 4.2.3.1. Apart from these quite clear instances there are two other occurrences of the term 'preserving' in *DA* (63.1, 68.16) that cannot be subsumed under these labels.[343] Once the distinctions are explained, I resume how this helps to understand Alexander`s explanation of representation, Sect. 4.2.3.4.

4.2.3.1. Preserving truthfully

Let us then start with memory and the conception of *preserving truthfully*. Memory for Alexander, as well as for Aristotle[344] is a case of *veridical* representation (*in Met*. 3.13-19; Aristotle *DM* 451a8-12).[345] That is, if one has memory about something, this something had been the case some time before the existence of this instance of memory. One cannot have erroneous memory. If one seems to have one, it is not a case of genuine memory, but taking

[342] Only one of these is explicitly distinguished by Alexander: preserving fully; the other names (or descriptions) are mine.

[343] At 68.16 the term occurs in the context of polemic against the Stoics, and used vaguely. The other occurrence is more problematic. At 63.1, Alexander refers to residues preserved from perception that are in the sight/eye. This is problematic in itself, for according to the theory residues are seated unambiguously in the primary sense-organ. But it is even more problematic, for the residues seem to be connected to immaterial changes happening in perception. Even though the passage may be explained away as a careless reference to Aristotle (*DA* 3.2. 425b24-25), I turn to this passage in Sect. 5.1.4.4.

[344] On Aristotle`s view on memory see King 2009; Bloch 2007; Annas 1986; Lang 1980; Sorabji 1972.

[345] Cf. Everson 1997. 195-197; Annas 1986. 303-304; Sorabji 1972. 11-12. I argue below for the claim that memory is veridical for Alexander, though if one presses that it is not, memory still remains a case of faithful preservation (discussed in Sect. 4.2.3.2), in contrast to being preserved merely fully but non-faithfully. So that there remains two different ways of preserving. This would not affect my thesis, since for my purposes the most important is the distinction between full and faithful preservation.

erroneously a representation of a state of affairs to be a memory of that.[346] This is said, it is not surprising that for Alexander memory requires *preserving truthfully*.

In *De Anima* Alexander explicitly makes the connection two times: at the above cited 68.10 and at 68.20. Of these occurrences, the former (68.10) connects memory to *image* (*eikōn*), the latter (68.20) to *completed impressing*, though the latter context is a polemic against the Stoics, so it is not obvious that Alexander refers to his own view here.[347] Notwithstanding, it is unclear what is Alexander`s own view. For unfortunately we do not possess his treatment of memory apart from one relatively short description (*in Met* 3.8-4.12, esp. 3.15-20).[348] Since my aim is not to analyse Alexander`s account of memory, I shall confine myself to discussing this passage focusing on the relation between memory and phantasia, and refer to the more sporadic notes only occasionally.

> In addition to these meanings, exactness and differentiation in accordance with phantasiai is also called *phronēsis*, and the natural versatility in regard to the performance of actions that is found in animals capable of remembering. Memory is 'the having of a phantasma as being an image (*eikōn*) of that about which the phantasia is'; for the impression (*typos*) according to the phantasia is not sufficient for memory, but the activity concerning it must be concerned also with an image, that is [it must be] from something else that has happened (*gegonotos*), as Aristotle has shown in his treatise *On Memory*.[349] (*in Met.* 3.13-19, Dooley`s translation modified)

[346] However, King 2009. 86-88 claims that for Aristotle memory can be false. He cites the same passage that I take to show that memory is veridical, *DM* 451a8-12. This asserts: 'they spoke of their *phantasmata* as having actually happened and as remembering them. And this situation occurs when one contemplates as an image (*eikōn*) what is not actually an image (*eikōn*).' (Bloch`s translation modified) The error of the people mentioned lies in taking themselves to remember the events that did not actually happen. But since the events did not happen, they cannot remember them. This is because these people take *phantasmata* to be images that are not actually images. Cf. Lang 1980. 392-393. My point here is that cases of allegedly erroneous memory are not cases of memory at all, rather; they are erroneously taken to be cases of memory.

[347] The idea that memory is *completed impressing* gains support from the fact that it requires a past perception, and in the same passage perception is simply taken as the creation of the impression, i.e. impressing. Cf. Sect. 3.2.2.2.

[348] Additional to this there are only a few general notes on memory (*DA* 68.20, 69.19; *in Sens.* 5.20-29, 8.3, 167.20; *in Meteor.* 60.23-26); on its connection to knowledge and concept formation (*DA* 83.2-13; *in Met.* 4.13-5.2; *in Top.* 116.30-31); mentioning it as examples for some point (*in Top.* 343.17-344.10, 19-21); references to either his own or Aristotle`s work on memory (*DA* 69.20; *in Sens.* 173.12; *in Met.* 312.5; *in Meteor.* 3.36; *in Top.* 586.10) and citations or paraphrases of Aristotle`s account (*in Met.* 3.12; *DA* 68.4-10).

[349] παρὰ δὲ τὰ σημαινόμενα ταῦτα λέγεται φρόνησις καὶ ἡ κατὰ τὰς φαντασίας ἀκρίβεια καὶ διάρθρωσις, καὶ ἡ περὶ τὰ πρακτὰ φυσικὴ εὐστροφία, ἥτις ἐν τοῖς μνημονεύειν δυναμένοις γίγνεται. ἔστι δὲ μνήμη ἕξις φαντάσματος ὡς εἰκόνος οὗ ἐστι φαντασία· οὐ γὰρ ἱκανὸς πρὸς μνήμην ὁ τύπος ὁ κατὰ τὴν φαντασίαν, ἀλλὰ

The context of the passage is that perception itself contributes something to knowledge, and this fact justifies that humans love their senses for the sake of knowing (*in Met.* 2.23-3.8). Again, in the passage being commented (Aristotle *Met.* 980a28-b3), Aristotle states that animals that have memory in addition to perception are more intelligent (*phronimos*) than those lacking it.[350] This calls for clarification of the concepts intelligence and memory.

In the passage quoted, having cited Aristotle`s definition of memory (*DM* 451a14-16),[351] Alexander goes on to explain it. In particular, he clarifies that the impression[352] is also an *image* of the perceptible object. As Aristotle is keen on showing that a mere phantasma (being possessed) is not sufficient for constituting a memory (Aristotle *DM* 450a25-451a14), Alexander picks this up, and claims that the impression *has to be an image* as well. Since memory is about past events (cf. Aristotle *DM* 449b15-23), the impression has to be an image of the past event it is about. 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 there is memory.

Thus, to understand what distinguishes memory from mere phantasia it must be clarified what being an image consists in. In the passage above, Alexander claims that being an image amounts to *being from something else that has happened* (*gegonotos*). This has two parts: (1) being from something else, and (2) that this something else is something that has happened. Let us see these aspects in turn.

(1) To be an image, the residue must be *from something else*. This is obviously true, for the residue comes to be from a perception of something.[353] However, through looking at Alexander`s use of the word 'image' some more significant meaning can be given to this claim. First, 'image' is used in relation to memory clearly not in the Platonic sense of the term (as in the passages arguing against Plato`s theory of Forms *in Met.* 83-105). In that sense an image is a less valuable particular instance of its universal paradigm: the Form. Instead,[354] it seems that the relevant sense is closer to being an *imitation* (*mimēsis*) or depiction *of some particular*

δεῖ τὴν περὶ αὐτὸν ἐνέργειαν καὶ περὶ εἰκόνα γίγνεσθαι, τουτέστιν ὡς ἀπ' ἄλλου γεγονότος, ὡς ἐν τοῖς Περὶ μνήμης δέδειχε.

[350] On animals` intelligence in Aristotle see Labarrière 1990; Sorabji 1993. 12-20.

[351] With a slight but significant modification: instead of 'about which the phantasma is' Alexander writes 'about which the phantasia is'.

[352] As I have shown (in Sect. 2.2), this should be taken as a careless reference to residue. But it is noteworthy that Alexander simply replaces 'phantasma' with 'impression'.

[353] Cf. Dooley 1989. 17n25.

[354] Lang 1980. 391-392 argues that Aristotle as well reconsiders the image-relation in this regard.

thing.[355] Indeed this sense is one of the most prevalent in Alexander: *in Met* 277.23-24, 417.14; *in Top* 466.26, 428.3, 434.24. In these passages image is often mentioned together with *statue*, in one case statue explicitly claimed to be a species of the genus image (*in Met*. 353.13, or in an analogy *in Met.* 349.2). That is, an image is like a statue of a particular person, say of Socrates. It is of Socrates, for it is an imitation of him. By this fact, the statue (or image) has a *fixed reference* to something beyond itself, to something else, namely to the paradigm, the original, that is imitated in it. The image and the original are clearly distinct entities, though they are the same in name: both can be called Socrates (*in Meteor*. 199-201). Since it is an imitation of its original, as long as it remains to be an image (of its original), it represents its original. Thus preserving an image means preserving some content intact, moreover preserving some content that is about an original.

(2) To be an image, the residue has to be *from something that has happened*. This implies two things: that the image is about some *past* event (some event happened before the occurrence of the mental state – the memory),[356] and that it is about an event that *did actually happen,* i.e. the image is veridical. Since memory is about the past (*genomenon*) (cf. *Arist. DM* 449b15-18), the first part is clear. But why should memory be veridical? In addition to that this is the Aristotelian view (Aristotle *DM* 451a8-12) we can say some things. First, since the image is an imitation *of an original*, it presupposes the existence of the original. In case of an artefact – a statue – the image comes to be through the artist creating it. What determines the reference of the image (what it is an image of) is what the artist uses as paradigm in creating the image. In case of an image coming to be by nature – a memory image – we might suppose that the same happens. The image is the image of the thing that brings the image about. What determines the content of the image is what actually happened.

Nonetheless, at other places, both memory (68.20) and image (68.10) is connected to an impression (or residue) *being preserved*.[357] Memory can occur if there is an image, i.e. if the image is preserved, if there is a residue that is preserved so that it is an image. Thus, putting all these together: an image is a preservation of being an imitation of some existent particular

[355] Cf. Sorabji 1972. 2, 7, 9.

[356] Annas 1986. 304-305, in interpreting *mnēmē* as personal memory, argues that the person`s past experience of the object is also represented. For the contrasting view see Sorabji 1972.

[357] This is vaguely implied by Aristotle too, without explicitly connecting preserving to memory at *Sens.* 436b5-6. However, King 2009. 24-27 suggests that memory is to be connected to affection or possession, rather than to preservation of perception, because preservation does not occur in *DM*. He adds that it is phantasia itself that is responsible for preserving the perceptions (p 70-85). However it is taken by Aristotle, Alexander is unambiguous on this point.

thing, i.e. a preservation that has a fixed reference to some particular existent thing beyond itself. So I presume that 'being from something else that has happened' (=being an image) amounts to being a veridical representation of an actual fact from the past, that is, a *truthful preservation* of something that has actually happened.

An image can constitute memory, for it is about something in the past and it represents that event truthfully. Note that the residue *is* an image (i.e. preserved truthfully) independently of *taking* it as an image, merely by the fact that it is about an actual fact in the past.[358] It constitutes memory when the activity of phantasia concerns it as an image. So Alexander is explicit that it is necessary for memory that the residue is an image (a truthful preservation). I do not go further in discussing memory, for it is not our concern here, and there is not more text to investigate.

In summary, it should be noted that a residue preserving truthfully (i.e. an image) is indeed a representation of the fact that caused the residue. But this is not all that can be said about representation in general. For the image is restricted in two ways. It is about a *past* event, which would restrict representation to memory and recollection. More generally, an image is a *veridical* representation, so it cannot be false. This would rule out any misrepresentation, which is certainly possible. So preserving truthfully is a too strong notion for representation in general.

[358] *Pace* King 2009.78-85. According to him Aristotle believes that a *phantasma* is an image if and only if someone takes it to be so. This implies two unacceptable consequences for Aristotle. First, memory could be false, for there is no restriction as to which representations can be used for making connection with past events. Second, since by image King means only that the item is about something (p. 79), *phantasma* in itself would not have representational content, it would not be representation at all. This problem seems to bother King as well when he writes, contradicting himself: 'Without the qualifier ["as an image"], the connection with the original perception is not given. Of course there is *a* connection, since the representation [i.e. the phantasma] remains from the perception. But that is not sufficient for memory.' (p. 80) Here he acknowledges that phantasma is about the original perception, though it does not constitute memory, for it is not taken to be an image. Thus, he admits that phantasma refers to something beyond itself even when it is not taken to be an image. Hence, an image cannot be simply something that refers to something else. Unfortunately, King does not realize the import of this. Cf. e.g. Wedin 1988. 53-55; Caston 1998a 258n21, 282n80. Wedin 1988. 93 formulates this worry: 'no mental operation on an internal item can give it the semantic property of aboutness'.

4.2.3.2. Preserving faithfully

> Then, the activity and the phantasia that came to be concerning the residue preserved from[359] the intrinsically perceptible will possess truth and falsehood in the same manner as the perception on which the phantasia depends. Hence most of such things and phantasiai concerning such things are true, but [phantasiai] concerning residues from common perceptibles or from extrinsically perceptibles possess a great amount of falsehood, because perception as well is in error concerning such things, and it is plausible that phantasiai themselves depending on these will have a great amount of falsehood as well.[360] (*DA* 70.5-12)

This way of preserving is the clearest. It is apparent from this passage that since phantasia depends on perception for its content, it possesses the same amount of falsehood as perception. This implies that the content of these phantasiai is the same as that of the original perceptions. Since the content of the phantasia depends on its causal object – on the residue –, phantasia can have the same content as the original perception only if the content of the original perception has been preserved in the residue. That is, the residue is such that provides the same content to phantasia as it acquired from the perception that caused it. In a word, the residue preserves the content (or information) faithfully.

Even though the residue is faithful to its origin, this does not necessarily make it true. Should the original perception be false, the residue preserves exactly this false content. It preserves the perceptual judgement as it was made, without modifying it. Thus the faithfully preserved residue can be false.

In this passage, Alexander follows Aristotle *DA* 3.3. 428b17-30. It is stated there first, how perception can err regarding the different kinds of object: minimally with respect to special perceptibles, then about accidental perceptibles and most of all about common perceptibles. Then, Aristotle claims:

[359] I retained ἀπὸ of Bruns, with [AD] and [BD], instead of ὑπὸ of the Ms., though it would make sense also with ὑπὸ – though with a problematic grammar –, meaning that 'the residue [caused] *by* an intrinsically perceptible and preserved'.

[360] ἡ μὲν οὖν περὶ τὸ ἐγκατάλειμμα τὸ ἀπὸ τοῦ καθ' αὑτὸ αἰσθητοῦ σωζόμενον γινομένη ἐνέργειά τε καὶ φαντασία ὁμοίως τὸ ἀληθές τε καὶ τὸ ψεῦδος ἕξει τῇ αἰσθήσει ἐφ' ᾗ γίνεται. διὸ αἱ πλεῖσταιτῶν τοιούτων καὶ περὶ τὰ τοιαῦτα φαντασιῶν ἀληθεῖς, αἱ δὲ περὶ τὰ ἐγκαταλείμματα ἀπὸ τῶν κοινῶν τε αἰσθητῶν καὶ κατὰ συμβεβηκὸς πολὺ τὸ ψεῦδος ἔχουσιν τῷ καὶ τὰς αἰσθήσεις διαψεύδεσθαι περὶ τὰ τοιαῦτα, ἐφ' αἷς αἱ γινόμεναι φαντασίαι εἰκότως καὶ αὐταὶ τὸ ψεῦδος ἔχουσι πολύ.

> The movement resulting from these three kinds of perception, effected by the activity of perception will differ: the first, as long as perception is present, is true; the others can also be false, whether the perception is present or absent, and especially when the object of perception is far off.[361] (*DA* 3.3. 428b25-30)

The *movement* (*kinēsis*) refers to phantasia, identified just before this passage (428b10-17). It seem plausible to take Alexander interpreting (at *DA* 70.5-12) Aristotle`s condition of the *perception`s presence* as *preserving faithfully*. In that case, the 'presence of the perception' means the presence of the *same content* as was in the original perceptual act. Then, since in case of special perceptibles perception cannot err (or just minimally can), phantasia as well will be true as long as the same perceptual content is present. In the other cases this fact (on its own) does not make phantasia true. They can be false even when the content of the original perception is present, if this content was false in the first place. This may happen mostly when the object is far off. Or we could add, when some other condition fails to be normal, or ideal (cf. *DA* 41.10-42.3). This might or might not be a plausible interpretation of Aristotle`s reasoning: viz. that Aristotle takes the role of phantasia to preserve the content of perception faithfully for later use.

Further, certainly there is a possibility that phantasia is false on account of not having the same content present to it that was in the original perception, viz. in cases when the *perception is absent*. That is, due to loss or deformation of content. Apparently this is what Alexander will expand in his other notion of preserving: *preserving not fully* (Sect. 4.2.3.3). It is necessary to suppose this, for faithful preservation cannot explain certain falsities, in general that phantasia is more prone to error than perception.

In summary, it must be noted that a residue preserving faithfully is a representation of a state of affairs that was perceived. It is a true representation if the perception (on which it depends) was true, but it is a false representation if the perception was false. It is able to represent the perceived state of affairs, for the perception of that (whether or not true) was about that state of affairs, and the content is admittedly preserved without modification. This last feature, however, makes this notion still too strong to cover all kinds of cases of mental states in which representation is involved. This cannot explain dreams, hallucinations, illusions, or even the falsity of phantasia regarding special perceptibles. These are cases when error (or

[361] Shields` translation modified, as from all passages of Aristole *DA*. ἡ δὲ κίνησις ἡ ὑπὸ τῆς ἐνεργείας τῆς αἰσθήσεως γινομένη διοίσει ἡ ἀπὸ τούτων τῶν τριῶν αἰσθήσεων, καὶ ἡ μὲν πρώτη παρούσης τῆς αἰσθήσεως ἀληθής, αἱ δ' ἕτεραι καὶ παρούσης καὶ ἀπούσης εἶεν ἂν ψευδεῖς, καὶ μάλιστα ὅταν πόρρω τὸ αἰσθητὸν ᾖ.

misrepresentation) occurs on a regular basis, and in general that phantasia is more prone to error than perception.

4.2.3.3. Preserving fully

The third mode of preserving – *preserving fully* – is attested by Alexander explicitly.

> And those coming to be from residues, but from such that were *not preserved fully*, but rather the phantasia impressed further these residues, those possess a great amount of falsehood.[362] (*DA* 70.12-14)

Thus, preserving fully (*pantēi sōzein*) is contrasted with cases when phantasia itself is involved in the creation of the residue by certain mechanisms: impressing further (*prosanatypoun*). So that the resulting phantasia ends up being false for the most part. Let us see first, what cases this mechanism is to explain.

> For even with respect to {a} intrinsically perceptibles, [the phantasiai] generated in this way are false, because {b} the capacity of phantasia is moved by residues that are as if from present [objects] but indeed from [objects] not present, and {c} are not from such [objects] as they actually are; such are {d} the [phantasiai] of people who are sleeping, and {e} all those that come to be, as I said, by a picturing process in them. Such are {f} also those of the insane people.[363] (*DA* 70.14-19, labels are mine)

We have here several cases: three identified quite specifically – {a} phantasiai about intrinsically perceptibles, {d} dreams and {f} phantasiai of insane people; one identified by a creating mechanism – {e} picturing process; and two general causes of error – {b} from absent objects and {c} not being like the present objects. In what follows I first discuss (Sect. 4.2.3.3.1) the mechanism *impressing further* and how that is to explain error in case of proper perceptibles. Then, turning to another cause of error (Sect. 4.2.3.3.2), when the object is *not present*, I argue that the relevant sense of presence is presence at the time of the coming to be of the residue rather than when phantasia occurs. Finally I show (Sect. 4.2.3.3.3) the explanatory mechanism related to this latter case is *picturing*, which I analyse supposing an analogy with impressing further.

[362] αἱ δὲ γινόμεναι μὲν ἀπὸ τῶν ἐγκαταλειμμάτων, μὴ πάντῃ δὲ σωζομένων, ἀλλὰ τῆς φαντασίας προσανατυπούσης αὐτά, πολὺ τὸ ψεῦδος ἔχουσιν.

[363] καὶ γὰρ {a} ἐν τοῖς καθ' αὑτὰ αἰσθητοῖς γίνονται ψευδεῖς αἱ γινόμεναι τοῦτον τὸν τρόπον τῷ {b} τὴν φανταστικὴν δύναμιν κινεῖσθαι ὑπὸ τῶν ἐγκαταλειμμάτων καὶ ὡς ἀπὸ παρόντων τῶν οὐ παρόντων καὶ {c} οὐχ ὡς ἀπὸ τοιούτων ὁποῖά ἐστιν, οἷαί εἰσιν {d} αἵ τε τῶν κοιμωμένων καὶ {e} ὅσαι γίνονται, ὡς εἶπον, κατὰ ἀναζωγράφησίν τινα ἐν αὐτοῖς. τοιαῦται καὶ {f} αἱ τῶν παρακοπτόντων.

4.2.3.3.1. Impressing further – prosanatypoun

In the sentence just after the introduction of not fully preserving it is connected to phantasia concerning intrinsically perceptibles (*DA* 70.14), which should be taken as proper perceptibles, by one sense exclusively.[364] This is an important case for Alexander, for through this he can most clearly demonstrate that (and how) phantasia is more prone to error than perception. For perception of them is true (if certain conditions obtain, *DA* 41.14-42.4). Were the residue created by that perception preserved faithfully, the phantasia concerning that residue would also be true. The dependence of phantasia on perception and the idea of faithful preservation just implies this. Thus, in order for Alexander to be able to account for cases when phantasia is not true regarding proper perceptibles, he needs to posit some mechanism that may end up in a false phantasia. This mechanism has to be such that the output-state (M-1) fails to preserve the original content faithfully; yet (M-2) remains to be a *representation* of the object originally perceived – otherwise it could not be a misrepresentation of it.

Now, this kind of outcome could be reached in two different ways. Either by supposing that (A) the residue is deformed, so that it fails to preserve the content faithfully, but nevertheless it preserves a content with the same level of specificity. E.g. one perceives that 'This is white'[365] and a residue with this content is created; but by the time this residue is deformed due to whatever cause (e.g. its physical structure is disturbed by violent physical affections), so that it ends up bearing the content 'This is green' or 'This is yellow' etc.[366] Alternatively it might be supposed that (B) first the residue is affected in such a way that it fails to preserve the content in its utmost specificity, quite literally *not fully*; and, as a second step, the residue is completed to have content in the required specificity. E.g. what is preserved from 'This is white' is that 'This is of a bright colour', which leaves open more possibilities allowing for different colours beyond being white. But a state can represent an object only if it has sufficient amount of information about the object.[367] A perceptual state requires a specific,

[364] That this refers to proper perceptibles in particular and not to intrinsically (*kath` hauta*) perceptibles in general is clear from the immediately preceding passage (*DA* 70.5-12), where the case of intrinsically perceptibles (*DA* 70.6) is contrasted to common and accidental perceptibles.

[365] I argue in Sect. 5.1 that the content of perception and phantasia for Alexander (and for Aristotle, for that matter) is like 'This is white' in cases of proper perception.

[366] This is how [AD] 243-247 seem to understand the claim. Caston 1996. 48-50, 1998a 272-279 too appeals to such processes in explaining how the causal powers (hence the represented content) of Aristotle`s *phantasmata* may deviate from the original perception. Cf. *DM* 2. 453a14-31.

[367] Dretske 1981. 53-62 argues that the same amount of information is required. However he does not allow for any loss and addition in the process.

definite perceptible feature as its cause and intentional object (it must be white, green or yellow). This perceptible feature may be represented (or misrepresented) only if the same amount of information (as the perception contains) is preserved. But in the not fully preserved content 'This is of bright colour' there is less information than in the original 'This is white'. So then it is some internal psychological mechanism (attributed to phantasia) that fills the content of this residue, so that a content like 'This is yellow' is created, now having the same amount of information as the original.

In both cases (A) and (B), the resulting residue fails to preserve the perceived content faithfully; and both are false.[368] Again, in both cases the process that makes the residue unfaithful is left unexplained. It is not specified what leads to (A) the deformation of the residue, and to (B) the loss of information in the content of the residue. But unlike in (A) the first proposal, where this unspecified process is the whole story, the second (B) gives some explanation. Namely, how a phantasia-state may come about with the required specificity of content concerning a residue that has lost part of the information it carries. It is the creativity of phantasia that explains this, through completing the incompletely preserved residue, by supplying the relevant information to it.

Note that account (B) is superior over account (A) not only because it provides more explanation, but also because it presupposes more plausible mechanisms. In (A) it is supposed that there is a process that replaces part of the content in the residue with an equally fitting element. Whenever such a deformation of the residue occurs a residue with the same level of specificity comes about. From a residue with content 'This is white' only a residue with content 'This is green/yellow/etc.' may be generated – always a fitting content, in this case a specific colour term. Since there is no place for loss of content without a replacing content, this should happen in every case of deformation. This is possible, but unlikely. What guarantees this given that the process is presumably a blind physical mechanism?

On the other hand, account (B) presupposes two distinct mechanisms. First, there is loss of information. This, being an ordinary phenomenon,[369] can be a blind process, merely physical

[368] In case of (B), it is only the filled or completed residue that is false.

[369] Consider just a few examples. A written page may be shred so that there comes about some lacunae, but it is unlikely that some words are simply replaced with others, as in deformation of (A), unless a conscious agent does that. Again, the painting of a statue may fade away, and the remains may only give a guidance for interpretative reproduction, by no means having the colours. It is unlikely that instead of the original colours other shades emerge spontaneously in every case. And most common experience for computer users: information coded digitally may be lost through damage in the physical structure in which it is embodied and stored.

mechanism that damages the physical structure of the residue so that some content cannot be recovered from it. Alexander does not try to explain this any further, just supposes that this is possible and indeed happens. Secondly, he proposes a process that proceeds from such residues that have lost part of their information: this is done by phantasia itself.[370] It seems that phantasia can work on its object, which contains some information about something, and creates an object for herself that suffices in its level of specificity. That is, it is able *to create a completed object from its incomplete object*.[371] Presumably phantasia can do this from its own resources: using other residues.[372] What I described here is an interpretation of *impressing further* (*prosanatypoun*) as *completing an incomplete residue*[373] *so that it can function as a proper object of phantasia*.[374]

Now, we might identify this case as falling under {c} when the residue is *not such* as the external object. This clearly concerns the *predicate* of the propositional content 'S is P', for it is the predicate that says the thing is *such*.[375] And we have been discussing the case when the error consists in predicating a feature of a thing that the thing does not instantiate. So if {c}

[370] The fact that the subject of further impressing is phantasia does not contradict the claim that the proper subject of activities (of the soul) is not the soul itself but the animal (in virtue of its soul), cf. Sect. 3.4.2. The mechanism described presently is a sub-conscious process involving material changes that is to explain how the conscious states can have certain content.

[371] Being completed implies that the residue is completed with some content – in the example: a definite colour is supplied. This application of the colour term (in completing an incomplete residue) might be called 'application of a perceptual-concept'. I mean something of the sort Dretske 1981. 190-213 describes as simple, perceptual concepts. According to Dretske the error in simple beliefs (perceptual, *de re*, beliefs – that might be identified as perceptual judgements in Alexander and Aristotle, cf. Sect. 5.1.5) might be explained by the misapplication of such perceptual concepts. Once these perceptual-concepts (types) have come to be, particular instances of perceived things may be subsumed under them. When an object is subsumed under such a perceptual-concept, but it happens not to be an instance of the property the perceptual-concept in question represents, there is misrepresentation, error, falsity.

[372] This is not explicit, but at *DA* 69.25-70.2, mentioning the case when an object of phantasia is not entirely dependent on perception, but also on phantasia itself (through picturing), Alexander claims that the resources of phantasia originate in some perception. So the resources of phantasia may be residues.

[373] Fotinis 1980. 272 interprets impressing further in a similar way. Cf. Schofield 1978 259-260 attributing to phantasia in Aristotle a role of amending unclear perceptions, including cases of illusion.

[374] A problem might be posed here. If phantasia creates its object, how can the object be a causal object that triggers phantasia and provides content to it? I content myself with some remarks. First, the residue does provide content, even if that content is insufficient for the phantasia. Again, the additional content (with which the first residue is completed) also comes from a residue, so after all the whole content depends on residues. Second, that the object triggers the phantasia-activity is not a clear-cut notion, cf. Sect. 4.1.2.3. Possibly it is the completed residue that serves this function.

[375] Indeed, this description '*such*' (primarily at *DA* 70.23-71.2) is one of the reasons to admit that Alexander proposes propositional content for phantasia, cf. Sect. 5.1.3.

refers to the mechanism impressing further it is apparent how this is a cause of error in phantasia.

It is clear from all this that the item created by impressing further is not a faithful preservation of the content of the original perception, so requirement (M-1) is met. But still, (M-2) the completed residue must be such that it nonetheless *represents* the thing, it still has to be about the external thing, the original state of affairs. This seems to be problematic, for as we saw for representation causal continuity is required between external object and mental state, but the involvement of the creative mechanism of *phantasia* in the generation of the object seems to sever this connection. However, what is important is that the residue does preserve *some* content, and it indeed sustains causal continuity in that it has been caused by the perception of the object and it is the cause of the state and provides the preserved content to the state. The fact that there is another cause involved in the determination of the content does not make the causality of the residue ineffectual.

The problem might be put in other terms. If some information is lost in the residue from the original perceptual information about the particular object, and some additional information is supplied by phantasia independently of the particular original perception, how can the particular state of phantasia and the completed residue be a representation of that particular perception and that particular perceptible object?[376] In other words, how can there be representation if the residue is not preserved fully? I shall answer this question in Sect. 4.2.3.4.

4.2.3.3.2. Causes of error – presence

We have seen that one kind of cause of error in phantasia {c} concerns the predicate of the content, and this is explained in terms of impressing further. Now we should turn to the other type of cause, {b} when 'the capacity of phantasia is moved by residues that are as if from present [objects] but indeed from [objects] not present' (*DA* 70.15-16). As {c} was related to the predicate of the content, {b} should be related to the subject. So being from an object *not present* should lead to an error concerning the subject of the predicational content 'S is P'. It must be clarified, though, what might be such an error, and what *presence* of the object means in this account.

[376] Cf. Dretske 1981 63-83: the flow of *information* requires not only that the amount of information in the signal is at least as much as the amount created at the source (the object), but also that all the information created at the origin is carried by the signal (i.e. that is perceived). The signal may be *about* the source only if the right amount and the specific piece of information is carried.

Presence in this context might have at least three different meaning. (Pres-1) It might mean that the object does *exist*, in contrast to non-existent objects. This could be suggested by *DA* 70.23-71.5, where Alexander defines falsity in phantasia as concerning residues that either {α} are from objects that do not exist (or are not real), or {β} are not such as the thing from which they came to be. Again, (Pres-2) presence might mean that the object is indeed *present* when the mental state is directed to it. This is the literal meaning of presence,[377] and this seems to be the most fitting with the expression 'moved by residues that are *as if* from present objects' (70.15-16). Moreover, this seems to capture best the fact that dreams are about absent objects, or at least not perceived ones, perception being inhibited. However, I argue that the term is best understood in sense (Pres-3), that the object *has actually been perceived*, namely the object was indeed *present at the time of the creation of the residue*.

First, let us make some general points. The presence of the object at the time of the occurrence of a mental state – sense Pres-2 – is not necessary for that mental state to be true. What makes a case of memory true is not that the object to which memory is directed (what one remembers) is present, but that this object *was present* and was indeed perceived at the time of the occurrence of the original perception. In general, since phantasia is concerned with external objects insofar as they are no longer present, the fact that the external objects are absent cannot be a cause of falsity in phantasia, otherwise every phantasia would be false. Indeed, as I mentioned above, it is perception that is connected to the presence of its intentional object, not phantasia.[378]

Moreover, presence in sense Pres-2 and Pres-1, are conditions the not obtaining of which *constitutes* falsity, in contrast to being the cause of falsity. That is, when (Pres-1) the object of a mental state does not exist, or (Pres-2) is not present when the mental state occurs – yet it is represented in the state as being present ('as if present') –, this makes the state false in the sense that this is a sufficient condition for the state to be false.[379] But neither can *cause* that the state comes to be false – for causing requires the presence (and of course the existence) of the item that causes. But the context of the passage (*DA* 70.12-23) is not what falsity in phantasia consists in, rather what are the *causes of falsity in phantasia*.

[377] This is how [AD] 245 take it.

[378] Despite of this consideration [AD] 243-247 take 'presence' to mean exactly presence at the time of the occurrence of phantasia. Then they struggle with the apparent contradiction with Alexander`s explicit claim which relates phantasia to absent external perceptibles, and they cannot find a satisfactory solution.

[379] Recall the case of memory when absence or presence of the object – when one remembers – is irrelevant to the truth or falsity.

That the context of the passage is the cause of error can be seen from three things. (1) Alexander is describing *mechanisms* that can lead to erroneous phantasiai. As we have seen further impressing a not fully preserved residue leads to error concerning the predicate. As we shall see picturing is the mechanism that leads to error concerning the subject of the predication. These mechanisms are clearly *causes* of error. (2) This is indicated by the wording: '[the phantasiai] *generated* (γινόμεναι) in this way are false, *because* (τῷ) the capacity of phantasia is *moved* (κινεῖσθαι) by residues that are […]' (70.14-16). What is relevant in the claim is the fact that it is about how phantasiai come about. What the connective 'because' introduces is not what it is to be false for a phantasia, but the way the relevant phantasiai come about: i.e. by *being moved* by certain kinds of item. (3) If the claim was about what falsity consists in, then the passage following this one would be redundant, it would assert the same. For truth and falsity is defined below at *DA* 70.23-71.5 (see Sect. 5.1.3); and the conditions resemble closely the previous ones {b} and {c} – except that Alexander uses not only the word 'presence' (*parontos*), but also 'existence' or 'reality' (*ontos*). A phantasia is false (a) if it is concerned with residues that are from not real objects, or (b) if it is from present objects, but not such as the objects. So to give relevance to this passage, the previous should be about something else. And this difference in the context may well make a difference in the meaning of the terms too.

Granted that the context is the causes of error, an account that takes the above conditions {b} and {c} to be causes of falsity is preferable to an account that makes them general conditions for falsity, as Pres-1 or Pres-2. In what follows I argue that sense Pres-3 is such an account.

According to Pres-3 presence means: the *presence of the object at the time the residue was created*; i.e. it indicates that the object that the residue picks out was indeed perceived. This notion of 'presence' might be found a little earlier, at *DA* 69.25-70.2, just after the introduction of Alexander`s positive account of phantasia that invoked the notion of causal continuity (69.20-25, see Sect. 4.2.2). He claimed there that the residue (the motion caused by perception) can move the soul of phantasia in the same way as perceptible objects move the perceptive soul. Now he adds:

> In closely resembling way to these, also those that come to be in us due to picturing process and [those] from [objects] that are not present move [the soul of phantasia]. For these too occur because some perception of them has occurred. So these too move as being generated from perception in activity.[380] (*DA* 69.25-70.2)

A further case is added here, that of residues or objects of phantasia that involve *picturing* (*anazōgraphēsis*). This is connected to the case when the residue came to be from a thing that is *not present*.[381] This is nearly the same description as case {b} above,[382] so they might be identified. This case is contrasted to that described immediately before in 69.20-25:[383] when the residue is caused by a perception in action; so that the residue is from a thing that was present when the residue came to be. So this latter case (69.26) should be contrary to the former: the residue is not caused by perception in action. Indeed, Alexander claims that it is created by means of picturing (69.25) – which is a function of phantasia rather than of perception – so it is true that the residue is not caused by perception. Thus it is not necessary that when the residue was created the external perceptible had to be present.

However, Alexander adds that in this case too, *some perception* of the objects is involved (69.26-70.1) – they have been perceived nonetheless. This does not contradict the previous claim. The point is just that even items created by means of picturing involve perception in the generation of the content – presumably picturing works with content that eventually comes from perception. Alexander needs to admit this, for in the larger context (69.2-70.5; cf. Sect. 3.4.2) his aim is to show that *all* cases of phantasia are caused by perception in activity (70.2-3). He must explain that the apparent exceptions indeed fall under this account. He admits that there are cases in which the content does not depend exclusively on perception; but he insists that even then perception has a necessary role. In these cases it might be claimed that the object was not present when the residue was created, meaning that what is in the content has not been perceived, the outcome does not depend exclusively on perception, but comes from additional sources too.

[380] παραπλησίως δὲ τούτοις καὶ τὰ κατὰ ἀναζωγράφησιν ἐν ἡμῖν γινόμενα καὶ τὰ ἀπὸ μὴ παρόντων κινεῖ. καὶ γὰρ ταῦτα γίνεται τῷ γεγονέναι τινὰ αὐτῶν αἴσθησιν. ὥστε καὶ ταῦτα ὡς ἀπὸ τῆς κατ' ἐνέργειαν αἰσθήσεως γινόμενα κινεῖ.

[381] So I take the καὶ before τὰ ἀπὸ μὴ παρόντων as epexegetic, specifying the cases that involve picturing. Cf. Sect. 4.2.3.3.3. It is all the more interesting that despite of its importance Michael of Ephesus omits this case from his commentary *in Parva Naturalia*.

[382] Here it is μὴ παρόντων rather than οὐ παρόντων as above at *DA* 70.16.

[383] The two cases are compared insofar as they move the phantasia-soul in the same way, but they must have a contrast if there are two cases.

Let us grant that this sense (Pres-3) is fairly clear in the passage 69.25-70.2. But it has to be accommodated to 70.14-20 too. In particular it has to be shown how case {b} explains the occurrence of error in phantasia.[384]

If 'presence' means that the content of the residue depends exclusively on perception, this might amount to that the residue is faithful to the original perception. But we have seen (Sect. 4.2.3.3.1) that {c} is a cause of error concerning the predicate of the content: instead of the true 'This is *white*' something of 'This is *yellow*' comes about. One of these propositions is true and the other false, because in both something is predicated about the same thing, about 'this'. Again, we supposed that {b}, failure of presence, is related to the subject of the predication. Hence, that the residue is from an object present in sense Pres-3 should not imply that the residue faithfully preserves the content of the original perception in its entirety. Yet, the connection to the subject term allows us to assume a process analogous to the one concerning the predicate term, to impressing further. Then, presence in sense Pres-3 implies that the residue *preserves faithfully the reference of the subject* in the proposition – i.e. the predication is of the same thing. This might be lost: when the original perception is about one thing, the content preserved in the residue is about another. If one perceived that 'A is white', but the residue contains 'B is white'. So when the residue is *from an object present* in sense Pres-3 the *subject* of its content *refers to the thing that was the subject of the original perception* of this residue.

It seems clear how this might be an explanation or cause of error in phantasia. Without the possibility that the content of phantasia depends not exclusively on perception, i.e. that an unfaithful preservation is involved at some point, there might be only that much error in phantasia as there is in perception. We have seen how this premise is in play concerning phantasia about proper perceptibles (Sect. 4.2.3.3.1). The residue may come to be unfaithful regarding the predicate of the content through the involvement of phantasia in the determination of the content by means of impressing further. I assume that a similar process is involved in our present case of {c} regarding the subject term.

It might be noted here that since perception is a *de re* attitude – i.e. it is about that thing

[384] One may ask what 'as if present' means if sense Pres-3 is operative. Then it seems odd to say that *as if the reference was dependent exclusively on perception*, for certainly this does not appear to the person having her mental state. Yet it might be said that if it was not the case that the object is as if present, then error could not come to be about that object, for then it was clear to the person that the reference does not depend exclusively on perception, hence she would not even consider it. The point is that it is crucial for falsity to come about that the dependence on factors other than perception is hidden.

which caused the perceptual state, the subject of the perceptual content is the cause (see Sect 5.1.5) – there might not be error in perception concerning the subject (at least in case of proper or common perception as 'This is white' or 'This is circular'). So if there might be error in phantasia concerning the subject of the proposition – that it is about a different thing than the original perception –, this requires that the reference of the subject term does not depend exclusively on perception. Case {b} presents exactly this option. I turn in the following section to how the reference may depend on phantasia.

4.2.3.3.3. Picturing – anazōgraphēsis

Let me proceed with the other mechanism mentioned: *picturing*, *anazographēsis*. The following questions has to be answered: what cases are explained by picturing; how it can explain them; what the relationship is between picturing and impressing further.

Let us start with the cases. In the passage above, Alexander writes: 'such are {d} the [phantasiai] of people who are sleeping, and {e} all those that come to be, as I said, by a picturing process in them.' (*DA* 70.17-18) In this clause, picturing is said to occur in people sleeping ('in them'), thus it is connected to dreams. This might suggest that dream is thought to be a pictorial experience.[385] However, we saw that the first part of the sentence introduces two ways that may lead to error: phantasia is moved by residues that {b} are not present, or {c} are not from such [objects] as they actually are. Few lines below (*DA* 70.23-71.5) Alexander claims that the two corresponding cases ({b} and {c}) cover all kinds of error in phantasia, indeed they are used as a definition of falsity (and truth) in phantasia. Here dreams are explicitly connected to case {b} when the object about which the phantasia is does not exist.[386] Thus we might safely claim that in the previous passage as well dream is an example of case {b}. So, it seems that picturing is involved at least in dreams, or more generally in cases when the object of the mental state does not exist or is not present. This identification is supported by the other occurrence of the term:

> In closely resembling way to these, also those that come to be in us due to picturing process and [those] from [objects] that are not present move [the soul of phantasia]. (*DA* 69.25-26)

[385] Cf. Gallop 1990. 6-10.

[386] This passage concerns the conditions of falsity, thus it mentiones *existence*, or *reality* (*ontos*), for it is non-existence that is sufficient for falsity rather than absence, see Sect. 4.2.3.3.2 and 5.1.3.

In this passage too, to which Alexander refers in the above one, picturing is connected to the case of objects that are not present. As we saw this means that the reference in the content does not exclusively depend on perception, it can be said that *picturing* (*anazōgraphēsis*) is to explain these cases. Again, just as further impressing, picturing is attributed to phantasia. Thus, picturing seems to be the creative activity of phantasia[387] by means of which (on the analogy with further impressing) from a residue that does not contain the amount of information that is sufficient for the residue to be about an individual object phantasia creates an object for herself that has the required information, so that it refers to a particular object. Let us see how this may work.

Perception is about individuals, thus the subject of its content is an individual. As in the previous example ('This is white') the subject might be picked out *demonstratively,* by terms like 'this', 'that object', 'the cause of this perception', etc. This way of determining the subject of the predication is *infallible*, always giving the same entity: *the very thing that caused the perception*.[388] Until this determination is preserved, the representation will be about the object that caused the original perception. But this might be lost. In that case the determination of the subject does not depend exclusively on perception. Thus, the subject cannot be determined demonstratively.

Examples of accidental perception are instructive to consider – 'The white thing is Diares` son'. What is important from this now is that the subject is picked out in a different way: 'the white thing'. Even though this too refers to the cause of the perceptual state, the reference is determined not demonstratively (it is picked out not *qua* being the cause of the perception), but by a *description* 'the white thing'. It is easy to see that (in contrast to demonstrative determination) this way of picking out a subject is fallible – there might not be one and only one white thing in the environment. Thus, I suppose that our case involving picturing should be understood along this kind of example: *determining the reference through description.*[389]

[387] This, i.e. influencing the content, is not the proper phantasia-activity itself, it is rather judging; cf. Johansen 2002. 176.

[388] Hence I called perception as *de re* attitude.

[389] Graeser 1978. 73-74 argues that in Aristotle in any perceptual judgement (accidental perception) the subject is picked out by a definite description involving a complex of proper and common perceptibles. Lautner 2015. 228-230 shows that Porphyry attributed the function of identifying the individual object descriptively to *doxa*, calling the mechanism '*anagraphein*', although this is made by verbal representation, and used by phantasia to produce images of the kind (p 230-239). This is apparently picked up by Simplicius, as Sheppard 1991. 169-170 shows. A similar account is considered for Aristotle by Everson 1997. 204-205: sometimes the features of the *icon* are relevant in determining what the perception is about, by providing a description that settles what

The process is something of the following. Whether in the original perception there is a demonstrative reference ('This') or not ('The white thing'), presumably some information is lost and an incomplete residue is preserved with a less specific content that would be required for identifying an individual as the subject of the propositional content. Thus what is preserved is certainly not the demonstrative connection, but some form of description: 'the white thing', 'the snub man', 'the quadruped animal'. In case the preserved descriptive reference does not pick out one individual as subject for the predication (when there are more than one white objects in the relevant range), the possibilities must be reduced to one in order for the mental state to be about one individual. This, I suppose is done by means of *picturing*. Analogously to impressing further, *phantasia* through picturing determines the subject by providing a description[390] that picks out one individual (in the relevant range). Thus, by picturing, the incomplete 'snub man' is completed to 'the snub and tanned man' so that one individual is picked out. Note that this account of picturing takes the term somewhat literally. Even though the 'picture' is not something visible such that has been drawn or painted, nevertheless it brings together a growing number of features so that eventually it *depicts* an individual.

Now, this account of picturing can be used to explain certain types of error. First, the result may pick out an *individual that is not there* where it is represented to be. E.g. an individual might be picked out in the present environment of the person even though it is not there – 'the white man' approaching identified as 'Diares` son' may not be Diares` son, but probably someone else (or not even a man, but a dog).[391] Moreover, the subject picked out by the resulting description may *not* even be an *existent* thing. E.g. one may imagine a 'horse-like animal with wings' (or Pegasus),[392] or one may hallucinate about 'the snub tanned man' (Socrates) when there is nothing to correspond to the description. In these cases, however, the subject being picked out is either an individual thing (Socrates),[393] or one that *would be an*

objects the icon *resembles* – then it is a *picture* (cf. Modrak 1987. 104-107); although in general what determines the referent is the thing that *caused* the state – then it is a *likeness*. However, Everson connects such cases to hallucinations, when he claims the state need not be about an individual (p 205), and finally rejects it (p 206-210).

[390] This should not be taken as implying use of language or conceptual capacities. Thus this is not necessarily restricted to humans.

[391] The example here is not the usual 'The white thing is Diares` son', but e.g. 'Diares` son (=the white thing) is unshaven'.

[392] Cf. Charles 2000. 87-94.

[393] Since these issues are not discussed by Alexander, I do not aim at a complete theory (of reference), in particular deciding the status of proper names like 'Socrates'. Whatever way proper names may refer, the distinction between demonstratives and descriptions can be sustained.

individual if existed (Pegasus). Thus, this account of picturing provides Alexander with a powerful explanatory concept applicable to an account for *misidentification*, *hallucination* and representation of *non-existent* things.

We have seen that picturing is most prominently connected to dreams. Even though we do not possess Alexander`s account of dream, from his remarks (*in Met*. 432.15-433.8),[394] and from Aristotle`s treatment we might say that it falls under mainly what I labelled as hallucination, though one may surely dream about non-existent things.

The next question is the relationship between picturing and impressing further. Since picturing seems to involve cases of {b} that are related to the subject term of the predication, but not {c} – it is mentioned at both of its occurrence together with {b} – picturing is either narrower than impressing further or they are independent mechanism, being responsible for completing different elements in the content. For impressing further explicitly involves case {c} when it is about proper perceptibles, but it is not obvious whether it also covers case {b}. On the one hand, if it does not, then the two mechanisms are neatly complementary, being productive of the two different parts of the content. However, it seems that when impressing further is introduced it has a general role of completing any kind of incompletely preserved residue. This, however cannot be decided. In either case, what is important is that there are two kinds of mechanism, one that completes a residue that does not have a definite reference so that it has one – this is called picturing; and the other that completes a residue that does not predicate a feature with the requisite specificity, so that it does predicate such a feature. Whether or not the name of the latter is impressing further, is not so important for us.

4.2.3.4. How preserving explains representation?

As we have seen, explaining representation in phantasia (i.e. providing a feature in virtue of which residues represent) in general – covering all cases – involves fulfilling certain conditions. First, since perception (and phantasia) is about a state of affairs 'S is P' such that a *definite perceptible feature* P is predicated of an *individual* S (Sect. 5.1.5), (R-1) the subject of the content of representation has to be an individual; and (R-2) the perceptible feature that is predicated of that subject must have the same level of specificity as the original perception had. These requirements follow from that a representation must bear the same amount of information as that which is represented. Second, since phantasia is prone to error (indeed more

[394] He claims that even though there is no object present, yet there is something in the body, a physical motion, a residue. This gives rise to the false phantasia, the dream, because it is such as if it was about a real thing.

than perception), the account (R-3) has to allow for error, falsity, indeed (R-4) it has to allow for more error than there is in the original perception – in particular it has to cover *dreams*, *insane people*, error concerning *proper perceptibles*. All these conditions are necessary to explain representation in general. We should see whether together they are sufficient.

It is clear that R-1 and R-2 together guarantee that the item does represent something. In particular, R-1 assures that there is a proper subject term in the content of the representation, an individual thing). Again, R-2 assures that something appropriate is predicated of the subject term. The aptness of the predicate involves being quite specific, actually being that specific as a perception. So these two conditions assure that what is picked out is the proper type of thing.

Again, representation has to allow misrepresentation, hence R-3. And the account explains all possibility of error. For it covers both error concerning the subject term: misidentification, representation of non-existent things; and error concerning the predicate term: when something else is predicated of the thing, hence R-4. Since one may be in error either concerning the thing about what the content is (subject), or what it is like (predicate), R-4 covers all cases.

So these conditions together are adequate to explain representation in general, i.e. all cases of representation. First, it covers all kinds of relation to the subject term: (S-1) cases when the individual object has been perceived;[395] (S-2) cases when the individual object has not been perceived, though exists (e.g. imagining/thinking about the son of my friend, even though I have not seen him); (S-3) cases when the object has not been perceived, and does not even exist, though if it existed, it would be an individual (e.g. imagining/dreaming about Centaur). Again, it covers all kinds of relation to the predicate term: (P-1) cases when the object is such as it is predicated of it (remembering my breakfast today being sweet); and (P-2) cases when the object is not such (dreaming about an elephant that is pink).

Now, we have seen that for being a representation the residue is not required to be truthful preservation, for then misrepresentation would not be possible. So truthful preservation is too strong a notion to cover all cases, it cannot even allow R-3, falsity, a fortiori R-4. However it clearly satisfies R-1 and R-2, indeed it is about an object that had been perceived (S-1).

[395] Cases (1) might have a sub-division as well: cases when the object is present and when it is absent at the time of being represented in a mental activity. But this seems to be necessary only in the distinction between hallucination and illusion.

Again, even though faithful preservation allows for R-3, misrepresentation, but it depends on misperceiving the object in the first place, thus it is still too restrictive. Only that can be represented what was perceived either truly or falsely. But this cannot explain R-4, cases when phantasia may turn out to be erroneous even when the original perception was true (Sect. 4.2.3.3): false phantasiai about proper perceptibles, cases of dreams and phantasiai of insane people. This is partly because the faithfully preserved residue will be (S-1) about the same object that had been perceived.

Hence, if at all, it must be preserving fully that explains representation. If something is preserved fully (whether or not truthfully) it is able to represent the content preserved. On this account being a full preservation constitutes a representation. But in order to incorporate the problematic cases as well, to satisfy R-4, it must be assumed that (M-2) representation can also occur in cases when at some point there was a preservation not fully. In those cases phantasia completes the residue, as we have seen. So it must be supposed that even though not all the information in the object comes from the original perception, hence from the original state of affairs that caused that perception, yet the residue can be a representation of this perception and this state of affairs. Even though phantasia itself plays an active, creative role in the formation of its object, yet it is a representation of something besides itself. On the one hand, it is still true that something was preserved in the residue. Otherwise, probably, it was not a residue at all. The information preserved in it is less in amount than what is required for representing the state of affairs in question. The lacking information is provided by phantasia. As Alexander claims:

> the cause of the error that occurs concerning the activity that concerns this [residue] comes from the shape or from the extension or from the colour or some other quality, or the movement or the place or the quantity or the composition.[396] (*DA* 70.20-23)

This might be taken as an explanation how phantasia provides the required information in impressing further or picturing. With regard to the features mentioned here, error can occur. Phantasia uses other residues with which it completes the not fully preserved residue, so that ending up with an object that is equivalent to a fully preserved residue.

Let us see how residue as full preservation satisfies the above conditions. R-3, it can certainly be false, either being faithful, or being a completed preservation. The latter indeed can explain R-4, all the problematic cases of error. (1) When the reference to the external thing

[396] τῆς δὲ περὶ τὴν ἐνέργειαν τὴν περὶ αὐτὸ γινομένης διαμαρτίας αἰτία ἢ παρὰ τὸ σχῆμα ἢ παρὰ τὸ μέγεθος ἢ παρὰ τὸ χρῶμα ἤ τινα ἄλλην ποιότητα, ἢ τὴν κίνησιν ἢ τὸν τόπον, ἢ τὸ πλῆθος, ἢ τὴν σύνθεσιν.

that was the subject in the content of the original perception is preserved in the residue (=S-1), the phantasia can obviously be about that very individual, hence R-1. So in these cases when phantasia, by means of impressing further, completes an incomplete residue to full specificity, the completed residue will carry the same amount of information as the original perception did, hence R-2. (2) In other cases, when the direct reference to the particular object is not preserved, yet through completion, by means of picturing, phantasia supplies a subject term by providing a (definite) description that picks out (S-2) an individual or (S-3) a would-be-individual, hence R-1. Then, if the predicational component may be incomplete as well, this is also supplied by phantasia to be completed, so that the required amount of information is given, hence R-2.

Thus, a full, and possibly completed residue can represent a state of affairs. For R-1, it is about an *individual* – either about the original thing, if (S-1) the reference to the subject term is preserved and depends exclusively on perception; or about some other individual, when (S-2) the reference is determined not merely by perception, but by picturing as well, through a description; or (S-3) about something non-existent which is such that if it existed it would be an individual, again picked out by description provided by picturing. Again, R-2, it predicates a *definite perceptible* – either (P-1) the same as the original perception; or some different (S-2) in case some more general feature were preserved and phantasia impressed further.

4.3. The difference between the objects of phantasia and perception

We started this chapter with the requirement that the object of phantasia has to be significantly different from the object of perception. Since we had only a vague description of this purported distinctness: that the one is internal and the other is external object, I made an effort to describe the object of phantasia so that its distinctness should be apparent. Now we are in a position to state the difference clearly.

Before the difference, let us see what they have in common, since both of them are objects of cognitive activities. (1) Both objects are the *causal object* of the respective mental state (being bodily items), being not only the item *activating* the capacity, but also the one *providing* the content for the mental state.

However, the objects differ, in that (2) the object of phantasia (being in the body) is available independently of the presence (and existence) of the external object, whereas the object of perception must be present (hence existent as well) for a perceptual state to come about. This is because the object of phantasia is a causal *intermediary* that provides causal

continuity between a state of affairs at one time and a mental state at a later time, whereas the object of perception is the direct cause of its perception.

Most importantly though (3) whereas the object of perception provides content about itself (thus in perception the causal object is the same as the intentional object), the object of *phantasia* provides content about something else it represents. The object of perception provides the content in virtue of *possessing the feature* that is part of the content, whereas the object of *phantasia* provides content in virtue of *representing that content*. This object has its representational content because it is a full or completed preservation, thus bearing the required amount of information for representing the state of affairs it represents. The possible involvement of mechanisms independent of perception make the object of phantasia such that it may be dependent not exclusively on perception, so that all kinds of misrepresentation become explainable.

Since it is claimed that the object of phantasia has its representational content *qua* being a preservation of that *content,* it seems that the account given is circular. But if we add that the item which is indeed preserved – the residue – is a bodily item, and the content which is preserved is embodied in this item, it might be said that the content is preserved in virtue of the residue as content-bearing *physical structure* being preserved. This move opens the way of explaining representation non-circularly in this model. Since Alexander did not care much about physiological details of his theory, I finish with this claim about the possibility of such an account.

5. The Activity of Phantasia

We have seen so far that according to Alexander phantasia is a distinct faculty of the soul, it belongs to the perceptive soul-part, but it differs from perception insofar as it has a distinct object: *phantaston*. We could identify this object as a physical state internal to the body of the animal, dependent on perceptual-change; as the cause of the phantasia-activity, that is responsible for determining the content of phantasia.

I appealed repeatedly in the argument to the fact that phantasia and perception have propositional content, in particular a predication of a perceptible feature of an individual thing: 'S is P'. In the first part of this chapter (Sect. 5.1) I argue just for this claim by considering some obstacles – Alexander`s apparent denial of complex content for some cases of phantasia and perception (Sect. 5.1.1 and 5.1.5.2); the supposed requirement of concepts for any propositional mental content (Sect. 5.1.6) –; and by providing two positive evidences – the case of truth conditions of phantasia (Sect. 5.1.3) and the case of simultaneous perception (Sect. 5.1.4).

In the second part of the chapter (Sect. 5.2), I turn to examining the activity of phantasia, which will give further clarification about the distinct status of the faculty of phantasia, esp. its difference from perception and opinion. The activity of phantasia is *krisis*, which, I shall argue (Sect. 5.2.1), is to be understood as *judgement*. The main reason for this identification is that phantasia has propositional content. Since quite a few mental activities are *kriseis*, judgement has to be interpreted quite generally, in such a way as to cover all its different instances. However, since our goal is to specify the phantasia-judgment in particular, it has to be seen (Sect. 5.2.3) what differentiates it from other kinds of judgement. Is there a feature peculiar to it, or is it just the object that identifies the judging as phantasia-judgement. In addition, it should also be seen (Sect. 5.2.2) what is the subject of the different judging activities, whether it is the distinct capacities or rather the soul-part. Further, as a final consideration (Sect. 5.2.4) I describe the relationship between the phantasia-activity and the object of phantasia, and show how this differs from the relationship between the perceptual change and the perceptual activity (cf. Sect. 5.1.4.6). This last point shows the difference between perception and phantasia most clearly.

5.1. The content of phantasia

Let me start the analysis of the activity of phantasia with its content. I argue that this is propositional content with the form 'S is P'; where S is an individual, P is a perceptible feature that S possesses. There are two main reasons for attributing this view to Alexander, apart from the philosophical advantages of the position (cf. Sect. 5.1.1.3). First, he analyses the truth conditions of phantasia at *DA* 70.23-71.5 as involving a *real object* in the world and a *feature characterizing* it. Second, he apparently believes that perception has propositional content; and since the content of phantasia depends on that of perception; phantasia as well must have such content. This attribution is implied by Alexander`s treatment of simultaneous perception, and by the few examples of perceptual judgements he gives.

However, there are a few obstacles to this reading. The first is purely philosophical: many believe that propositional content implies possession of concepts; and since animals other than humans do not have concepts; but animals obviously do perceive; this account cannot be correct. This issue can and will be answered (Sect. 5.1.6) by showing that propositional content (or any type of content) in itself does not imply having conceptual capacities and possession of concepts. In other words: the propositional content of perception and phantasia is non-conceptual.

One more particular – textual – worry has to be discussed as well. Namely, Alexander distinguishes phantasia from opinion (*doxa*) by the fact that whereas *doxa* involves complexity in its content, phantasia may be simple, just as perception. This is read most naturally as a claim to the effect that phantasia need not have (and in its most basic form, does not have) propositional content. Accordingly there are phantasiai whose content is simpler than propositional, e.g. pictorial, imagistic, or correspond to bare names. Our consideration below will be structured along this worry, hence first (Sect. 5.1.1) I explicate it in detail. I turn then (Sect. 5.1.2) to the discussion of the objects of perception that shapes the content of perception by identifying the types of intentional object. Then, I discuss the two positive evidences for attributing propositional content to phantasia and perception. I show (Sect. 5.1.3) that the analysis of the truth-conditions of phantasia imply that it has propositional content, indeed of a certain type. Again, I show (Sect. 5.1.4) that Alexander`s treatment of simultaneous perception implies that perception has the type of content identified as the content of phantasia; and since the two kinds of mental state must have the same type of content, this corroborates that phantasia too has propositional content of that type.

This will give us the ingredients of the perceptual and phantasia content, from which two kinds of propositions will be shown to be composed (Sect. 5.1.5): one obviously propositional (accidental perception: 'S is P'); and another, simple, content (proper and probably common perception: '_ is P'). I argue (Sect. 5.1.5.2) that the simple content is simple by the fact that its subject refers to the cause of the perceptual state directly, by means of a demonstrative ('this'), so that simple perception is a *de re* attitude.

5.1.1. Simple content (phantasia, perception) vs. complex content (doxa)

Let us start our inquiry into the content of phantasia, then, with a problem for the claim that it is propositional content after all. We find Alexander distinguishing phantasia from opinion (*doxa*) – among other features[397] – by the fact that they have different types of content.

> Again, every opinion is compound (for it is either affirmative or negative), but not every phantasia is such. Hence truth and falsehood do not apply to them in the same sense, as they do not apply in the same sense to perception and to opinion.[398] (*DA* 67.20-23)

The following argument may be reconstructed.

(P1) The content of opinion is propositional with the structure 'S is P' – I shall call this *predicational content*.

(P2) Not every case of phantasia has a propositional content with the structure S is P. The case that has no predicational content might be called *simple phantasia*.

(CON) The sense in which truth and falsity[399] may be applied to an item depends upon the type of content the item has.

(P3) Simple phantasia may be true in a different sense than opinion. (from P1; P2; and CON)

[397] At *DA* 67.12-20 Alexander follows Aristotle (*DA* 3.3. 428a18-22) in claiming that opinion involves conviction, which follows the endorsement that such and such is the case. This renders opinion to be a rational capacity, hence not available to irrational animals. Phantasia, on the other hand is shared with animals, so it has to be non-rational capacity, and it does not necessarily involve conviction or endorsement. See Sect. 5.2.3.

[398] ἔτι πᾶσα μὲν δόξα ἐν συνθέσει (ἢ γὰρ καταφατικὴ ἢ ἀποφατική), οὐ πᾶσα δὲ φαντασία τοιαύτη. διὸ οὐδὲ τὸ ἀληθές τε καὶ ψεῦδος ἐν ἀμφοτέραις ὁμοίως, ὥσπερ οὐδὲ τὸ ἐν αἰσθήσει τε καὶ δόξῃ.

[399] Hereafter for the sake of brevity I use truth/true instead of truth or falsity/true or false.

Hence, phantasia differs from opinion, for there are cases of phantasia that cannot be cases of opinion, due to difference in content, hence difference in the sense of truth that might be applied to them.

The reasoning, on the one hand, is clear-cut. Affirmation and negation that involve composition is safely identified as predicational content, in which the predicate is compounded with the subject. It seems also to be clear that some cases of phantasia and perception lack predicational content. Hence the identification of phantasia with opinion is impossible. But after closer inspection the argument turns out to be vague. The sense in which phantasia – esp. the simple case – may be true, hence also the type of content simple phantasia should have is left unspecified. Most naturally, though, the argument suggests that simple phantasia does not have propositional content. For it seems that propositional content involves predication, so that it coincides with assertion and composition. However, as I shall argue (Sect. 5.1.3) we should take Alexander as attributing propositional content to every case of phantasia, as well as (Sect. 5.1.4) to every case of perception: including proper-perception, which is the best candidate for being simple perception. Hence I interpret (Sect. 5.1.5.2) simplicity of the content of simple phantasia (and perception) in a different way. Accordingly, even though each case involves predicational content, the simple case has a causal feature that renders it as lacking predication of one item of another (i.e. composition); rather it is predication of one item of itself. But for the time being let us suppose that simplicity of content after all means that it is not propositional, and see (Sect. 5.1.1.2) whether this gives a coherent sense. Let us proceed with a closer analysis of the argument.

5.1.1.1. Argument from simple phantasia

First, consider CON.[400] As it is usually understood, truth is strictly speaking an attribute of propositions.[401] If something – a mental state or a linguistic assertion – is claimed to be true,

[400] In this concise summary of the Aristotelian theory of truth I owe much to Crivelli 2004.

[401] On propositions and truth in modern sense see the encyclopedia entries McGrath 2005/2012; Glanzberg 2006/2013. Alexander remarks (*in Met*. 431.1-3) that falsity (and truth as well) most naturally seems to be in assertions and thoughts, and it is unusual to attribute it to things. This, however, does not entail that on the level of theoretical explanation (or in the proper sense) truth may not be attributed to things (or states of affairs or propositions) – as it seems to be done by Aristotle in *Met*. Θ10 (cf. Makin 2006. 248; Crivelli 2015. 178-190) –, for probably Alexander`s remark concerns ordinary usage. Compare Aristotle *Met*. E4. 1027b25-28, where it is stated that truth is in thought rather than in things. This remark is made in an introduction to the science of *being qua being*: hence the point is ruling out one sense of being – truth – as not fundamental to metaphysical enquiry (cf. *Met*. E4. 1027b33-1028a4). It is instructive to see the reason of excluding truth from metaphysical studies: it depends upon the categories and the combination of items from categories made *in*

this implies that it has propositional content, and it is true in virtue of the truth of its propositional content. The propositional content denotes a state of affairs in the world.[402] Now, in a straightforward correspondence theory of truth, the truth of a proposition depends upon the obtaining of the state of affairs the proposition denotes.[403] Hence, the truth of a mental state or an assertion depends upon the obtaining of the state of affairs the propositional content of the mental state or assertion denotes.

Thus, truth in the proper sense implies propositions, and thereby states of affairs denoted by the propositions. So, propositions need to be structured in a way states of affairs are structured. We may set aside debates about states of affairs, propositions, and different theories of truth, and invoke only the Aristotelian view. This is expressed in sparse discussions on diverse topics: on being in the sense of truth – Aristotle *Met*. E4. 1027b18-33; Θ10. 1051b1-17; on falsity in things and in statements – *in Met.* 430.38-436.11, cf. 371.35-372.10; cf. Aristotle *Met*. Δ29. 1024b17-1025a1; Δ7. 1017a31-35; *Cat*. 12. 14b14-22; on signification of terms and assertion – Aristotle *Int*. (e.g. 1. 16a3-9; *Cat*. 2, 5. 4a22-b19, 10. 13a37-b35); or on simple and complex thought – Aristotle *DA* 3.6. Accordingly, the relevant type of structure is

thought, *Met*. E4. 1027b29-33; cf. Kirwan 1971/1993. 199-200. Crivelli 2004. 62-71 and 2015. 183-190 repeats Alexander`s point: truth and falsity indeed belong to thought in the ordinary sense, but strictly speaking it belongs to states of affairs. Crivelli takes states of affairs in *Met.* E4 to be mind-dependent, though, compare Crivelli 2015. 213-219.

[402] In this characterization I do not intend to suggest that propositions for Alexander or Aristotle constitute a separate class of entity (with its own ontological status) besides linguistic and mental items (thoughts, perceptions, and phantasiai) on the one hand, and independent existents, things – i.e. states of affairs – on the other (as e.g. for Frege 1918). Being interested in perceptual content I simply use 'proposition' to denote the *content of mental states and linguistic utterances that are truth-evaluable*; irrespective of whether they are identical to facts (cf. e.g. Russell 1903) or states of affairs (as Crivelli 2004 describes the issue, cf. Moore 1953). It is true, after all, that Aristotle did not posit propositions unambiguously, cf. Ackrill 1963. 114-115. But probably he identified mental states (esp. thoughts, *DA* 3.6. 430b14-15) by what they are about, i.e. by their content, cf. e.g. Caston 1998b 202-203; Modrak 2001. 47; Perälä 2015. 360; Charles 2000. 113 adds time as a factor. This allows him to claim that several people may have the same thought (Aristotle *Int*. 1. 16a6-8). But clearly, the thought of A and that of B are not the same numerically, even if the same *in type*. So my usage picks out just this idea: that in such a case what is the same is the content, i.e. the proposition – if it is truth evaluable; cf. e.g. Dummett 1996.

[403] On correspondence theory of truth see David 2002/2015. On the Aristotelian version see Crivelli 2004. 129-180; Crivelli 2015; Modrak 2001 (esp. p 52-66); Charles 2000; Makin 2006. 247-251; Whitaker 1996. 25-34. Pritzl 1998. 182 emphasizes that in addition to correspondence between thought and reality a contact to reality is required. Though some argue that Aristotle`s theory is not a correspondence theory of truth, mainly on the basis of *Met*. Γ, e.g. Hestir 2013; but Modrak 2001. 59-62 shows that Aristotle appeals to correspondence theory of truth even in this book. Alexander clearly endorses correspondence theory, see e.g. *DA* 71.2-5; *in Met*. 433.9-436.10.

composition, i.e. *predicating something of something else*:[404] S is P. Here P is a general term – a universal – and S is either a general term too or an individual. Hence there are universal and singular predications respectively (cf. Aristotle *Int*. 7, esp. 17a38-b3). Now, a proposition 'S is P' is true if the state of affairs it denotes obtains, i.e. if S (the subject) is related to P (the predicate) in the appropriate way (cf. Aristotle *Met*. E4. 1027b20-23): if P is predicated of S (in the ontological sense of predication).[405] Since something may obtain only if it is a state of affairs, there is no room for truth without such a structure.

Now we can assess P1: that the content of opinion is compound, which is justified by the fact that it involves assertion or denial. An assertion is predicating something of something else. Thus it is clear that this involves exactly the type of content that is required for truth in the strict sense: 'S is P'. We learn further things about opinion from Alexander: it is a capacity of the rational part of the soul (*DA* 29.23-25), and has a seat in the same organ as the other capacities (99.3-5); its activity is also *krisis* as of perception and phantasia (66.10-14, 78.13-20); in particular it is supposition (*hypolēpsis*)[406] about contingent states of affairs (66.15-16);[407] it involves endorsement (*synkatathesis*) of its content (67.15-18);[408] it is for the sake of another activity of accepting or rejecting (72.2-3); hence it bears closer connection to the practical part of the soul and practical behaviour of humans (80.24-81.13). For the moment what is important is merely that it has predicational content about contingent states of affairs –

[404] Truth and falsity require composition of terms into a statement, cf. Aristotle *Cat*. 4. 2a4-10. Statements involve composition: affirming/denying something of something else – ἀπόφανσις τινὸς κατὰ/ἀπὸ τινός, cf. Aristotle *Int*. 5-6. 17a8-26, 8. 18a13-18. A verb 'is a sign of things said of something else' – τῶν καθ' ἑτέρου λεγομένων σημεῖον – 'of a subject' – καθ' ὑποκειμένου, Aristotle *Int*. 3 16b7, 10. The two terms might be one name and a verb, or – more precisely – two names connected by the copula that has the force of attributing the predicate to the subject term (cf. Alexander *in Met*. 371.36-372.10) – denial is simply the use of negative copula (Aristotle *Int*. 10, cf. 3. 16b19-25), cf. Whitaker 1996. 52-61, 137-143. In accidental predication the accident must be predicated of a substance in which it inheres, Alexander *in Met*. 288.5-8; cf. Aristotle *AnPost*. 1.22. 83a24-32. The composition in thought and statement matches that in things, e.g. *Met*. Θ10. 1051b1-17. And the two terms are combined in an asymmetric way, cf. Alexander *in Met*. 289. 16-20. Cf. Aristotle *DA* 3.6. 430b26-27; 3.8. 432a11-12; and further references in Crivelli 2004. 70n81.

[405] Cf. *in Met*. 370.5-371.35, 373.11-16; cf. Aristotle *Cat*. 2. 1a20-b9; 5. 2a23-b7, 3a7-20; *Met*. Z3. 1029a20-24. For different interpretations of ontological predication in Aristotle see e.g. Ackrill 1963. 74-76, 82-83; Owen 1965b; Frede 1978; Lewis 1991; Wedin 2000; Modrak 2001. 27-42, 46-50, 161-163.

[406] Caston 2012. 201 takes *hypolēpsis* as 'judgement', which I use for *krisis*. On the term see Sect. 5.2.1 and 5.2.3.

[407] Cf. Aristotle *AnPost* 1.33 88b30-2; *DA* 3.3 428a19; *Met.* Z15 1039b34-1040a1. The distinction of *doxa* from knowledge (*epistēmē*) in terms of their object – contingent vs. necessary – does not rule out that about the same thing there may be opinion and knowledge as well, though not in one subject simultaneously; such a case is possible because the two attitudes involve different modes of supposition – non-essentially vs. essentially; cf. Aristotle *AnPost* 1.33; or weakly vs. strongly, *in Met*. 300.5-20.

[408] Cf. Barnes 2006; Miller 2013.

some of the other features will be discussed later (Sect. 5.2.3).

Let us turn to P2: the purported simple phantasia. First, the formulation clearly implies that some cases of phantasia are compound, hence most probably have the same type of propositional content as opinion. I grant that this applies to the parallel case of perception too. This is important in ruling out some proposals. In particular, this feature is not easily accommodated with the argument according to which propositional content requires concepts, so that phantasia and perception cannot have propositional content (see Sect. 5.1.6). Obviously, the strategy of the advocate of this view is to claim that the propositional-type of phantasia and perception are to be attributed to humans exclusively (that have conceptual apparatus). Indeed, this distribution of propositional (or rational) phantasia to adult humans on the one hand and irrational phantasia to non-humans and children on the other is to be found in the Stoics ([LS] 39A6).[409] But there is no textual support to attribute this view to Alexander. Further, it is arguable that animal goal-directed behaviour requires some propositional attitude in any case (see Sect. 5.1.1.3). And it is more plausible that Alexander (as Aristotle) emphasized the *similarities* of human and non-human perception rather than distinguishing them sharply – although he perhaps allowed that conceptual capacities may influence the way humans grasp the environment in perception. So it seems that just as animals may have complex as well as simple perceptual content, humans too can have both. After all humans are distinguished from animals not by the complexity of their perception, but by having rational soul in addition.

Finally, P3, truth may be applied for simple phantasia in a loose or stretched sense only. For something may be true in the strict sense only if it has propositional content with

[409] This creates a similar problem within Stoicism about the content of phantasia that we are discussing in Alexander. If rational phantasia amounts to having propositional content, the question arises: what is the content of non-rational phantasia. It certainly has to be simpler than rational-propositional phantasia. There are two reasons that make the Stoic account relevant for us. First, as Alexander is influenced by the Stoics on many points, it is possible that his argument picks upon the Stoic idea. Second, there is a debate over the Stoic account among contemporary interpreters which proposes similar or the same accounts for simple phantasai that I shall explicate below concerning Alexander. In particular: (a) the orthodox object-reading (with content like 'white') is supported by Frede 1983; Inwood 1985. 73-74; [LS] 240; (b) it is supposed that after all non-rational phantasiai have propositional content, by Sorabji 1990a; 1993. 20-28; probably Annas 1992. 75-77; Sorabji adds that irrationality stems from non-rational being`s not having conceptual capacities to verbalise or conceptualise the content by themselves; and (c) the middle-position taken by Lesses 1998 that the content of phantasia is not propositional, nevertheless in addition to the object it contains in the content (i) that the impression is the subject`s own, and (ii) the causal connection between object and the impression as well (for phantasia is said to reveal its cause, [LS] 39B2).
However, since the influence of the Stoic account for Alexander is not apparent in this case, and Alexander`s view might better be seen along Aristotle`s account, and an examination of the Stoic view would distract my enquiry, I do not pursue the Stoic parallel further.

predicational structure denoting state of affairs, for only states of affairs may obtain. Thus, what has to be explained is the following. What type of content do simple phantasia and the parallel case of simple perception have that no opinion might have? And in what sense is this type of content simple, viz. not involving composition? Let us see first, in Sect. 5.1.1.2, a few suggestions that have been or could be made based on interpretations of Aristotle, the common feature of which is that simple phantasia and perception have content that is not propositional (or at least not predicational), and it is simple exactly because of not being propositional (or predicational). Once these are rejected we may turn to our positive account to show that all cases of phantasia and perception involve predicational content, and simplicity is to be explained in a different way.

5.1.1.2. Simple content as non-predicational

(A) It is suggested, first, by Lautner 1995 that simple and complex phantasiai are two types distinguishable in virtue of their causal history: the simple kind being the immediate product of perceptual activity – an impression, a residue; whereas the compound is a product created by phantasia itself by means of picturing (*anazōgraphēsis*) – it is a picture (*anazōgraphēma*). This account has serious flaws. Granted that the products of picturing – the alleged complex phantasiai – are items like 'vision of the centaur' or 'dreams when the perceptible objects are missing' (p 39) – which I endorsed with some provisos in Sect. 4.2.3.3.3 – it is unclear, first, how this is analogous to the case of complex proposition involved in opinion (as it should be). For neither the 'centaur' nor the 'dream' is an assertion or denial, the first referring to an individual or species which does not exist after all (thus it refers to a would-be-individual or would-be-species), and the latter might also pick out a non-existent individual as the protagonist of the dream, or may tell a story about it. Second, it is also admitted that the immediate products of perception, the impressions – which are supposed to be the simple case – have certain complexity, though 'not considered as such' (p 40). Hence, even though there are two cases of phantasia and its object: one simply continuously preserved (viz. 'immediate product of perception'), the other modified also by phantasia itself (the picture) – as I also acknowledged – but this distinction does not explain the difference of simple and complex content. For both kinds might be simple as well as complex, in the same way. The role of picturing in the account lies elsewhere, as I argued in Chap. 4.

(B) Another suggestion is to connect the distinction between simple and complex content to the distinction between ingredients of propositions – i.e. terms uncompounded –, and propositions themselves. This approach seems to be promising insofar as the identification

of complex phantasia with propositional content is concerned; accordingly, complex content has the form 'S is P'. In contrast, simple content is 'S' or 'P'; i.e. the content is exhausted by the *object* of the mental state: so it might be called *object reading*.[410] An often cited example of such content is perceiving of 'white' or 'whiteness' or 'this white', and 'circular' or 'circularity' or 'this circular'. Then, these simple perceptions might be used as components of propositions: e.g. 'the white' is used thus in the content of perceiving (accidentally) that 'the white thing is Diares` son'.

Two problems with this proposal are immediately apparent. First, the scope of complex, propositional perception and phantasia is too restricted: only accidental perception might be propositional.[411] But there are good reasons to assume propositional content in other cases, of proper and common perception, too (Sect. 5.1.1.3).[412] Second, since simple content is not only without predicational structure, but it is not even propositional, it cannot be true. If it is to be called true – as by Aristotle and Alexander –, the sense of truth has to be specified. In what follows I discuss two approaches for this. The first (B1) invokes Aristotle`s idea of *thinking simple items*, and the sense of *truth as being in touch* with simples; the second (B2) supposes that the truth-condition for simple perception is *existence of the simple object*. I argue that neither of these accounts proves to be satisfactory.

(B1) According to the first approach of object-reading, since proper perception is analogous to thinking simple – indivisible or undivided – items (*DA* 3.7. 431a5-8), we should turn to this idea discussed at Aristotle *De Anima* 3.6 (430a26-b6 and 430b26-31).[413] It is told there that falsity in thought implies composition of concepts (*noēmata*) (*DA* 3.6. 430a26-27),

[410] E.g. Caston [Content] calls so.

[411] E.g. Annas 1992. 80; Graeser 1978; Cashdollar 1973. Moreover some accidental perceptibles may not be objects of simple perception: e.g. 'Diares` son'. Hence they may be constituents out of which the complex perception 'the white thing is Diares` son' is composed only in a way that this constituent (Diares` son) occurs necessarily in such complexes. Thus strictly speaking the composite content of accidental perception is such that one of its components may not occur outside of that very content. This is at odds with the approach (B1) that emphasizes that compound contents come about by combining simple contents that must themselves have been grasped as simples if they are to be combined (cf. Aristotle *DA* 3.6. 430a26-b6).

[412] It is arguable that what acts on the sense – i.e. what is the object of perception – is not the quality, but the thing possessing the quality, see e.g. *DA* 2.12. 424a22-24; cf. Perälä 2015. 361. Hence even proper perception involves predication, cf. Modrak 2001. 65.

[413] [AD] 239 and [BD] 314 connect the difference between simple and complex phantasia in Alexander to Aristotle *DA* 3.6; for Aristotle cf.Modrak 1987. 101-103. Engmann 1976 poses the issue of simple phantasia for Aristotle, connecting also to *DA* 3.6. Rodier 1900. 268 explains the infallibility of proper perception as a consequence of having a simple quality as content, connecting it explicitly to *DA* 3.6. He identifies in that chapter (p 473-476) (and other passages from *Metaphysics*) an *intuitionist* view of grasping simple concepts. This intuitionist view is refuted by Berti 1978.

so that uncompounded or indivisible items may be said to be true only in a specific sense: *being in touch with things*[414] (*Met*. Θ.10. 1051b17-1052a4). This kind of grasping indivisibles is infallible, always true (*DA* 3.6. 430b26-31; *Met*. Θ10. 1051b25-33). This account might be taken in at least two ways depending on the scope of indivisible items: either concerning grasping *essences*[415] of things (esp. *DA* 3.6. 430b26-30; *Met*. Θ10. 1051b25-27); or as concerning thoughts about items in separation of any proposition in general: whatever concept uncombined.[416]

The main reason to reject this account is that it explicitly rules out falsity, error, which is obviously a possibility for phantasia, and even for perception. For accordingly truth consists in grasping some indivisible item. But this grasping is a *success* activity: the indivisibles are either grasped (in which case there is truth); or not grasped at all (ignorance of the item, which is the lack of grasping).[417] There is no room for error: falsity would mean that the item is

[414] Pritzl 1998. 196-201 describes the noetic contact to essences as acquaintance with the forms that might only be indicated but not articulated, for its articulation would involve propositions – which he thinks are made by *dianoia* through combining simple items, and the creation of them depends on noetic contact with the ingredient forms. In supposing this un-articulable content, however, Pritzl wanders to the waters of mysticism. A similar confusion might be seen in the arguments for un-articulable content of perception; though in this case this is somewhat motivated by the requirement that the perceptual content should be non-conceptual. Indeed, the non-propositional grasping is to be found beyond the realm of thinking, in the union with the One, even in Plotinus` mysticism, see Sorabji 1982. 311-314. As we shall see (Sect. 5.1.6) this argument is ill-conceived for perception as well.

[415] E.g Hamlyn 1968a 142, 145: basic concepts, the essences; cf. Charles 2000. 135-138; Pritzl 1998. 188-190: all forms, i.e. the essences of composite substances and separate non-composite substances, cf. Pritzl 1984 describing everything else as compound: even point, genera; see also Crivelli 2004. 100-116. It is indeed the traditional view to take the reference to be to immaterial substances as well, against which it might be said with Berti 1978. 146 that essences of material things too are without matter.

[416] E.g. Shields 2016. 332-333; Modrak 2001. 55-66; Polansky 2007. 473-480, though Polansky emphasizes that the proper objects of thought are indeed essences. Berti 1978, though he emphasizes that the items in question must be real universals, rather than mere concepts formed by the mind; Hicks 1907. 510-512; Wedin 1988. 128-136. Perälä 2015 takes indivisible items to include beyond substances and attributes even unities of these – e.g. musical Socrates – though admitting the lack of textual support (p 352). However, he also emphasizes that simple items are not only universals, but also individuals (p 354, 364-365; cf. Pritzl 1984), and aims at explaining singular thought on the basis of this. Accordingly, the singular thought is the result of the *intelligible unity* acting on the mind so that assimilating the mind to itself, so that a composite thought may be about the singular thing it is about. Even though his notion of accidental intelligible unity – that is required for an item to be able to act upon the intellect – is shaky, his investigation contains useful insights about singular thought.
In general, if all universals are covered, then the sense of truth becomes very stretched and trivial: that the mental state has some content (indeed the content it actually has), and ignorance is the lack of (this) content, cf. Crivelli 2004. 115. Since a mental state is identified by its content, without content there is no mental state at all.

[417] Cf. Shields 2016. 332-333.

grasped, but *erroneously*, wrongly, inadequately[418] (which is not simply the contradictory of grasping[419]).

In reply, one might point to the fact that Aristotle (if not Alexander) claims that proper perception is indeed always true (*DA* 2.6. 418a14-15, 3.3. 427b11-14, 428a11-12, 3.6. 430b29; *Sens*. 4. 442b8-10; *Met*. Γ5. 1010b2-26). And since it is this type of perception to which the thinking of indivisibles is compared (*DA* 3.6. 430b26-31), the argument above fails to provide reason to reject account B1.

There are three immediate problems with this suggestion. First, as we have seen above, the simple – purportedly non-propositional – case was not restricted to perception of proper objects, but it covered also common objects: like 'circular'. But perception of common objects is said to be eminently prone to error (*DA* 70.8-12, 41.10-13; cf. Aristotle *DA* 3.3. 428b22-25). Hence this obviously does not fit the present account. If one is to restrict, in reply, the simple case to proper perception (that is admittedly infallible), one has to suppose that falsity in common perception is possible due to predicational content, as in accidental perception.[420] This is a possible theory, but not one held by Aristotle or Alexander. For according to them common objects are on a par with proper objects, both being intrinsically perceptible; and common objects differ sharply from accidental objects that are extrinsically perceptible (cf. Sect. 5.1.2). Hence it is more likely that common objects behave in the content of perception like proper rather than like accidental objects.

Second, even though Aristotle on occasion claims that proper perception is infallible, elsewhere he qualifies this, admitting that there may be error regarding proper objects too, if only quite rarely (*DA* 3.3. 428b18-19). So his assertion for infallibility may be explained away by taking the specific context into account.[421] Moreover, Alexander explicitly connects infallibility of proper perception to the presence of optimal or *normal conditions*.[422]

[418] E.g. Aristotle *DI* 1. 458b31-33, 2. 460b23-25; cf. Caston [Content].

[419] Makin 2006. 256-257.

[420] This position is considered and rejected by Graeser 1978. 86-90.

[421] E.g. the claim for infallibility at Aristotle *Met*. 1010b2-26 might be construed as embedded in a protasis, claiming that 'even if perception, at least of what is proper, is not false', so that being non-committal, cf. Kirwan 1971/1993. 110.

[422] A comparable list with argument is to be found at *in Met*. 312.11-313.3, explicitly identifying the conditions as constituting the natural state of the observer. Arguably this is the position taken by Aristotle as well, cf. *Met*. Γ5. 1010b2-26 for phantasia, see Sect. 5.1.2.2.

> In contrast [to the common perceptibles], [the senses] are most true with regard to proper perceptibles, as long as they preserve the conditions in which they have the capacity to be aware of these perceptibles.
>
> These are, (i) first, that the perceptual organs are healthy and in their natural state; (ii) second, the position of the perceptible (for sight cannot have awareness of what is located behind oneself); and (iii) third, the commensurateness of the distance, since an awareness of perceptibles does not occur at just any distance from the perceptual organs. Beyond these conditions, (iv) the medium through which there is awareness of perceptibles must also be in a suitable condition for transmission to the perceptual organs. For it is not possible to see if the transparent [material in the medium] is not illuminated. (v) Finally, [the medium] must not be disturbed by anything. For one cannot hear what one wishes when loud sounds create a disturbance.[423] (*DA* 41.13-42.3, I added the labels)

Thus, for Alexander, error is clearly possible even about proper objects.[424] Infallibility is guaranteed not by the nature of the content – that it was uncompounded –; or by the specific kind of grasping – that it is either successful or does not even occur. But by *external conditions* of the environment and of the perceiver`s body.[425]

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[423] περὶ δὲ τὰ ἴδια αἰσθητὰ ἀληθεύουσι μάλιστα, ὅταν αὐταῖς φυλάσσηται ταῦτα, μεθ' ὧνεἰσιν αὐτῶν ἀντιληπτικαί. ὧν (i) πρῶτον μὲν ἂν εἴη τὸ ὑγιαίνειν τε καὶ κατὰ φύσιν ἔχειν τὰ αἰσθητήρια, (ii) δεύτερον δὲ ἡ θέσις τοῦ αἰσθητοῦ (οὐ γὰρ τοῦ ὄπισθεν κειμένου ἡ ὄψις ἀντιληπτική), (iii) τρίτον ἡ τοῦ διαστήματος συμμετρία. οὐ γὰρ ἀπὸ παντὸς διαστήματος τοῖς αἰσθητηρίοις ἡ τῶν αἰσθητῶν ἀντίληψις γίνεται. καὶ ἐπὶ τούτοις (iv) δεῖ τὸ μεταξύ, δι' οὗ ἡ τῶν αἰσθητῶν ἀντίληψις, ἐπιτηδείως ἔχειν πρὸς τὸ τοῖς αἰσθητηρίοις διακονεῖσθαι (οὐ γὰρ οἷόν τε ὁρᾶν μὴ ὄντος τοῦ διαφανοῦς πεφωτισμένου), ἔτι (v) ὑπὸ μηδενὸς ἐνοχλεῖσθαι· οὐ γὰρ οἷόν τε ἀκούειν οὗ τις βούλεται, ὅταν ἐνοχλῶσιν ψόφοι μείζονες.

[424] Alexander argues against infallibility of perception also in the context of refuting Protegorean relativism, *in Met*. 306.5-13, 311.23-315.10.

[425] Note that some of the conditions seem to be necessary to be met for any occurrence of perception: (ii), (iv), and probably (iii). And there might be cases of (v) when any other perception is disrupted than the perception of the disturbance. Again, condition (i) does not seem to be necessary for veridical perception. One may truly perceive the thing, even if accidentally. E.g. suppose one sick person tastes some bitter food, and because of her sickness – for in sick state one is supposed to taste many or all things to be bitter – she perceives it to be bitter, cf. Aristotle *DA* 2.10. 422b8-10.

Compare *in Met*. 312.11-313.4, where Alexander considers that not all phantasia is reliable in the same degree. A further condition is added here: someone awake is more reliable than the sleeping. The issue here is not infallibility, however, but merely which person`s opinion or appearance is to be trusted more (312.25-26). It is plausible to take this consideration to be about perception (as well), for it occurs in a polemical context (against the Protegorean view), where the addressees identify phantasia (appearance) and perception (cf. 311.26-33); despite the fact that Alexander enumerates some of his arguments against the identification at 311.33-312.10. This connection is explicitly made in the following: 313.20-314.3, 314.11-14.

The third problem is simply that even if the account worked for perception – if proper perception was infallible due to its type of content and common perception was compound after all –, it could not explain simple phantasia, our present concern. For *every kind of phantasia* (with any kind of perceptible object, including proper objects) *might be false* as well as true (*DA* 70.5-20; cf. Aristotle *DA* 3.3. 428b18-30).

(B2) The second approach relies on the fact that truth is correspondence. As a proposition is true if it corresponds to a state of affairs that obtains, a term (an unstructured item) might be called true* if it corresponds to an item in the world that exists.[426] E.g. my perception of 'white' is true* if the content 'white' corresponds to an existent white in my environment, i.e. if *there is white* around me. Or a statue is true* if the person it depicts really exists.

However, since the idea is that 'white' is true* if *there is white* (or the statue is true* if *Socrates exists*), this account tacitly attributes an *existential proposition* to the content of such perceptions. For the content is (at least partly) the truth-conditions of the state. Since the state is true* if there is white, its content can be described as 'there is white' or 'white exists'. So the proponent of object-reading has to admit an existential proposition as content of simple perception.

One might argue that existential propositions are true in a different sense than predications like 'S is P'; hence they might be called simple insofar as not involving predication, and thereby the composition of two terms.[427]

Two things might be answered to this reasoning. First, the simple content we are dealing with has to be perceptual rather than rational-doxastic. That is, it should be a content that might be of a perceptual state (perception or phantasia) but *may not be of opinion* (Sect. 5.1.1.1). But obviously, one can believe that 'white exists' or that 'Socrates exists'.[428]

Second, these existential propositions reduce to a predication of a certain type. Hence, since the structure of the propositional content is predicational, so the same as that of admittedly complex items, B2 fails to explain simplicity of perceptual content in terms of the difference in the structure of content. This would be the case if every existential proposition involves

[426] E.g. Wedin 1988. 76-79, 122-136 disitinguishes the concept of being *true of* something from asserting something of something; cf. Osborne 2000. 275-277.

[427] Cf. e.g. Crivelli 2004. 100-116; Johansen 2012. 193, 2002. 179.

[428] Indeed an existence-claim is more plausibly believed than perceived.

predication. For some argue that in Aristotelian logic existence is a predicate.[429] That is, 'white exists' is to be analysed as 'white is existent'. Hence, despite the appearance to the contrary this proposition does involve predicational content. But we need not rely on this assumption,[430] it is sufficient to appeal to the fact that perception is of particulars.

Since perception is of individuals,[431] the content 'there is white' may be further explicated: 'there is this white'. Again, since white must be an attribute of a substance as subject for it,[432] for white may not exist separately,[433] it is reasonable to analyse further this content as 'this is white', where 'this' refers to the substance that is the subject of the particular whiteness. So, perception of 'white' involves beyond the particular whiteness a particular substance in the environment in which that white inheres.[434] Thus the truth-conditions of 'white' include the existence of that substance too. Hence the content is to be identified as the proposition 'this is white' – where 'this' refers to the particular substance in the environment which is white.

In a word, the purported non-propositional simple case involving merely the correspondence of a single uncompounded term to an existing feature in the environment ('white') is reducible to a propositional content 'this is white' with the form 'S is P', where S is a particular substance that has P, and S is picked out by a demonstrative 'this'. I further elaborate this conception in the following sections.

As a final remark I would like to note that the argument of Alexander at *DA* 67.20-23 is more plausible connected to the passage in which Aristotle is distinguishing phantasia from primary thoughts:

> But it is also the case that phantasia differs from assertion and denial, since what is true or false is an interweaving of thoughts. What, though, will differentiate the first thoughts from phantasmata? Indeed, even the others are not phantasmata, but they are not without phantasmata.[435] (Aristotle *DA* 3.8. 432a10-15)

[429] Cf. Bäck 2000. Or an alternative view which also involves predication is to take seemingly existential statements to be asserting that the subject belongs to a certain category, see e.g. Whitaker 1996. 31-32, 135-137, cf. *Int*. 10. Accordingly, 'Socrates is' means 'Socrates is a substance'. Then being is not an unequivocal predicate, though functions as predicate, thus the objection applies to this view as well.

[430] Against that existence is a predicate (universal) for Aristotle, e.g. Crivelli 2004. 113.

[431] Cf. e.g. *DA* 87.5-14; *in Met*. 386.28-30; *Q* 3.3. 85.5-10.

[432] It is irrelevant for us whether the proper subject of colours is a surface, cf. *DA* 45.20-46.1; *in Sens*. 44.7-45.7, 48.1-15; *in Met*. 416.7-15.

[433] E.g. *in Met*. 288.20-23, 370.7-26; cf. Aristotle *Cat*. 2, 5.

[434] Cf. e.g. Sorabji 1992. 198.

[435] ἔστι δ' ἡ φαντασία ἕτερον φάσεως καὶ ἀποφάσεως· συμπλοκὴ γὰρ νοημάτων ἐστὶ τὸ ἀληθὲς ἢ ψεῦδος. τὰ δὲ πρῶτα νοήματα τί διοίσει τοῦ μὴ φαντάσματα εἶναι; ἢ οὐδὲ τἆλλα φαντάσματα, ἀλλ' οὐκ ἄνευφαντασμάτων.

Since this passage contains quite different formulation and details than Alexander`s – it concerns primary thoughts not clearly identified in the context; it connects truth to interweaving of thoughts (*symplokē noēmatōn*) rather than simply composition (*synthesis*); it asserts the dependence of thought on phantasmata that Alexander does not mention at all[436] – I suggest to leave the interpretation of this passage to another occasion,[437] and continue with Alexander`s words.

5.1.1.3. Arguments for propositional content in all mental states

Let me just sketch two arguments that show the need for attributing propositional content to perception, even in animals, and in case of all types of perceptibles. The first, Argument from Purposive Behaviour, appeals to a broader perspective in ancient philosophy, covering esp. Aristotle and the Stoics. This, even though restricted to accidental perception, shows that an explanation of purposive behaviour requires propositional content, though it does not require possession of concepts. The second, Argument from Concept Acquisition, is all-inclusive in scope, and appeals to the fact that empiricist epistemology requires that the content in the original states (perception) is the same in type as that in states of knowing and thinking. Since the latter is obviously propositional, perceptual content must be propositional too. Universals could not be grasped if they were not already grasped somehow in perception.

Argument from Purposive Behaviour. The argument might be stated quite briefly (cf. Sorabji 1992. 195-202; 1993. 7-20; cf. Caston [Content]). Animals show purposive behaviours – e.g. following a scent, searching for food, looking for shelter, etc. – that require quite complex content. It requires to perceive the object of pursuit being *in a certain direction*, to be able to follow it; or the thing to be consumed *as food*.[438] Otherwise it is not explained why the animal followed the direction or took the food. Now, since Aristotle denies that animals have rational capacities,[439] i.e. they have only perception, perception must have sufficiently complex content – including *direction* and seeing something *as food*.[440]

[436] The sole mention of the role of phantasia in thinking is being one phase in concept-acquisition at *DA* 83.3. This neglect is emphasised by [AD] XXII.

[437] It is usual to take the passage to imply that phantasia does not have propositional content, hence simple, due to the lack of combination, e.g. Wedin 1988. 122-136; Engmann 1976. 260.

[438] Animal emotions also seem to require propositional content, Sorabji 1992. 198. Nussbaum 1978 attributes the role of *perceiving as* to phantasia and construes *aisthēsis* as mere sensation. But e.g. Johanses 2002. 178 rightly points out that Nussbaum neglects accidental perception in her account.

[439] In contrast to Plato, cf. Cooper 1970; Modrak 1981b; Burnyeat 1990.

[440] The same argument is proposed also for the Stoics by Sorabji 1990a, 1992. 203-206, 1993. 20-28.

So, the explanation that the animal consumes the food involves smelling the scent *as* food or a predication in the content of perception that 'the scented thing is food'.[441] It seems, however, that the relevant perceptions are accidental: 'food', 'tasty', or 'nutritious'; 'dangerous'.[442] Even though some argue that the explanation involves even phantasia, either as past experiences need to be utilised[443] or as possible future outcomes must be envisioned,[444] it seems to be possible that one is motivated by one`s present perceptions. So this argument can show that at least some perception have propositional content – that which are required in the explanation of animal behaviour.

Argument from Concept Acquisition. Another argument is proposed by Caston [Content]; but already hinted at by Sorabji 1992. 201-203. Caston offers an exhaustive argument against extensional or object readings of perceptual content, according to which what is perceived is a particular object, without essentially involving in the content the kind of thing the object is, i.e. proposal (B) above. Here I may only pick out two important reasons Caston provides for his intensional content reading. In his view – that I mostly adopt (Sect. 5.1.5) – perception involves *taking x as F*, where x picks out the actual, real, object that is perceived, it does not matter how the object is described, hence all true descriptions may be substituted; F may only be expressions under which the subject views the object at the occasion of perceiving it, it is not required that x is F. That is, perception is a *de re* attitude to the perceived object, but such that also involves taking the object to be of a certain kind F.

The first reason I should mention is that if the general types were not already in the content of perception, perception could not lead to universal concepts. But Aristotle believes that concepts are acquired in a process, induction, starting from perception. In describing this process, Aristotle indeed claims that 'although one perceives the particular, perception is of the universal' (*AnPost*. 2.19. 100a16-b1, Caston`s translation). Being of the universal means that in perception the perceived object is essentially taken to be in a certain way, taken to be of such and such.[445] Thus having propositional content of the form x is F.

[441] Sorabji 1992. 196 also takes the connection to a direction as involving predication.

[442] Cf. Cashdollar 1973. 164. *Pace* Everson 1997. 14 n5, 164-165 and Johansen 2012. 211, who believe a proper object may motivate too.

[443] E.g. Modrak 1987. 95-98.

[444] E.g. Johansen 2012. 210-215.

[445] Cf. Modrak 2001. 96-98, 109-110; Wedin 1988. 156-157.

The second reason, which I have already indicated above concerning (B1), is that if perception were not involving taking the object to be such (perceiving *as* F), misperception, error would be impossible. For in erroneous perception one does perceive something, but takes it to be such that it is not (cf. Aristotle *DI* 458b31-33). Instead of taking it to be G, when it is G, one takes it to be F. The content of the perception in such a case is 'x is F', however x is not F, but x is G. According to the argument, error is impossible without perception necessarily involving *taking* the object to be a certain way.

These considerations strongly warrant that perception must have propositional content for Aristotle. Considering that Alexander adopts the tenets underlying the reasoning – animal purposive behaviour to be explained without rational capacities; a certain sort of empiricism of concept acquisition; and that perception may be erroneous – these arguments suggest that Alexander as well should be credited with a comparable view, at least as supposing that perception has propositional content. In the following I shall demonstrate that this indeed is the case through considering Alexander`s own words.

5.1.2. Objects of perception (*DA* 40.20-42.3)

Even though we have already appealed to the Aristotelian distinction among objects of perception, it is time to investigate this in some detail, being important to the issue of the content of phantasia and perception. Before turning to an analysis of the distinctions, let us make some preliminary notes that help us to settle the context and the aim of the discussion of the objects of perception.

First, we distinguished causal and intentional object in Sect. 4.2.1: identifying the causal object as that which triggers the activity, and in case of cognition that which provides content for it. We saw that what defines capacities of the soul is the causal object, for psychology is the part of physical inquiry, so that it requires causal explanation – hence the theory of cognition is a causal theory. We have also seen that in perception (though not in phantasia) the causal object coincides with the intentional object: for perception is about the things that bring about its activity. Since the content of a cognitive state consists of the intentional object, any treatment of the objects of perception has a bearing on the issue of perceptual content – including a treatment of causal objects, being coincident with the intentional objects.

Second, Aristotle investigates the objects of perception in *DA* 2.6 esp. with the aim of defining the senses (in line with FAO; cf. Sect. 3.1.2), the examination of which constitutes his treatment of the perceptual part of the soul. Even though he distinguishes three types of object,

only one of them proves to be useful for definitional purposes: the objects exclusive to one sense: *proper objects*. *Common objects* by definition cannot define special senses, for they are objects common to multiple senses (cf. Sect. 5.1.2.2). *Accidental objects* cannot define any sense, for they cannot serve as causal object: as we shall see that they are not perceived intrinsically amounts to that they are not efficient cases of their own perception (Sect. 5.1.2.1).

So, this treatment of objects of perception is best seen as an investigation into the intentional objects of perception to sort out the relevant type which is applicable in the definition of the individual senses; i.e. to identify perceptible in the strict sense (*kyriōs*, *DA* 2.6. 418a24-25), *to identify the intentional object which is causal object for exactly one sense.* This renders Aristotle`s investigation as a description of the intentional objects of perception. Hence it has a direct connection to the issue of perceptual content.

As a corollary, it turns out that not each type of causal object may define a perceptual capacity: namely, common perceptibles. Even though this peculiar status of common objects poses quite a few problems of interpretation, esp. due to the fact that the issue is not central to Alexander`s or Aristotle`s treatment (indeed because it is irrelevant for definition), I refrain from discussing these issues, and instead I show (in Sect. 5.1.2.2) that a detailed account of common perception is irrelevant to identifying the simple case of perception (which is proper perception), and its contrast to the complex case (exemplified by accidental perception).

With these in mind should we approach Alexander`s treatment at *DA* 40.20-42.3 that corresponds to Aristotle`s *DA* 2.6. I first recapitulate what types of intentional objects are proposed; and then I analyse the distinctions underscoring the classification. I show in some detail that the differences among objects lie in differences in their causal roles. Since this is not my main goal, I do not attempt to resolve all problems of interpretation. I especially avoid going into problems that arise within Aristotle`s text; which many times have been explained or clarified by Alexander. Let us start with the description of objects.

Three kinds of perceptibles are distinguished (*DA* 40.20-41.10; cf. Aristotle *DA* 2.6): the first two are perceptible *intrinsically*,[446] *kath` hauta* (or in themselves) – (a) the *proper*[447] perceptibles, *idia*, those that are perceptible intrinsically[448] to one sense exclusively; and (b) *common* perceptibles, *koina*, those that are common to more than one sense. The third kind (c),

[446] On the translation see Caston 2012. 144-145; other options are: '*per se*', 'in itself', 'on its own'.

[447] I use 'proper' to emphasise that it is most relevant in defining the special senses. Other variants include 'special', 'peculiar', and Caston`s 'exclusive'.

[448] For each is perceptible by the other senses accidentally (*Q* 3.8, cf. Aristotle *DA* 3.1 425a30-b3), cf. Caston 2012. 145, [Content].

accidental object is of those that are accidentally perceptible,[449] *kata symbebēkota*. (a) Proper perceptibles are properties like colours for seeing, sounds for hearing, etc. – the features that define the special senses. Common perceptibles (b) include change, rest, number, shape, extension.[450] Examples for accidental perceptible (c) are Diares' son, foam – i.e. characteristics that happen to belong to (or rather: happen to be identical to) an object that is perceived intrinsically. Such as, I see that 'the white thing is Diares' son', or I see 'the white thing as Diares' son'.[451]

5.1.2.1. Intrinsic vs. accidental perceptibles

An F is perceptible intrinsically if it is perceptible *as such*, insofar as it is an F, *qua* being F. Hence G is perceptible accidentally, if it is perceptible not *qua* being G. This distinction might be taken in three ways: (A) extensionally; (B) logically; (C) causally.

According to (A) the distinction serves to restrict the extension of genuinely perceptible features to (a) proper and (b) common perceptibles, leaving (c) accidental perceptibles to be *not genuinely* perceptible. That is, accidental objects are accidental because it is not perception alone that is necessarily operative in grasping them. Rather (it is supposed) in accidentally perceiving (e.g. Diares` son) the perceiver needs to use her memory or phantasia, or according to some even her rational capacities. [452] The argument appeals to the fact that to perceive something *as Diares` son* one needs to be acquainted with Diares` son, which in turn requires that one has previous experience of Diares` son that one activates by phantasia or memory in *reidentifying* Diares` son – that may even involve an element of inference.

Even though this line of argument is relatively popular, it is untenable. First, neither Aristotle nor Alexander mention any other capacity than perception which is used in accidental perception. This argument from silence, however, supports only that an account of accidental

[449] I use one of the traditional labels (another would be 'incidental object') rather than Caston`s 'extrinsic perceptible' (or 'concomitant'), simply to ease reference in several ways.

[450] The lists differ within Aristotle, e.g. *DA* 3.1. 425a14-16; *Sens*. 4. 442b4-7. Alexander mostly follows Aristotle, but adds distance to the list, *DA* 65.13-14.

[451] Cf. Aristotle *DA* 3.1. 425a24-27. There are other types of accidental perceptions, namely: perceiving a proper object in a sense-modality to which that object is not proper, e.g. *seeing* (the bile) as *bitter*, Aristotle *DA* 3.1.425a30-31. This type of accidental perception, however, is not so important for us now, because it is to be explained rather in terms of simultaneous perception, cf. Sect. 5.1.4; as Graeser 1978. 78 too emphasises. According to Cashdollar 1973. 163-166 accidental perceptibles may come from any category.

[452] E.g. Ross 1961. 271 claims: they are not really perceived, rather by phantasia (p 34), cf. Caston 1996. 42; Scheiter 2012. Hicks 1907. 360-361 and Block 1960: they are only indirectly perceived; Perälä 2015. 351: perceived accidentally, but they are not part of the perceptual content, rather a kind of intelligible unity. It is often claimed that some inference is also involved, e.g. Beare 1906; Kahn 1966. 46-48.

perception that does not involve other capacities is preferable to one that does.[453] So this has to be supplemented with positive reasons. Second, as Caston 2012. 148-149n366 emphasizes, claiming that 'something is extrinsically F' is not to say that 'it is not genuinely F'. Cf. *Q* 3.8. 94.4-9: if something is accidentally perceptible, it is not the case that it is not perceptible *at all* – i.e. imperceptible – for being perceptible implies that it is perceptible by some sense. Third, the requirement of other capacities for some perceptual activity does not render that activity non-genuinely perceptual. Just as the fact that all thinking involves phantasia according to Aristotle (e.g. *DA* 3.8. 432a3-10) does not make thinking non-genuinely thinking. Fourth, it is doubtful that all cases of accidental perception involve *reidentification* of an object by using a previously acquired phantasia, memory, or concept of it. Probably this is required for perceiving individuals *as such* (Diares` son),[454] but certainly not for perceiving general features like *foam*, *food* or even *human*.[455] Otherwise, the explanation of concept acquisition that Aristotle gives would be incoherent. For it supposes the following sequence: perception – phantasia – memory – experience – universal concepts (*DA* 83.2-13; *in Met.* 4.13-5.2; cf. Aristotle *AnPost*. 2.19; *Met*. A1. 980a21-981a7);[456] so that no item may require another with the same content which is later in the sequence. Hence perception of G (a general feature) may not require either phantasia, memory or concept of G. This is not to say, however, that a given occurrence of an accidental perception may not involve the use of the relevant phantasia, memory or even concept in a reidentification.[457]

(B) According to a second conception, intrinsic and accidental perception differ logically: whereas intrinsically perceptibles are perceived necessarily in any perceptual act of the type, accidental perceptibles are not.[458] That is, if one is seeing, the content of one`s perception must include a colour, for seeing involves colour as its object. Moreover, it must be

[453] After all neither Aristotelian discussed the phenomenon in any detail, which is the reason why there are so vastly different interpretations.

[454] Although it is more plausible that reidentification and past experience do not play a role even in these cases, as Polansky 2007. 261 or Osborne 2000. 262-263 note. For after all we have to get acquainted with a person, i.e. to acquire acquaintance with her, similar to acquisition of concepts. Cashdollar 1973. 169 calls the acquisition of the ability to recognise things *as F* (an accidental perceptible): habituation.

[455] Or as Polansky 2007. 260 puts it: we perceive accidentally the essence and certain relations of substances, thus: intelligibles. Cf. Aristotle *Met*. M10. 1087a19-20; *AnPost.* 2.19. 100a17.

[456] On concept formation or acquisition in Alexander see; cf. Tuominen 2010; Sorabji 2010. The issue in Aristotle is highly debated, requiring a separate study.

[457] Cf. Everson 1997. 159-163; Cashdollar 1973. 167-170.

[458] E.g. Sorabji 1971, 1992. 197; Cashdollar 1973; Graeser 1978; Ben-Zeev 1984. For Hamlyn 1968a 105-106 this logical difference implies that common sense is defined as the sense for common sensibles; however compare *DA* 3.1; cf. Sect. 5.1.4.

a colour with a certain shape, size etc., not without these properties, so common perceptibles too must be perceived in the same act (*DA* 83.17-22). But whether the given item – which has this colour and this shape and this size etc.[459] – is a certain kind of thing (man, food, etc.) or a certain individual (Diares` son) is not necessarily grasped.[460] Since this logical difference is apparently posited by Aristotle and Alexander, the reasoning has some appeal.

However, the fact that there is a certain logical difference between two types of perceptibles does not mean that the distinction between them is to be made precisely in terms of this difference. In other words, it is arguable that this logical difference is not basic, but rather it follows from another difference. Since the formulation of the distinction in Aristotle and especially in Alexander suggests another interpretation, if it might be shown that the distinction understood in those terms is more basic, entailing the logical difference, this strongly favours that alternative. Let us move to it then, considering Alexander`s claim:

> Those things are accidentally perceptible which, because some perceptible happens to belong to them, are themselves called perceptible too. For example, if someone were to say that foam[461] is perceptible, it would be because foam happens to be white, which is perceptible. So things said to be perceptible in this way are not perceptible at bottom [*tēn archēn*], because *the sense is not modified in any way by them in so far as they are such things*.[462] (*DA* 41.6-10)

(C) The last sentence shows that it is a *causal* difference that renders some objects intrinsically, others accidentally perceptible (cf. Aristotle *DA* 2.6. 418a23-24; *Sens*. 6. 445b4-8, 3. 439a17). Whereas intrinsically perceptibles are perceived because they by themselves act upon the

[459] Cf. Graeser 1978; see note 389.

[460] A further, more specific, logical difference is also suggested by Graeser 1978: intrinsic and accidental perceptibles have different roles in the perceptual judgement: the former occupies the subject position; whereas the latter the predicate position (just consider the standard example of accidental perception: 'the white thing is Diares` son'). Accordingly, perceptual judgement is restricted to accidental perception. Cf. Cashdollar 1973. 162-163, 172-174. But there is no reason for this restriction, cf. esp. Sect. 5.1.4.5. Again, although in accidental perception the accidental object is the predicate and an intrinsically perceptible is required as a subject, this does not entail anything for intrinsic perception, see Sect. 5.1.5.1.

[461] Instead of 'foam' =ἀφρὸν, it is suggested by Bruns, relying on the Hebrew translation, that the original was the proper name *Euphron* =Εὐφρὸν, which could easily corrupt to the ms. version. Caston 2012. 148n365 welcomes this, noting the close connection to Aristotle`s example. The 'foam', however, would be more fortunate, giving a further instance of accidental perception. Nothing crucial turns on this for us, however.

[462] κατὰ συμβεβηκὸς δὲ αἰσθητὰ τῷ συμβεβηκέναι τι αὐτοῖς αἰσθητὸν αἰσθητὰ καὶ αὐτὰ καλοῦμεν, οἷον εἴ τις τὸν ἀφρὸν αἰσθητὸν εἶναι λέγοι, διότι συμβέβηκεν αὐτῷ λευκῷ εἶναι, τοῦτο δὲ αἰσθητόν. τὰ μὲν οὖν οὕτως λεγόμενα αἰσθητὰ οὐδὲ αἰσθητὰ τὴν ἀρχήν, ὅτι μηδὲ πάσχει τι ἡ αἴσθησις ὑπ' αὐτῶν ᾗ τοιαῦτα.

perceiver, i.e. they are *efficient causes* of the perception about themselves,[463] the accidental perceptibles do not have such a causal power, they are perceived because they are *accidentally identical* with a thing having the feature in virtue of which that thing is the efficient cause of the perception.[464]

We have seen that the causal object of perception is what triggers the perceptual activity: i.e. it is the efficient cause. But we have also seen that the causal object is what makes the state what it is, it is what provides content to the state: in this function the causal object might be said to be the *formal cause* of perception. Again, the causal object (in case of proper perceptibles at least) provides content to perception by means of assimilating the primary sense-organ to itself. Assimilating is an ordinary physical change, thus the cause of assimilating is an efficient cause. Since providing content is a formal causal function, it might be claimed that the causal object is formal cause insofar as it is such an efficient cause that brings about an assimilation to itself (cf. note 291). Hence, being a formal cause for the causal object depends upon its being efficient cause.

But then, as an accidental object is not an efficient cause of perception, and it cannot bring about assimilation to itself, it seems to follow that it cannot be a formal cause either, and it cannot determine the content of perception. If this is the case, we can ask: what makes the perception to be about a given accidental perceptible? What does explain that one perceives a given accidental object, say Diares` son? Is it the causal object *tout court*, i.e. the features perceptible intrinsically? But then, perceiving the accidental perceptibles were a kind of construction or inference from intrinsically perceptibles to the accidental object.

This need not be the case, for Aristotle and Alexander after all indicate a specific factor that can explain how accidental objects come into the content: the accidental perceptible is *accidentally identical* with the intrinsic perceptible which is the efficient cause of the perceptual state (on accidental oneness see *in Met*. 362.13-363.14). Thereby the accidental object is an *accidental cause* of the same state (on accidental cause see *in Met*. 350.20-34, 352.25-353.4; cf. Aristotle *Phys*. 2.3; *Met*. Δ2),[465] so that it may influence the content (it may be a kind of formal cause), even though it is not a proper efficient cause. Instead of a detailed analysis, let us consider an example. P sees Coriscus, who is white and cubical. P is affected by Coriscus in virtue of Coriscus being white, so that an assimilation to the whiteness of

[463] Charles 2000. 112-117.

[464] Cf. Wedin 1988. 94-95; Everson 1997. 20-55; Bolton 2005. 218-222; Polansky 2007. 257-258; Johansen 2012. 176-185; Caston [Content]

[465] Cf. Johansen 2012. 180-185; Caston [Content].

Coriscus comes about in the primary sense-organ of P (in short: in P, cf. Sect. 4.1.2.2). This assimilation to white carries along with it an assimilation to cubical shape, insofar as the white thing (Coriscus) is cubical (cf. *DA* 65.11-22). Again – and this is the important factor for us – since the white (and/or the cubical) thing *happens to be* identical with Coriscus, Coriscus as well is perceived; i.e. Coriscus comes into the content of seeing, despite the fact that P is affected by Coriscus only accidentally, not *qua* that thing being Coriscus.

Apart from the fact that this account renders content-determination for perception hybrid, in terms of efficient causality and accidental causality, not applying the quite clear-cut assimilation model throughout the cases, there is a possible problem. Relegating the causal object from determining the entire content seems to demolish the whole conception of causal object, especially for the case of phantasia. For if there may be factors that determine the content of a mental state independently of triggering that state – in particular the characteristics that are accidentally identical with the causal object –, residues turn out to be inadequate to define phantasia by serving as causal objects for it. This worry might be answered by pointing to the fact that the content of perception may be influenced by the accidental identities of the causal object, because it is a feature of perception that the causal object is the same as the intentional object, i.e. the object of perception brings about perception about itself. Since the causal object of phantasia brings about phantasia-state not of itself, the accidental identities of the object (the residue) are irrelevant in the determination of the content: i.e. the residue determines the content of phantasia exclusively in virtue of what it represents.

It has to be shown, briefly, how this account explains – indeed entails – the logical difference (B) between intrinsic and accidental perceptibles: that the former is perceived necessarily, the latter is not.[466] The distinction is between efficient cause and not efficient cause (merely accidental cause). Since every occurrence of a perceptual activity requires an efficient cause, if there is perception of a thing in a certain sense-modality, this state must have been brought about by a certain kind of object that defines this sense-modality: a proper object. Moreover, perceiving this proper object is necessarily accompanied by perceiving common objects, for they also act upon the perceiver efficiently. Both objects cause assimilations, so

[466] A related problem might be posed, cf. Caston [Content]; Cashdollar 1973: even though this account enables us to explain all kinds of perceptual content, it seems to entail too rich content. In other words, it seems to rule out *selectivity*. For what is required for a feature to enter into the content of perception is to be accidentally identical in the appropriate way with an item that is the efficient cause of a perceptual state. If this is all, it would follow that all features a thing has are in fact perceived in an act of perception of that thing. To answer this, it might be supposed, in brief, that it is also required that the subject *takes* the perceived thing in a certain way. Cf. Caston [Content]; Modrak 1987. 70. Against this see Everson 1997. 187-193; Garcia-Ramirez 2010.

that they necessarily enter into the content of perception. In contrast, accidental perceptibles do not affect the perceiver as efficient cause, hence they do not bring about assimilation, so that they are not perceived necessarily.

5.1.2.2. Proper vs. common perceptibles

The other distinction, among intrinsically perceptibles, sets apart proper and common objects. Even though this is of crucial importance in understanding the Aristotelian theory of perceptual content in its entirety, I discuss it only schematically, being of secondary importance with regard to the issue of propositional content, and our main concern: the purported simple content. For arguably, the simplest content occurs in proper perception. Perception of common (or accidental) objects may only be additional to perceiving a proper object. For common perceptibles are claimed to be perceived by accompanying proper objects (*DA* 65.11-22; cf. *DA* 41.3-5, 83.17-22; *in Sens*. 11.14-19; cf. Aristotle *DA* 3.1. 425b5-9).[467] Again, one main function of the proper object – that I shall exploit, see Sect. 5.1.5 – is to determine the subject of the predicational content; for it is picked out in virtue of the external thing being the efficient cause of the perception *qua* having a certain proper perceptible quality. In this role, the proper object need not be supplemented by the influence of the common object – for even if the common object too has the relevant causal connection to the referent (the causal object), it is the very same thing that causes both the proper and the common perception.[468] Hence, even if we do not identify the specific nature of common perceptibles and the specific way they are perceived (including the kind of causal mechanism and material change involved in perceiving them), given that an adequate account of proper perception is available, we can be content with the analysis.

Nevertheless, let me discuss a few important worries concerning common perception, and how it may be intrinsic, i.e. how common perceptibles can be efficient causes.[469] For proper objects are efficient causes insofar as they bring about assimilation to themselves in the

[467] Probably, even though they accompany proper objects, they do not enter into the content of perception in all cases, cf. Polansky 2007. 258. Despite what Alexander asserts, *DA* 83.17-22; similarly Graeser 1978.

[468] Probably the common object can determine the reference by itself, as 'the thing approaching is Callias', *Prior Analytics* 43a36, cf. Cashdollar 1973. 174n32. A similar worry is mentioned by Johansen 2012. 183.

[469] This is apparently never explained by Aristotle, cf. Caston 2012. 145. Common perceptibles are said to be perceived by accompanying proper perceptibles. This might be taken to mean that the material change that they cause accompanies the qualitative change (assimilation) which is caused by the proper object. But this becomes problematic if taken to mean that the vehicle of perceiving common objects is the assimilation caused by the proper object without the efficient causality of the common objects. Cf. Everson 1997. 148-156.

perceiver. So common perception should also involve assimilation; but this seems to be problematic. For Alexander asserts:

> Of the things that are intrinsically perceptible, the senses make mistakes[470] with regard to common perceptibles, since the *senses are not modified*[471] [by them] in such a way *as to be like* the corresponding objects. For perceptual error consists in just this: due to certain circumstances, the modification that occurs in the sense is of a different sort than and unlike[472] that from which it arose.[473] (*DA* 41.10-13)

The claim that 'the senses are not modified' by common perceptibles as involving an *assimilation* might be understood in two ways. This either means that common perceptibles do not assimilate at all in any case (supported by the first sentence); or that they do not assimilate in some cases, and then they happen to be perceived erroneously (supported by the second sentence). On the one hand, the first sentence seems to state that the lack of assimilation to common perceptibles explains the possibility of error about them. But the second sentence connects the occurrence of dissimilar affection to certain external *circumstances*. This suggests that in certain cases the affection fails to be assimilation, even though had the circumstances allowed, it would have succeeded to be assimilation. The position of the sentence indicates that it applies at least to common perceptibles. However, it covers proper perceptibles too, as it is clear from the continuation of the passage, where the diverse circumstances are cited – which, obtaining together guarantee the truth of proper perception (*DA* 41.13-42.3, see in Sect. 5.1.1.2). So 41.10-13 is apparently a claim about error concerning intrinsically perceptibles in general.[474]

This suggests that in veridical cases of common perception as well an assimilation should be involved; and the perception will be false whenever the assimilation fails.[475] This, however, raises a further problem. How is it explained that error may occur more easily with regard to common perceptibles than concerning proper objects. For proper perception is more

[470] This clause can be translated as 'the perceptions are erring …' This does not nominate an agent of the mistakes.

[471] Or: affected, μὴ πάσχειν.

[472] *alloion* […] *kai mē homoion.* The difference between the two phrases is unclear.

[473] τῶν δὲ καθ' αὑτὰ αἰσθητῶν περὶ μὲν τὰ κοινὰ συμβαίνει τὰς αἰσθήσεις ἀπατᾶσθαι, ὡς μὴ πάσχειν, ὡς ἔχει τὰ ὑποκείμενα. αὕτη γὰρ αἰσθήσεως διαμαρτία τὸ διά τινα περίστασιν ἀλλοῖον αὐτῇ γίνεσθαι τὸ πάθος καὶ μὴ ὅμοιον τῷ ἀφ' οὗ γίνεται.

[474] Cf. Caston 2012. 149. Nonetheless, the case of accidental perceptibles is excluded, for they are defined as not being the cause of perception, hence assimilation is never involved in their case.

[475] Cf. Charles 2000. 124-128.

reliable apparently because it occurs through assimilation to the perceived object.[476]

A twofold answer might be given. On the one hand, proper perception is not infallible, and it is arguably less prone to error not simply because it involves assimilation.[477] Rather, it is the presence of *normal* or standard *conditions* that renders proper perception mostly veridical, hence successful in assimilation.[478] The corresponding lack of normal conditions for common perceptibles may partly explain that it is mostly false and fails to assimilate. But why common perception does not have normal conditions? This may stem from a causal difference. But most importantly, the status of proper objects as *defining* special senses constitutes a further difference from common objects.[479] As being defining features, proper objects might be considered as the *final cause* for the sake of which the senses are: namely the special senses are for the sake of perceiving correctly the proper perceptibles.[480] In contrast, there is no sense that is for the sake of perceiving common perceptibles, since there is no special sense for perceiving them (Aristotle *DA* 3.1. 425a14-29). Hence they might be perceived with error more easily. This feature might be stated in terms that there is no authoritative sense for perceiving

[476] It could also be asked, how might there be assimilation to common objects, if assimilation properly speaking involves some similarity, and in turn qualities (cf. Aristotle *Cat*. 8. 11a15-20; cf. Alexander *in Met*. 405.10-13), or even a scale with opposites, *in Sens*. 113.25-114.19, that common perceptibles do not show, *in Sens*. 86.6-24; in any case assimilation is said to become through *qualitative* change. Without answering this issue, I give only two remarks. First, assimilation might also be to common perceptible properties too, in a somewhat extended sense (e.g. geometrical properties might be called qualities, cf. Aristotle *Cat*. 8. 10a11-16; cf. Alexander *in Met*. 400.15-24, 401.7-12). Second, the fact that assimilation occurs *through qualitative change* does not entail that the assimilation itself is to a quality. The claim may concern the way the result (the assimilation) comes about.

[477] Although in case when the assimilation is successful, the perception is true. Error may occur, however: when a modification is caused, hence perception occurs, but the assimilation fails. Although error is explained here in terms of failure of assimilation, on the level of material explanation, this does not rule out that on the level of form this might be described as an erroneous judgement that 'S is F' when S is G.

[478] Thus truthfulness of proper perception should not be taken as a defining feature of proper objects, rather as a consequence of the theory of perception as a causal theory. This is clear both from Alexander`s late introduction of the issue of truthfulness at 41.13-15 (once he has distinguished the different types of perceptibles), and from his analysis involving normal or standard conditions of proper perception at 41.13-42.3. Cf. Caston 2012 145, 149-151. Most probably this view, or something along these lines should be attributed to Aristotle as well, even though he is less explicit on the matter, see e.g Block 1961; Ben-Zeev 1984; Everson 1997. 18-30; Charles 2000. 116; Polanksy 2007. 253; Marmodoro 2014. 134-140. However, some commentators defend the view that truthfulness of proper perceptibles is a defining feature of them (e.g. Rodier 1900. 264), at least one necessary condition for being proper perceptible, e.g. Shields 2016. 225; or a conceptual entailmaent Hamlyn 1968a 106.

[479] Cf. Sorabji 1971; Block 1961. 6-7.

[480] Cf. Block 1961. 7; Johansen 2012. 205.

common perceptibles (*in Met*. 313.20-32; cf. Aristotle *Met*. Γ5. 1010b14-17).[481] So proper perception is veridical and truthful not merely because it involves assimilation, but because of the further features of it – normal conditions and final causality – that common perception does not have.

5.1.3. Alexander: Truth conditions of phantasia

Our first positive evidence for attributing propositional content for phantasia is quite direct: Alexander discusses the truth-conditions of phantasia at *DA* 70.23-71.5. In addition to predicational content, this passage presupposes and states correspondence theory of truth. In this section I argue for these claims, and in addition I summarise how Alexander`s account is related to the Stoic view of *katalēptikē* phantasia.

Alexander attributes propositional content to all phantasia: for in describing the truth-conditions of phantasia he states that phantasia is true if it is about an existent thing (subject) and it is such as that thing (predicate). Since this account concerns phantasia in general, rather than being restricted to some specific cases, all phantasiai have predicational content.

This argument relies on four premises. (1) The context of the passage *DA* 70.23-71.5 is the general description of the truth-conditions of phantasia. (2) This description ranges over all cases of phantasia. (3) The condition that the object of phantasia is from a real object amounts to the claim that the subject of the content of phantasia is a real existent thing. (4) The condition that the object is such as the thing amounts to the claim that the predicate in the content is a predicate that the subject possesses. In what follows, I show that all these assumptions should be accepted, hence the attribution of propositional content should be made.

> Phantasia is true when it is active concerning such a residue that came to be from a real object, and that is such as the object, and the phantasia is also such when active concerning it.[482] It is false, on the other hand, when it [is active] concerning [residues] that are from not real object – such as the sort had during sleep, which came to be as if

[481] Cf. Caston 2012. 149-150, [Content]. In case of proper perceptibles, the sense to which they belong has an *authority* over them, whereas it is not the case with common perceptibles. This explanation is not quite satisfactory, though, and it is overwritten by the normal conditions, *in Met*. 313.32-314.2.

[482] The last clause is not entirely clear: καὶ ὡς ἔχει γινομένη περὶ αὐτό. It is taken to be a separate clause by [BD] 179: 'et qui preserve cet état quand la répresentation s'applique à lui'. This is a plausible interpretation, though the text does not indicate the preservation, at most the time of being active. Further, the comparison with the Stoic definition of cognitive phantasia gives evidence not to take it in this way. Rather, it should be understood in conjunction with the preceding phrase: καὶ ὁποῖον ἐκεῖνο, *hopoion* taken to be relative to *hōs*. Fotinis presumably reads in this way, though it is not entirely clear from his paraphrase: 'so that imagination represents that object as it really is.'

> from perceptibles being present, which, however, are not present – and also those that are from present [objects], but are not such [as the objects].[483] (*DA* 70.23-71.2)
>
> For a phantasia is false, if it does not agree with the thing that appears, just as an opinion is also false if that about which the opinion is testifies against it. And there is true phantasia on the one hand and false phantasia on the other according to what relation it has to the thing it is about.[484] (*DA* 71.2-5)

(1) *The context is the general description of truth-conditions.* As I argued in Sect. 4.2.3.3.2, the context of this passage is defining truth and falsity in phantasia. To see this, let me sketch the reasoning that leads up to this passage. Once the capacity of phantasia and its working mechanism have been described (*DA* 68.4-70.5), Alexander goes on to discuss the cases in which it does represent reality and also those in which it fails to do so. He starts with rehearsing Aristotle's account of the relative reliability of phantasiai corresponding to the different sorts of perceptible objects (*DA* 70.5-12; cf. Aristotle *DA* 3.3. 428b17-30), appealing to preserving faithfully (Sect. 4.2.3.2). This account shows that the content of phantasia depends upon that of perception in two ways: phantasia is about the same type of things that the original perception, they *share intentional object*; and phantasia *inherits the reliability* of perception. Then, the fact that phantasia is more prone to error than perception calls for explanation. So Alexander considers cases when perception is mostly true (proper perception; and concerning the subject of perceptual judgements, the individual about which that perception is) and gives a *causal explanation* of how error might occur in corresponding cases of phantasia (*DA* 70.12-23; cf. Sect. 4.2.3.3). The mechanisms that explain this (impressing further and picturing) also explain inherently deviant cases: illusion and hallucination (70.14-17), and more particularly, as examples of these, dreaming (70.17) and the case of the madmen (70.18-19). Instead of going into the detailed account of these errors, Alexander provides at the end a definition of true and false phantasia at 70.23-71.5. Since his account of causes of error appealed to two mechanisms that are responsible for error concerning two ingredients of the content, and his examples are few in number, he has to show that the account given indeed covers all cases of error. This might be done adequately by giving a general account of the truth-conditions of phantasia.

[483] ἀληθὴς μὲν οὖν φαντασία ἡ περὶ τοιοῦτον ἐγκατάλειμμα ἐνεργοῦσα, ὃ ἀπὸ ὄντος τε γέγονεν καὶ ὁποῖον ἐκεῖνο καὶ ὡς ἔχει γινομένη περὶ αὐτό, ψευδὴς δὲ ἥ τε περὶ τὰ ἀπὸ μὴ ὄντος, ὁποῖαι κατὰ τοὺς ὕπνους αἱ γινόμεναι ὡς ἀπὸ παρόντων τῶν αἰσθητῶν τῶν οὐ παρόντων, ἀλλὰ καὶ αἱ ἀπὸ παρόντων μέν, μὴ οἷα δέ ἐστι.

[484] ψευδὴς γὰρ φαντασία, ᾗ οὐ συμφωνεῖ τὸ φαινόμενον, ὡς καὶ δόξα, ᾗ ἀντιμαρτυρεῖ τὸ οὗ ἡ δόξα. καὶ ἔστιν ἥ τε ἀληθὴς καὶ ἡ ψευδὴς φαντασία κατὰ τὴν πρὸς τὸ οὗ εἰσι σχέσιν.

(2) *The description covers all cases*. This can be seen from three considerations. First, the account is clearly general, without any indication of restriction in scope. If it applied only for more complex cases (with accidental object) we would have expected this to be indicated. Second, the latter part of the passage, 71.2-5, compares truth in phantasia to truth in opinion, claiming that truth is to be understood in the same sense for both: namely, as correspondence to reality. There is no reason to suppose that this applies only to complex cases. Correspondence is quite a general feature of truth, so it may cover simple cases as well. But since this comparison comes just as a summary remark of the previous definition, apparently the definition itself applies to all cases of phantasia, hence that it involves predication. Third, in the passage that immediately precedes the definition, Alexander cites all kinds of cases of error. Indeed, the cases are exhausting, as I suggested. Proper perceptibles – that are the best candidate for being the simple perception, so that the simple phantasia – and error concerning them is mentioned with emphasis (*DA* 70.14; cf. Sect. 4.2.3.3.1). So it is most natural to take the definition to cover all cases.

Now that we have seen that the account provides the truth-conditions for all cases of phantasia, we can turn to the truth-conditions themselves. There are two necessary conditions of truth; to which two sufficient conditions of falsity correspond. A phantasia is true if (T1) it is concerned with a residue from a real object, and (T2) it is such as the object. In parallel, a false phantasia is either (F1) concerned with a non-real object, or (F2) even though it represents a real object, it does so not as it is actually. Error cases of F1 include dreams, and presumably hallucinations, and perhaps that of the madmen. The case of F2 is illusion, and perhaps that of the madmen again. These two conditions seem to cover all sorts of cases when something can go false, hence the two corresponding necessary conditions for truth are sufficient together. Since the account is followed by the general claim that a phantasia is false if it does not correspond to reality (71.2-3), these two components seem to exhaust the content of phantasia. Let us see the two conditions in more detail.

(3) *The subject is a real object.* Phantasia may be true if T1, its object, the residue came to be from a real existent thing (*apo ontos gegonen*). The content of the original perception has to include a real object, otherwise the residue coming to be from it could not contain it either. Again, the residue has to preserve the reference to this thing, if the phantasia concerning this residue is true. The reference to the object is secured by the causal link between the phantasia and the external object. The external object must be present at the time of the original perceiving, for perception is of the present, and it can cause the perceptual state only if it is present. In case of phantasia there is no such requirement, for its object, the residue, is an

internal object.

Whenever F1, a phantasia is not from a real object (*peri ta apo mē ontos*),[485] it is one type of error – hallucination, dream. This kind of error can occur only in phantasia but not in perception. For if there is no real object that could cause perception, perceiving does not occur in the first place, so there is nothing to be false. Perceiving presupposes the presence of a real object as the cause of perception. And this object is contained in the content of the perceptual state. In both cases – perception and phantasia alike – the reference to this real object is determined (and secured) by the causal connection between the mental state and the causal object. Perception is about the thing it is about precisely because that is the thing which caused that perception.

We have seen in Sect. 4.2.3.3.3 how phantasia may be about a non-existent thing: namely, if in the causal process generating the residue not only perception is involved, but phantasia itself as well, by means of picturing. So that the reference of the subject term is determined not exclusively by perception, but a sufficiently specific subject term is supplied by picturing that may pick out an individual thing of a relevant kind as subject of the content of phantasia. That is, the description of a residue that is 'not such as it came to be from a real object' does not imply that the residue is caused mysteriously by a non-existent thing. Rather, it means that the residue is caused not only by the external (real) object, and the reference of the subject term is determined not merely by perceptual means. Hence, the residue does not necessarily refer to the real object that indeed caused the original perception. More specifically, the residue may refer to a thing that does not even exist.

(4) *The predicate: is such.* A further condition for a phantasia to be true is T2, that the residue is *such* as the object from which it came to be (*hopoion ekeino kai hōs ekhei ginomenē* [viz. hē phantasia] *peri auto*). Since Alexander later shows of the residue that it need not be a replica of the perceptible object, viz. the residue need not bear the represented property to

[485] In describing the second type of error (F2) Alexander describes the fulfilment of the first condition, T1, as being from a *present* object rather than an existent: *apo parontōn*. This, however, does not make the condition to involve the presence of an object. First, the description comes after a parenthetical reference to cases of dreams that are described in terms of absence and as-if-presence of the referent perceptibles (*hōs apo parontōn tōn aisthētōn tōn ou parontōn,* 71.1-2). This description is the same as before concerning the causes of error at 70.16. So, being influenced by this last description, Alexander can easily use presence (*parontōn*) instead of existence (*ontōn*) as condition. Again, he adds the second kind of error by connecting as 'but also'. Since the presence of the object is a stronger condition than the existence, it is appropriate to state that even if the object is present (hence also existent), error may occur.

represent it,[486] neither does he commit himself to this view here. This condition involves only that the perceived feature (of the external thing) has to be in the content of the phantasia as characterising the subject of the content.[487]

If F2, the phantasia is *not such* as the object (that caused it) (*mē hoia de esti*), it is the second type of error: illusion, and probably the case of the mad. The 'not such' locution does not mean that the object of phantasia – the residue – does not bear the perceived feature literally (i.e. it is not a replica) for this is not required for truth. Rather it means that the phantasia is *different*. The thing referred to by the subject term does not bear the property that is predicated of it in the content, but it has some other property. The content of the phantasia contains not feature F, which the perceived object has in reality, but feature G, that the perceived object does not have. The animal perceives the white thing as blue, it perceives x (which is F) as G: hence it is G that is present in the content of this perception rather than F.

Note that the two conditions – T1 and T2 – do not allow an object-reading: a content like being of 'white'. For in the content there has to be two factors that correspond to the two conditions, but in 'white' there is only one. In other words, such a content would be exhausted by one truth-condition (maybe something like T1), a second condition would be redundant.

So truth involves correspondence to a state of affairs: a thing`s bearing a property. Since this applies to all cases of phantasia, it is more improbable that simplicity in content would lie in that it is not predicational in structure (so simple content is to be found elsewhere). However, there is one feature of this account that points to the solution: the requirement that true phantasia is about a real existent thing and is *caused by that thing*. This I shall examine in Sect. 5.1.5.

The two conditions of falsity, F1 and F2, might be compared to two cases of falsity in things, described by Alexander at *in Met*. 432.10-433.8. Falsity is in the things, rather than in statements, either because the thing does not exist, or because the thing gives rise to false phantasiai or appearances.[488] In this latter case, falsity is in the thing, for

[486] Alexander allows to call the residue an 'impression' (*typos*) only metaphorically, for it is only the form or shape that is imprinted literally, *DA* 72.5-7.

[487] For the premise that the 'such', qualification, is an accidental predicate see e.g. *in Met*. 363.5-14.

[488] On all the senses of falsity distinguished in the context see *in Met*. 430.38-436.11; cf. Aristotle *Metaphysics* Δ29.

> although they are beings, they are nevertheless the source of false appearances [i.e. phantasiai] because they appear either (False-A) not to be the kind of thing that they are, or (False-B) to be things that are not.[489] (*in Met*. 432.11-13)
>
> For these things are in fact something, not however the kind of thing that they appear to be.[490] (*in Met*. 432.15)

In both cases, False-A and False-B, there is an existent thing, a causal object for the appearance; but the effect of the thing – the phantasia – is false on a regular basis, so the thing is inherently deceiving[491] (cf. 432.22-25).[492]

The two cases are sufficient conditions of falsity.[493] False-A corresponds to F2, and False-B to F1 – though the two pairs of conditions analyse error from different perspectives: F1–F2 from the perspective of the appearance caused by an internal cause, a residue; False-A–False-B from the perspective of the thing giving rise to false appearance.

An example of False-B is dream (433.6-8),[494] as of F1, when what appears are things that are not (*ha mē estin*), but appearing as if they were present, e.g. the dream-image`s walking about (433.2-3); although it has something existent as a basis: movements in the body (432.18-20), more precisely residues (*enkataleimmata*) from perception (433.3-5). E.g. when I dream about an elephant walking,[495] there are movements in my body, though they do not appear as residues, rather as an elephant walking. And since there is no elephant there (at most coincidentally), the appearance is deceiving. Even though a residue may cause a true phantasia, but it has the potency to bring about false, deceiving phantasia (e.g. in dreams), so it might be called a 'false thing'.

[489] Dooley`s translation. Labels are mine. ὅσα ἔστι μὲν ὄντα [ψευδῆ], ἔστι δὲ ψευδὴς ἡ ἀπ' αὐτῶν φαντασία τῷ φαίνεσθαι ταῦτα ἢ μὴ οἷά ἐστιν ἢ ἃ μὴ ἔστιν.

[490] ἔστι μὲν γὰρ ταῦτά τινα, οὐ μὴν οἷα φαίνεται.

[491] This feature (inherently deceiving) is analogous to the characteristic of 'false man' who is such that enjoys lying, so that whose speech is inherently deceiving, *in Met*. 436.12-437.18.

[492] Dooley 1993. 181n572 complains that we are not deceived in what appears, only if we make the further judgement that it is the case (e.g. 'painted lion *looks like* an animal' vs. 'this is a lion'). This is true, but Alexander`s point is rather the following. Since the content of the phantasia (appearance) is that 'this is a lion', but there is no lion (except by coincidence), so the phantasia is false; and since this phantasia is a regular effect of the thing in question (the painting): the thing, the painting is *by its nature* productive of false appearance in its viewer.

[493] Cf. Dooley 1993. 181n570.

[494] Although the examples do not correspond consistently to the two types of case in 432.15-433.5.

[495] Gallop 1990. 6-9 shows that the content of dream for Ancient Greeks are figures seen.

Alexander`s example for False-A, appearing not to be the kind of thing that the things are[496] (*mē hoia estin, in Met.* 432.10, 12-13; 433.6-8 – the same description as F2, *DA* 71.2), is a picture of an animal (433.6-8).[497] A painting (or drawing) is something, viz. a two dimensional representation of an animal, but it is not the sort of thing it appears to be, or that it represents: it is not an animal (nor three dimensional) (432.15-18).[498] The painting itself (i.e. the particular pieces of pigments on the canvas) inherently gives rise always to the same appearance of an animal, hence it is deceiving. For the appearance is 'this is an animal', and it is about the picture itself (=this), being a case of perception where the causal object makes the state to be about itself. The fact that the picture represents something else is irrelevant to the effect that the perception caused by the picture is about the picture itself. In contrast, a residue, being an internal object, causes appearances (phantasiai in the strict sense) about the thing they represent. Though the kind of falsity F2 concerns the predicate of the content in this case too: yellow in 'this is yellow'.

I presented Alexander`s account of the truth-conditions of phantasia without mentioning a clear parallel to which it is usually compared: the Stoic account of cognitive (*katalēptikē*) phantasia.[499] Accordingly, the two conditions of Alexander`s true phantasia are very similar to the first two conditions of the Stoic *katalēptikē* phantasia: it has come to be from a real object (*apo hyparchontos*); and (ii) it is stamped (or formed) in exact accordance with what is ([LS] 40 C2), i.e. it represents the object accurately[500] (cf. Sect. 3.2.2.1).

The Stoic notion is used as a criterion of truth: cognitive phantasiai are always and necessarily true, hence by having them, one can build one's knowledge upon them. Hence,

[496] Surely, the translation is an over-statement, but the explanation given about the case makes this rendering defensible.

[497] The third example, mirror-image remains unclassified by Alexander, cf. 432.21-22.

[498] Cf. Dooley 1993. 181n572; Engmann 1976. 264.

[499] [BD] 319; [AD] 249. The examination of this issue is quite important for judging the epistemological consequences of Alexander`s theory of phantasia, but since the theory might be analysed independently of this, I do not go into any details beyond the overview below. Morover, as [AD] XXI remarks, Alexander does not seem to be much interested in epistemology in his *DA*.

[500] This causal interpretation of the conditions (suggested by the 'from' terminology) can be taken as the traditional account; cf. Striker 1997. 266-272; Frede 1983, 1999. 308-311; Hankinson 2003. However according to Sedley 2002 even though later Stoics clearly interpreted Zeno in this way, Zeno may probably have had another view. Sedley argues that 'from'+gen of Φ has the meaning that 'it represents Φ'. Then the first clause of the definition (i) would by itself establish the truth of the phantasia, the second clause (ii) would state the 'graphical' similarity to the object, and (iii) – it is such a kind as could not arise from what is not, [LS] 40 D6-7, E7 – would establish infallibility. However attractive this interpretation is, now it is irrelevant. For Alexander clearly uses 'from' in the *causal sense*, and for him a true phantasia needs to meet both his conditions T1 and T2.

Alexander needs to eliminate the appearance that his true phantasiai are indeed always true, so that his definition amounts to the Stoic definition of cognitive phantasia. This is the immediately following step Alexander makes, *DA* 71.5-21.[501] He disarms the Stoic notion by showing that it does not secure the truth of phantasia.[502] He does so by reinterpreting the Stoic distinctions among phantasiai and the terms that denominate these. The upshot of Alexander`s reasoning is that even though a *katalēptikē* (or secure[503]) phantasia cannot be false, there is no mark[504] by which we could distinguish it from false phantasiai. Moreover, he defines *katalēpsis* as endorsement (*synkatathesis*) of a (true and vivid) phantasia, so *katalēptikē* phantasia has more to do with the fact that it is *frequently endorsed*,[505] rather than with truth.

5.1.4. Simultaneous perception (SIM)

As we have seen Alexander`s account of truth in phantasia implies that phantasia has propositional content with predicational structure. We may, however, find attributing this kind of content to perception even more explicitly. In discussing the possibility of simultaneously perceiving several objects (from one sense modality as well as from several: e.g. white and black; white and sweet) Alexander both gives examples of perceptual judgements with propositional content – even for proper perception – and analyses the complex content of simultaneous perception (SIM) as composed of simple propositions of proper perceptions. By his solution Alexander is able to provide a satisfactory account for the unity of perceptual awareness[506] on the level of perception. An account that is missing in Aristotle – for he provides

[501] Cf. [BD] 44-45; [AD] 250-251; *pace* Fotinis 1980. 273.

[502] *Pace* Modrak 1993. 187-188, who claims that Alexander establishes a prominent place for phantasia in epistemology.

[503] Here I would follow Caston`s rendering as 'secure', which appropriately picks out the meaning Alexander attaches to *katalēptikē*. But since my discussion of this is an outline, I simply use the Greek term.

[504] According to the Stoics *katalēptikē* phantasia may be grasped as such, it might be recognised that it is *katalēptikē.* This is possible, most probably, due to some phenomenal features of such phantasiai: clarity (*ektypon*) and distinctness (*tranē*); cf. Frede 1987. 158-163; Hankinson 2003. 66-71. The latter term is indeed used by Alexander: distinctly (*tranōs*) as characterising vivid phantasia at *DA* 71.5-8

[505] Though not always or automatically endorsed, it might be reconsidered and it requires our decision whether to endorse an appearance by measuring it to our background knowledge and beliefs (cf. *DA* 71.16-21, 72.18-20), whenever any suspicion arises. This may be an echo in Alexander of the Academic arguments against the Stoic criterion (esp. Carneades`, cf. [LS] 40H), on which see Hankinson 2003; cf. Brennan 1996; Striker 1997.

[506] I take this to be the main issue of SIM. True, several higher perceptual functions depend on SIM: having complex perceptual content in general; ability to distinguish perceptible objects from one another (perceptual discrimination); perceiving physical objects as single unitary things.

Modrak 1981a 421 argues that perceiving common perceptibles as well depends on SIM. But common objects simply accompany special ones (*DA* 65.11-22), so that in their case the problem of SIM does not arise, see

only metaphorical explanations[507] – but is required if one wants to avoid the consequence that Plato drew in his *Theaetetus* (at 184-186):[508] that unity of awareness may be attained only on the level of the rational soul, hence it is impossible for animals.

In this section I investigate Alexander`s account of the problem in depth, going into somewhat more details than is required for the issue of the content of perception. For in previous chapters I have referred to this account and drawn other conclusions from it. In particular, I discuss in addition the material change involved in SIM, and its relation to the perceptual activity. By giving the account of the two aspects of the problem in one section, being highly dependent on each other, repetition may be avoided. I do not, however, discuss the issue in its entirety, especially the question whether Alexander`s account is an adequate solution to the problem, and what precisely is Alexander`s theory of common sense.[509]

5.1.4.1. The Problem of simultaneous perception

Alexander discusses the problem of SIM in three passages: in his commentary on Aristotle`s *Sens.* 7: *in Sens*. 135.23-168.10; in a short commentary treatise[510] on Aristotle *DA* 3.2. 427a2-14: *Questiones* 3.9; and in discussing the functions of common sense (also following the lead of Aristotle *DA* 3.2): *DA* 60.19-65.2. The topics of these passages are determined by the corresponding passages in Aristotle. The *in Sens*. concerns the problem of SIM directly, whereas the *DA* passage and *Q* 3.9 are primarily about perceptual discrimination – judging that two perceptible objects are different – and consider SIM because discrimination is dependent upon simultaneously perceiving the items that are discriminated (*in Sens.* 163.6-17; cf. *DA* 60.14-61.19 *Q* 3.9. 94.25-95.18; and Aristotle *DA* 426b8-29[511]). But since discrimination as an

Gregorić 2007. 129-130. Again, Marmodoro 2014 argues that it is SIM, together with other functions that depend upon the more general *becoming aware of complex perceptual content*. However, she often seems to equate this latter function with SIM. Johansen 2012. 180-198 argues that complex perceptual content (including SIM) is gained by accidental perception. But this cannot account for SIM of opposites – for they are by no means accidentally perceived.

[507] Hicks 1907. 452 claims that it turns out that a solution is not possible after all. Gregorić 2007. 141-144, 153-155 argues that the analogy with the point shows only the possibility of a solution, without providing one clearly; cf. Kahn 1966. 57; Hamlyn 1968a 128; Shields 2016. 274.

[508] On this problem in Plato`s *Theaetetus* see e.g. Cooper 1970; Modrak 1981b; Burnyeat 1990; Chapell 2004.

[509] For the theory see esp. Gregorić 2007; cf. Marmodoro 2014; Block 1988; Osborne 1983, 1998; Modrak 1981a; Hamlyn 1968b; Kahn 1966.

[510] Sharples 1994. 135 notes that the rapid summary of Aristotle`s text in the beginning of the work renders it as not being part of a commentary. The exact status of the work, however is irrelevant for us.

[511] Three requirements are settled for perceptual discrimination of two objects in different sense-modalities. (i) That it is by perception, since the objects are perceptible objects; (ii) that it is by one single subject (or capacity), otherwise it was like the Trojan horse (cf. Alexander *in Sens*. 36.11-20); and (iii) that it is in one

additional act of perception is relatively unproblematic (see the end of Sect. 5.1.4.5), the passages that directly concern it are for the most part about SIM as well.

This difference in context explains also that the problem of SIM is most elaborately developed in *in Sens.* (at 136.7-156.23); *DA* and *Q* 3.9 mentioning only one main issue: the Problem of Opposites (PO). Since this latter problem is the most pressing for Alexander, I shall concentrate on that. With regard to the other arguments for the impossibility of SIM I mention only the requirements for any solution for the problem of SIM that emerge from them. These are as follows.

If two things are perceptible simultaneously (i) they must be perceptible distinctly, *in the same way*, and (ii) *as two*, not as one. Again, (iii) the *activity* of SIM has to be *one*, and (iv) this activity has to be in *one time*. One activity will require (v) *one capacity*, indeed one that is able to perceive all kinds of perceptible. For (vi) the account should be the same for heterogeneous and for homogeneous perceptibles.

First, the Argument from Mixed Perceptibles (*in Sens*. 136.7-139.8; cf. Aristotle *Sens.* 447a14-b6) reduces the possibility of SIM to four cases, in none of which SIM is possible after all. In each case – either the two objects are mixed into an intermediate perceptible,[512] being homogeneous objects (HOM), i.e. in one sense modality; or they are not mixed, being heterogeneous objects (HET), i.e. from different genera (sense modalities)[513] – the problem is that the two perceptible objects *interfere*, hence they are not perceived distinctly, in the same way. Hence (i) is required.

Second, the Argument from the Numerical Correspondence of Activity and Object (*in Sens*. 139.9-143.8; cf. Aristotle *Sens.* 447b6-448a1) proceeds from the previously established possibility of perceiving two HOM in a mixture. But since in this case it is one object (the intermediate) that is perceived, but not two,[514] this is not a case of SIM. Hence SIM requires (ii).[515] Again, since one activity of perception is of numerically one perceptible object (and *vice versa*), unmixed HOM – being numerically two – may be perceived only in two distinct

indivisible time – i.e. simultaneously. On alternative interpretations of the argument see Polansky 2007. 395-398.

[512] On mixture of perceptibles see *in Sens*. 136.22-137.2, 138.8-24. The idea is that out of two perceptible objects in the domain of one sense (e.g. two colours) one single object comes to be when they are put together – in perceiving them (e.g. red and white are mixed and pink comes about). Alexander`s view of intermediate, mixed, colours dependent on mixture of the coloured bodies is expressed at *in Sens.* 63.13-66.6.

[513] The other opposition is the intensity of the objects (cf. 137.16 that describes the movement not merely greater or lesser, but specifically as stronger – σφοδροτέρας): either the same or different.

[514] More precisely, the two objects are perceived *as one*, not *as two*.

[515] *Pace* Gregorić 2007. 133, 138-139. Cf. Marmodoro 2014. 177-178, 220-221.

perceptual activities. But since at one time there can be only one activity of perceiving by a single capacity – and HOM are perceived by one and the same capacity[516] – the two activities must be at different times, hence not simultaneously. Thus, for SIM, each must be one: (iii) the activity, (iv) the time, and (v) the capacity.

Third, according to the first attempt of a solution (*in Sens*. 157.11-162.11; cf. Aristotle *DS* 448b20-449a5) it is by *different parts of the soul* – i.e. with different perceptual capacities – that we can perceive two objects together. HET are indeed perceived by different senses that Alexander considers to be parts of the perceptual capacity (*DA* 40.4-5, 11-15), so the idea suggests itself. But this account is inadequate for HOM. In their case one would have more than one capacities (or perceptive parts: *merē aisthētika*) that are specifically the same (*homoeidē allēlois*) – i.e. that are for perceiving objects in one and the same genus (*in Sens*. 158.8-9; cf. Aristotle *Sens.* 448b22-25). E.g. one would have two visual capacities.[517] For a perceptual capacity (as any capacity of the soul) is defined in terms of the object with which it is concerned (FAO). But one range of objects defines exactly one capacity, there is no place for a second one (cf. *Q* 3.7. 92.1-14; cf. Aristotle *DA* 3.2. 425b13-17).[518] Thus it is required that the solution (v) postulates only *one capacity*. It follows then that – since HOM as well as HET should be perceptible simultaneously – this one capacity has to be able to *perceive all*

[516] SIM of HET is dismissed *a fortiori* in this argument, being granted the principle that perceiving two things simultaneously is more plausible if the two objects are from one genus – *homogeneous* (e.g. two sounds) – than if from different genera – *heterogeneous* (e.g. colour and sound), *in Sens*. 139.9-18; cf. Aristotle *Sens.* 7. 448b6-9.

[517] The two visual capacities are either one for perceiving white (Vw) and one for perceiving black (Vb); or two full-blown visual capacities (V1 and V2) one perceiving the white and the other the black in simultaneously perceiving them. Neither is consistent with the Aristotelian view of capacities. For a capacity is defined by a range of objects – contrary to Vw and Vb – and one range defines one capacity, there is no place for a second (V1 and V2).

It is not clear how Alexander understands the argument, it is genuinely ambiguous. Though two facts suggest that he takes it in the former way: involving Vw and Vb. First, he claims that the capacities will be specifically the same 'because the perceptibles also are the same in genus with each other, for they are all visible.' (*in Sens.* 158.14-15). Second, he takes the analogy with the eye to be a possible reply to the issue, and it certainly involves the very same capacities specifically, and different only in number: V1 and V2, cf. *in Sens*. 158.17-159.19. Gregorić 2007. 141 takes it in the former way too; as Marmodoro 2014. 222-227, though she mistakes a part of the sense to be a sense-organ; cf. Gregorić 2016.

[518] This account may not be saved on analogy with two eyes as parts of the visual capacity and thereby having one joint activity (*in Sens*. 158.23-161.20; cf. Aristotle *Sens*. 448b26-449a5). For the two eyes on the one hand and the one capacity of which they are the organs on the other are ontologically distinct: body and capacity. This allows that the two eyes are unified on another level in the one capacity of vision, hence having one joint activity. But in the case of two visual capacities as constituting one visual capacity there is no such difference in the ontological status that would allow the unification into one activity.

kinds of object (cf. *in Sens*. 162.12-163.17[519]). This will require that the unitary capacity has sufficient complexity, so that it can perceive several things simultaneously. In short: it must be *one* and *many* (complex[520]) at the same time.[521]

Again, since the reason for dismissing this preliminary account was that it is not applicable for all cases, in particular for HOM, an account that can handle all cases in the same way is preferable to one that can do so only differently. This requirement – (vi) the homology of the accounts – is explicit in Aristotle *DA* 3.7. 431a24-25,[522] and taken up by Alexander at *DA* 63.23-64.4.[523]

5.1.4.2. Simultaneous Perception of Heterogeneous Perceptibles – The Point Analogy

In his solution (*in Sens*. 164.5-165.20; *DA* 63.6-64.11; *Q* 3.9. 96.8-97.20) Alexander reconsiders Aristotle`s analogy with a point (Aristotle *DA* 3.2. 427a9-14; cf. 3.7. 431a20-24). For Aristotle a point is one indivisible unity, but it divides a line into two segments, hence it can be taken as many.[524] According to Alexander it is the centre of a circle, which, by being

[519] This passage is a general account of SIM that argues for the requirement that one single unity, one perceptual capacity is needed which is perceptive of all kinds of perceptibles – namely all the objects of the special senses (colours, sounds, tastes, etc.). This capacity has to be a unity despite the fact that it does not have a unitary object, for the objects of different special senses cannot be mixed (*in Sens.* 163.18-164.4; cf. Aristotle *Sens*. 449a8).

[520] Additional requirement is that the complexity of the capacity has to be mirrored in the complexity of the physical structure underlying it, see Marmodoro 2014. 191-194.

[521] It is instructive to understand the diversity of the judging subject 'in being' as 'divided in its *relations'* and grasping them together as 'bringing them into one relation with one another' as Beare 1906. 279-281 takes it, cf. Modrak 1981a 419; Marmodoro 2014. 246; Shields 2016. 274. However, this in itself is not yet a solution, for the coming to bearing several relations has a basis in real occurrent changes; cf. *in Sens*. 126.25-127.12. See Sect. 5.1.4.6.

[522] The interpretation of the whole reasoning at 431a20-b1 is difficult, for many pronouns have unclear denotation – probably referring to a lost figure, cf. Osborne 1998. Hence it is best to restrict the use of this passage only as a source of the claim about the homology of the accounts, agreeing e.g. Beare 1906. 281; Hicks 1907. 531; Modrak 1981a 419; Gregorić 2007. 157; Shields 2016. 339-340; even though effort is made to extract a coherent picture out of the text, cf. Marmodoro 2014. 228-233; and Osborne 1998, who basically extends the account of Ross 1906. 231. For a view according to which the two problems need different approaches see Charlton 1981. 107.

[523] Even though [AD] 227-228 note that Alexander explicitly asserts that the problem is the same for the two cases, they doubt that indeed this is true.

[524] Most commentators agree that Aristotle means a point that divides a line: Rodier 1900. 394; Ross 1906. 230-231; Hicks 1907. 450; Henry 1960. 433; Ross 1961. 36; Hamlyn 1968a 128; Charlton 1981. 106; [AD] 230; Beare 1906. 280 specifies it as a point on the time-line i.e. a now. For interpreting Aristotle as meaning the intersection of several lines (as Alexander) see Marmodoro 2014. 245; Polansky 2007. 399; Modrak 1981a

numerically one and without extension or parts, is one indivisible;[525] and as being the *limit* of several lines beginning from it or ending at it, it may be said to be many.[526] It is divisible into these different lines, being the centre in which all the radii are joined (*in Sens*. 165.17-20; *Q* 3.9. 96.14-18, 20-22; *DA* 63.8-12). The different radii run from the periphery to the centre, hence the centre itself – their limit – has relations to the other limits: the different points on the periphery, thus it is divisible accordingly (*Q* 3.9. 96.19-20, 22-24). Understood in either way, the point is a numerical unity (one in subject, *kata hypokeimenon*, *in Sens*. 165.18), and has a plurality in its being, and in its relations to the lines terminating in it, and in its relations to the end-points of the radii on the circumference of the circle.

Thus, there are quite a few items involved in the picture: (a) the centre of the circle; (b) the radii; (c) the different termini of the radii on the circumference. Translating the image to the soul, Alexander claims 'each of these [things that judge] judges the affection on its own particular line' (*Q* 3.9. 96.25).[527] Hence we may identify a further item: (d) the affections on the lines. It is clear that what judges (perceives) is (a) the centre. Again, what is judged is (d) the affection corresponding to (b) a radius. It seems prima facie obvious that what is judged is identical to (c) the points on the circumference. However it shall soon be clear that this is not the case.

As we have seen, the perceiving thing must be one in number, indivisible, just like the point taken in itself:

> For in so far as it is itself taken and thought of in itself as being an indivisible limit of all the sense-organs, it will be in activity and by its own nature an indivisible one, and this will be able to be aware and perceptive of all perceptibles. (*in Sens*. 165.3-6) In this way, in so far as it is one thing in respect of the underlying subject, that which perceives all the perceptibles and judges them will be the same thing.[528] (*in Sens*. 165.8-9)

417-418; and Kahn 1966. 56. Gregorić 2007. 150-153 argues that the two images of the point should be taken to explain two distinct phenomena: the divided line – the discrimination of opposites; the centre of the circle – the discrimination of HET.

[525] Indeed the point is indivisible in all dimensions and has position, see e.g. *in Met*. 368.35-36. Pritzl 1984. 146 oddly claims that a point may not be thought of without the line-segments of which it is the limit (and part, sic!) so that the line-segments are conceptual ingredients of it.

[526] Alexander uses several words for the point: limit (ὅρος); point (σημεῖον); terminus (πέρας); centre (κέντρον).

[527] Translation by Sharples. All translations from *Questiones* are by Sharples, sometimes with modification. ὧν ἕκαστον κριτικὸν ὂν τοῦ ἐν τῇ ἰδίᾳ γραμμῇ πάθους ὄντος.

[528] Towey`s translations, as all translations from *in Sens*., sometimes with modification. καθόσον μὲν γὰρ αὐτὸ καθ' αὑτὸ λαμβανόμενόν τε καὶ νοούμενον ἀδιαίρετον πέρας τι ὂν πάντων τῶν αἰσθητηρίων, *ἐνεργείᾳ* τε καὶ

But it also has to be many, for it has to be able to apprehend many different things at the same time:

> When it is divided by the activities in respect of the sense-organ, it will be many. (*in Sens*. 165.7-8) Insofar as it is divided by the activities in respect of the sense-organs, coming to be many in a way, it will perceive several different things together.[529] (*in Sens*. 165.9-11)

First, the perceiving thing is said to be one thing, hence it must have one activity at one time – recall (iii), (iv) and (v) from Sect. 5.1.4.1. However, it is not prima facie obvious what it means that 'it is *divided by the activities in respect of the sense-organs*'. What Alexander tells about it here, referring to Aristotle`s *De Anima*, is quite dense:

> For being a limit of all the sense-organs in the same way, when the activity comes about in respect of several sense-organs, it is taken as divided and more than one. To the extent that it comes to be a boundary of several things together, the same <limit> in the activities in respect of several sense-organs, to this extent one thing would perceive several things of different genera together.[530] (*in Sens*. 165.13-17)

As it stands, this is an explanation only of SIM of HET. It seems to involve several activities in respect of several sense-organs, thus one activity in respect of each sense-organ that is being used in perceiving the relevant perceptible. E.g., in perceiving white and sweet together, by sight and taste, there will be activities in respect of the relevant organs: the eyes and the tongue. To see what these activities might be, we should turn to the parallel passages, especially to *Questiones* 3.9.

Alexander offers two alternative interpretations. (ORG) According to the first one (*Q* 3.9. 96.31-97.8) the point is to be identified with the *primary sense-organ*. Hence the point should be a body, a magnitude with extension. In this case the lines were the connections between the peripheral sense-organs and the central-organ, and *along these lines* were the affections *transmitted* (*diapempein:* 96.33, 36; or *diadosthai*: 97.5, 6) from the periphery to the

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τῇ αὐτοῦ φύσει ἀδιαίρετον ἕν τι ἔσται, καὶ τοῦτο πάντων αἰσθητῶν ἀντιληπτικόν τε καὶ αἰσθητικόν· (165.3-6). οὕτω δὲ καθὸ μὲν ἕν τί ἐστι κατὰ τὸ ὑποκείμενον, ταὐτὸν ἔσται τὸ πάντων τῶν αἰσθητῶν αἰσθανόμενον καὶ κρῖνον αὐτά. (165.8-9)

[529] ὅταν δὲ ὑπὸ τῶν κατὰ τὸ αἰσθητήριον ἐνεργειῶν διαιρεθῇ, πλείω ἔσται. (165.7-8) καθὸ δὲ ὑπὸ τῶν κατὰ τὰ αἰσθητήρια ἐνεργειῶν διαιρεῖται, πολλά πως γινόμενον πλειόνων καὶ διαφερόντων ἅμα αἰσθήσεται. (165.9-11)

[530] πάντων γὰρ τῶν αἰσθητηρίων *ὁμοίως* ὂν πέρας, ὅταν *κατὰ πλείω γίνηται ἡ ἐνέργεια αἰσθητήρια*, ὡς διῃρημένον καὶ ὡς πλείω λαμβάνεται· καθόσον δὲ ἅμα πλειόνων γίνεται πέρας τὸ αὐτὸ *ἐν ταῖς κατὰ πλείω αἰσθητήρια ἐνεργείαις*, κατὰ τοσοῦτον ἂν καὶ ἓν τῶν πλειόνων τε καὶ ἀνομογενῶν ἅμα αἰσθάνοιτο.

central organ. But together with the view that perception involves affections, i.e. material changes, the Problem of Opposites arises. The different affections from opposite objects cannot come to be in the same part of the central-organ – just like it does not come to be in the same part of the peripheral organs, or the appearance of them in the same part of mirrors. Thus the central-organ as body or magnitude will not only be divisible, but indeed the affections were in different parts of it, hence it would not be one single thing as it is required by the analogy.

It is clear from this that the radii do not only contain the affections, but they are indeed responsible for the *transmission* of the affections. This is further confirmed by the alternative, preferred, interpretation. (CAP) Accordingly (*Q* 3.9. 97.8-19), the point is to be identified with the *capacity* of the central sense-organ, the *common sense*[531]. This capacity, being the *form* of the body in which it resides, senses and judges the things that produce alterations in that body, *according to the transmission* from the peripheral sense-organs. As being a capacity it is *single, incorporeal, indivisible* and *similar in every way and every part*. It can become many, however, by perceiving (in the same way) the changes in each part of the ultimate sense-organ. Thus, by the judgements of the several different parts the capacity becomes several in a way.

Now, CAP is most probably the same as the account we find at *in Sens*. 165.13-17. Hence we may identify the activity that comes about *in respect of a sense-organ* as the perceiving activity coming about *according to the transmission*. This latter notion seems to be this (cf. *DA* 64.4-9; *in Sens*. 19.17-20). In perception, first the peripheral organ is affected by the perceptible object. Then this affection is transmitted from the peripheral-organ to the primary sense-organ. The result of the transmission is assimilation to the perceptible object (cf. Sect. 4.1.2.2). In case when there are several such assimilations in the central-organ (in different parts), the common sense perceives several objects at the same time. It is related to the different objects in virtue of perceiving by means of being related to the different assimilations. Since each affection is transmitted on a single way, and different affections on different ways, the *common sense is related to different means of transmission* from periphery to centre. If the different objects are *heterogeneous*, their transmissions are through different ways and from *different sense-organs*. Thus in SIM of HET, the objects are judged by alterations produced in the primary sense-organ according to transmissions from different sense-organs.

[531] It is clear from *DA* 63.6-28 that Alexander identifies this capacity as the common sense.

This amounts to saying that it is determined for the common sense to which sense-modality a given perception belongs by the route of transmission of that perceptual change.[532] For the routes from the different organs differ. This can be corroborated by appealing to the last parallel passage: *DA* 63.12-64.3.

> For insofar as the perceiving capacity is the terminus of all movements which come about through the [peripheral] sense-organs in the ultimate sense-organ (for the transmission from the perceptible objects through the sense-organs extends to it and is towards it), it will be many, coming to be a terminus of many and different movements.[533] (*DA* 63.13-17)

Alexander emphasizes the connection between the activity of common sense and the affections in the primary sense-organ. This sheds light on the way the different objects are perceived according to the transmission. For the sense capacity is many on account of being the terminus of the several different *movements* transmitted from the different peripheral organs (*DA* 63.13-17). When several such movements arise in the primary sense-organ, several objects are perceived simultaneously (*DA* 63.20-23). Since the movements are transmitted from different organs, HET are judged in virtue of the difference of the peripheral organ that transmits or reports[534] the affection (*DA* 63.23-64.3).

Granted that the theory in the three treatises is the same, it is noteworthy that the expression of it is not only less explicit in *in Sens.* than elsewhere, but it is less satisfactory too. For it makes the division of the activity in terms of the peripheral sense-organs, so that it can work only for HET. Alexander needs to clarify what he meant to apply his solution for HOM too – and he does this rather concisely, a few pages below (*in Sens*. 168.2-5). The *Questiones* 3.9 and *De Anima* passages, on the other hand, connect the division to the different *parts* of the central organ and to the *movements* coming about in those parts, and they mention the transmission only to explain how the different genera of perceptibles are to be distinguished – and explain this rather clearly (cf. Sect. 5.1.4.6).

Now, the picture is this. First, (a) the centre of the circle is what perceives: the perceptive part or capacity of the soul – the common sense. Then, (d) the affections on the lines

[532] Cf. Aristotle *DI* 3. 461a28-b3.

[533] τῷ μὲν γὰρ ἑκάστης τῶν διὰ τῶν αἰσθητηρίων γινομένων κινήσεων ἀπὸ τῶν αἰσθητῶν ἐν τῷ ἐσχάτῳ αἰσθητηρίῳ πέρας εἶναι τὴν αἰσθητικὴν δύναμιν (μέχρι γὰρ ἐκείνου καὶ ἐπ' ἐκεῖνο ἡ ἀπὸ τῶν αἰσθητῶν διὰ τῶν αἰσθητηρίων διάδοσις) πολλὰ ἔσται, πολλῶν καὶ διαφόρων κινήσεων γινομένη πέρας.

[534] Caston 2012. 146-147n362 emphasises the *subservient* role of the special senses in reporting or transmitting perceptual information to the common sense.

(b) are the things that are judged, and (b) the lines themselves are the routes of transmission from periphery to the centre. Hence (c) the points on the periphery must be the peripheral sense-organs themselves, rather than the objects perceived.

There is, however, a difficulty with the image: it applies – as it stands – only for HET. Two HET may be distinguished on account of being transmitted by different lines. But two HOM should have been transmitted by the same line, and be present together at the same time at the terminus – which is impossible, being opposites.[535] Thus if this analogy is to answer PO too, it must be refined.[536] How Alexander does this is the topic of Sect. 5.1.4.6.

5.1.4.3. The Problem of Opposites

The Problem of Opposites (*in Sens.* 143.9-26; cf. Aristotle *Sens.* 448a1-19) concerns SIM of HOM, and it is based on the connection between perception and physical movement.

(PO-1) Perception is a sort of movement (or it is by means of movement). (*in Sens.* 143.11-12; cf. *DA* 61.21-24)

(PO-2) Movements of opposites are opposites. (*in Sens.* 141.12; cf. Aristotle *Sens.* 448a1-2; *DA* 3.2. 427a1-2) For the movement is assimilation: and assimilations to opposites are opposites (*DA* 61.23, 28-30). Or, the movement is the reception of the perceptible form: and forms of opposites are clearly opposites (*Q* 3.9. 95.23-25).

(PO-3) Opposites cannot coexist in the same thing at the same time. Nor can opposite movements. (*in Sens.* 141.13; cf. *DA* 61.20-21; *Q* 3.9. 95.25-26, 97.19-22; Aristotle *Sens.* 448a2-3; *DA* 3.2. 426b29-30)

Hence, opposites cannot be perceived together. (*in Sens.* 141.13-14; cf. Aristotle *DS* 448a3-5)

The argument can be extended to every pair of HOM (*in Sens.* 143.19-22; cf. Aristotle *Sens.* 448a5-8). Since perceptible objects that are intermediate between the opposites – and come to be as a mixture of them in certain ratio or by means of excess – might be allocated to one of the opposites in virtue of which one is in them in greater amount (*in Sens.* 142.25-27, 143.17-19). Hence it is impossible to perceive any two HOM simultaneously.[537]

[535] This is why (CAP) in itself is insufficient for the explanation. Polansky 2007. 400 too emphasizes that it is the sense which is represented by the point, but he interprets affection in a non-material sense, hence believes that PO does not arise. We shall see that it does.

[536] Modrak 1981a 418 thinks that PA is easily adoptable to opposites, for 'one can envision the lines moving in opposite directions'. I doubt that it is easy to envision this.

[537] And *a fortiori* SIM is impossible for HET, hence for any two objects (see the Argument from Numerical Correspondence in Sect. 5.1.4.1).

This argument is the most important difficulty for the discussion in Aristotle, the examination of this occupies most of the chapter *Sens*. 7 and most of Alexander`s commentary. Since it would be difficult to deny PO-2 or PO-3, the question is how PO-1 should be understood so as not to lead to the unacceptable consequence of the impossibility of SIM of opposites. Moreover, since (vi) a unitary account is preferable – which explains all cases of SIM in the same way – the solution for PO must be coordinated with the solution for HET, which has been expanded in the previous section.

In what follows I first articulate Alexander`s first proposal in *DA*, according to which perception is a non-material change. This is apparently not endorsed by him, though this is not stated explicitly. Then, I turn to Alexander`s final solution, which is an elaboration of PA, so that it may be applied to HOM too.

5.1.4.4. Purported non-material change

Now, Alexander`s first proposal in his *De Anima* (61.30-63.5) is simply denying that movement in PO-1 is physical movement.[538] That is, since PO-2 applies for changes taken in physical sense – e.g. becoming white and becoming black – Alexander proposes that perception does not involve a physical change, but rather it is *another kind of movement* (*DA* 62.1).[539]

He appeals to such a kind of change so that the opposites may coexist – thus not receiving the form *as matter* (*hōs hylē*) (*DA* 62.2, 13; cf. 42.19-22), or not even as being affected (*mē pathētikōs*)[540] (*DA* 62.13; cf. *in Sens*. 19.5-8, 47.3-4, 50.16-18; cf. *Mant*. 15. 144.34-145.2). This suggestions should not be confused with the claim that perception involves the *reception of the form* of the perceived object *without its matter*. For this latter view is adopted by Alexander (e.g. *DA* 39.13-14; 60.3-6; 66.13-14; 78.6-10; 83.13-14; cf. *Q* 3.7. 92.27-31; cf. Aristotle *De Anima* 2.12. 424a18-19), and he most probably interprets it as referring to

[538] This suggestion does not occur elsewhere, neither in Aristotle. Sorabji 1991. 228-230 calls this case 'dematerializing the senses', and takes the passage to argue from the Problem of Opposites for the claim that the eyes are not coloured when one is seeing. Caston 2005. 257-258 adopts this interpretation. But as we shall see, the fact that the eyes are not coloured is rather cited as supporting evidence for the plausibility of non-material change.

[539] ἄλλος ὁ τρόπος τῆς ὑπὸ τῶν αἰσθητῶν κινήσεως τῇ αἰσθήσει. Probably this idea picks up Aristotle`s introducing a 'different kind of change' (quasi-alteration) in his *DA* 2.5 (esp. 417b2-16); cf. Alexander *Q* 3.2 (even though *Q* 3.3 is also about the same topic, it is most probably not by Alexander, cf. Sharples 1994. 128-129n206). On this and its connection to the reception of form without matter, see e.g. Burnyeat 1992; 2002; Johansen 1998; Caston 2005; 2012. 138-139; Sorabji 1974; 1992. 220-221, 2001. 50-51; Sisko 1996; Everson 1997. 56-102; Polansky 2007. 223-249; Lorenz 2007; Heinaman 2007; Bowin 2011.

[540] Cf. Towey 2000. 165n109; Caston 2012. 152-157.

the material change involved in perception.[541] So 'receiving the form *without matter*' is the same as the material affection in perception. The 'matter' in this kind of reception refers to the matter of the object received. It might be said, in contrast, that in 'receiving a form *as matter*' the 'matter' refers to the matter of the receiver subject. Hence this latter notion picks out rather any kind of physical change – i.e. in case of which that which receives a form receives it by becoming the underlying matter for it, hence undergoing a real change (cf. *DA* 83.23-84.4). So 'receiving the form not *as matter*' is not being a physical affection.[542]

Alexander further elaborates on this type of change. The movement is such as the change in the medium when it is transmitting the visible colours (*DA* 62.5-13), and as mirrors or surfaces of water change when they are reflecting colours (*DA* 62.13-16):[543] a relational change (*DA* 43.1-4; *in Sens*. 42.26-43.1, 50.16-20).[544] It has to be such that many people can

[541] This is implied by its connection to the affection side of perception; cf. Caston 2012. 141n350; for Aristotle cf. Sorabji 1992. 211-223. Many take the phrase also in Aristotle to refer to the physiological change, e.g. Sorabji 1974, Everson 1997; whereas others argue that it picks out the formal cause of perception, becoming aware of the given form, e.g. Burnyeat 1992, 1995, 2002; Lear 1988. 116.

[542] *DA* 83.16-23 poses a difficulty for this interpretation. For it is claimed there that perception 'even though grasps the perceptible forms not as matter […].' εἰ καὶ μὴ ὡς ὕλη τὰ αἰσθητὰ εἴδη λαμβάνει, 83.16. This seems to be identified with receiving the forms without matter, 83.13-14. And these are contrasted with grasping the objects *as existing in matter* (*hōs ontōn en hylēi*), 83.17. However, the context may explain the tension. Alexander first compares intellectual grasping to perceiving, insofar as both are receiving forms without matter, 83.13-15. Then he goes on to distinguish the two types of activity by what is grasped about the things: the quality as it belongs to a substance with other perceptible properties (perception) vs. the quality in isolation from other items (intellection), 83.22-23. Alexander`s point is to clarify intellectual grasp as abstracted from any material condition, 84.6-10. For this conclusion he requires that perceiving itself is not an affection, but rather an activity of judging, 84.4-6. Probably he describes perception as *not affected as matter* to emphasise this latter aspect of it, predicating this feature (not affected as matter) of the *capacity* rather than of the sense-organ as at 62.2. So that the two passages remain consistent. Indeed, Alexander notes that perception involves material change, it must be through alteration, 84.4-5, 12-13.

[543] To be sure, Alexander does not offer the analogy explicitly. But he cites the case of the medium and the change in it just after he has claimed that the eyes (*opsis*) are not affected physically (*DA* 62.3-4). Indeed, he emphasizes that the medium does not transmit visual information insofar as it is affected and then affects the eyes (62.5-7). This applies for the case of mirror-appearances too (62.13-15): they do not involve assimilation.
It should be emphasized that *opsis* here must refer to the eyes, for it is stated as an evidence for the kind of reception not as matter that 'for we *see* that the *opsis* does not become black or white, when it is perceiving these' (62.4-5) ὁρῶμεν γὰρ ὅτι οὐ γίνεται ἡ ὄψις μέλαινα καὶ λευκή, ὅταν ἐκείνων αἰσθάνηται. Cf. Caston 2012. 159n383, making the same point for 43.11-16. If *opsis* were referring to sight – the capacity – seeing (or observing) it would not make sense. We may observe sight only insofar as we observe the organ of sight, which is the eyes. Moreover, at 62.16-22 Alexander explicitly claims that the affection in question is in the body possessing the perceptual capacity, i.e. in the sense-organs.

[544] However, on many occasions the transparent is described as being affected by the colour it transmits, e.g. *in Sens*. 25.20-25, 35.5-10; *DA* 42.5-10, 12-19, 43.11-15; though this is often qualified, e.g. *DA* 42.7; cf. Caston

see the same thing through the same air;[545] and the appearance as well as the mirror image depends on its spatial relation to the object seen through or reflected. Since one thing may have several relations towards different things, even to opposites, if perception is just coming to be in a certain (perceptive) relation to a perceptible object, and the change in the (peripheral) sense-organs is such a relational change,[546] simultaneous perception becomes possible (*DA* 62.16-22). Thus not being a material change, movements of opposites can be present together in the same subject. Just as white and black can be seen through the very same air, white and black can be seen through the very same eye (*DA* 43.5-7; *in Sens*. 59.1-15).[547] Hence, this view is virtually the same as the so called *spiritualist* interpretation of Aristotle`s theory of perception.[548]

There are two indications that Alexander does not adopt this line of thought. First, this view is in conflict with his expressed theory of perception. Perception is common to soul and body, hence it must be treated in physics; and since many functions of the soul depend on

2012. 153-157. Marmodoro 2014. 141-153 argues that according to Aristotle the medium is indeed affected in a different sense that she calls 'disturbance'; cf. Sorabji 2001.

The media for the other senses are certainly affected, when the perceptibles *travel* in them from the external object to the sense-organ, thereby making a difference from seeing where there is no such travelling, see *in Sens.* 128.6-130.25; cf. Aristotle *Sens*. 6. 446b13-25; cf. Caston 2012. 155-156; [AD] 181-183. Sorabji 1991 argues that this, in Themistius and Philoponus leads to the dematerialization of the senses, esp. those other than touch which is taken up by Medieval and later commentators. This might be connected to the increasing emphasis on the activity side of perceiving in contrast to the passivity, cf. Knuuttila 2008.

Illumination, light, at least is a relation, *in Sens*. 31.11-18, 52.10-12, 132.5-17, 134.11-20; *DA* 42.19-43.4, 43.9-10, 45.1-3; *Mant*. 15. 141.29-147.25; cf. Aristotle *DA* 2.7. 418b18-20.

[545] Cf. *in Sens*. 30.12-18; *Mantissa* 15. 147.16-23.

[546] Thus, the reasoning is this. If the account concerning the medium may be extended to all sense-organs, so that physical change is involved in no proper perception, then SIM of HET is possible through different sense-organs.

[547] The remark that 'the perceptive capacity will be capable to be aware of all perceptible objects, but not all of them through the same organs' (*DA* 62.18-20) ἡ δύναμις ἡ αἰσθητικὴ πάντων μὲν τῶν αἰσθητῶν ἀντιλαμβανομένη, οὐ μὴν πάντων διὰ τῶν αὐτῶν ὀργάνων does not commit Alexander to the claim that this solution would be applicable only for the case of HET (*pace* [AD] 229 ad loc.). It implies only that some affections would indeed be through different organs.

It is important, though, that sense-organs must have other properties in addition to the property that defines the medium, e.g. the eye must be 'appearance-making' (*emphanēs*) in addition to being transparent, so that it can receive and preserve the perceptible forms, *in Sens*. 26.14-25; cf. *DA* 44.6-9; cf. Towey 2000. 166-167; Sorabji 2001. 52-53. Although at *Mant*. 15. 142.21-32 the same property is attributed to mirrors too; cf. Sharples 2005a 349.

[548] Even though it is anachronistic to suppose that for Aristotle perception does not involve any material change at all, some did suppose it: Burnyeat 1992, 1995, 2002; Johansen 1998 (though note that Johansen 2012. 146-169 is against this view); Murphy 2005; 2006. Notwithstanding this interpretation is conclusively rejected e.g. by Sorabji 1992, 2001; Sisko 1996; Everson 1997; Caston 2005; Lorenz 2007.

perception, all these inherit to be common to body and soul from perception (*in Sens*. 5.19-8.13). In his general account of perception, he takes material change seriously, interpreting it as the assimilation of the sense-organ to the sensible object, and assimilation is conceived of as ordinary physical change (*DA* 39.10-18, see Sect. 4.1.2). Again, the idea that the eye is not affected materially by colours contradicts his evidence that the changes of different colours are present in different parts of the eye, by which fact he advocates that this is the case with the ultimate sense-organ too (*in Sens.* 168.3-5; *Q* 3.9. 97.1-4). Moreover, the view is in conflict with Alexander's final solution to the issue of SIM, which he puts forward in each passage where he treats the problem. As we shall see in Sect. 5.1.4.6, that account is not only consistent with physical change occurring in the sense-organs in perceiving, but it requires this.

Second, immediately after the passage in which the suggestion is made, Alexander continues with a remark (*DA* 62.22-63.5; cf. *Mant*. 15. 9-16) that ruins the analogy with the medium. He says some movement remains in the eye[549] even when the object is no longer present. This is due to *phantasia*, and illustrated by after images.[550] It seems that Alexander distinguishes the case of living sentient beings from mirrors and media by this fact about the persistence of residues. Media and mirrors do not preserve any residue, the colour-reflection appears and disappears together with the object (*DA* 62.15-16), but sense-organs do. And obviously the persistence is most prominently a feature of material change (cf. *DA* 42.23-43.4; *in Sens*. 47.3-8, 50.16-27, 134.11-20).[551]

So Alexander may not be credited with an endorsement of the spiritualist view. But then, it might be asked: what is the role of the suggestion? Alexander does not indicate this, neither explicitly, not by his introduction, nor by refuting the suggestion. It is just spelt out, and immediately followed by the alternative which is adopted at each place where the issue is considered.[552]

[549] Again, *opsis* must be the eye rather than sight. First, it denoted the eye in the preceding passage. Further, it is told that what remains in it are residues (*enkataleimmata*), *DA* 63.3. But residues are physical motions responsible for bringing about the activity of phantasia, see Chap. 4. So they must be present in a body.

[550] For Aristotle see note 84. Cf. Alexander *Q* 3.7. 92.27-31.

[551] Cf. Polansky 2007. 384. *Pace* [BD] 309 ad loc.; cf. Gregorić 2007. 36; however see *Mant*. 15. 145.7-9.

[552] Cf. [BD] 42, 308-309; [AD] 228-230; Emilsson 1988. 99. One might argue, as Pavel Gregorić suggested at a workshop, that the point of the suggestion is to motivate the view that perception itself is not material affection of the body, but an affection of the sense itself (the capacity), probably in addition to the material affection as Lorenz 2007 argues, so that it has to be a different kind of affection. But in what follows, Alexander is not describing perception as a different kind of affection, though see e.g. *in Sens*. 9.27, but rather as a completely different type of activity: judging. Hence, considering also the previous points, I do not see what might have taken Alexander from the present suggestion.

5.1.4.5. Judgement – opposition in judgement

If PO may not be resolved by denying PO-1 that perception involves physical change, rather PO-1 should be reinterpreted so as to allow SIM of opposites. Alexander`s final solution is this: 'perception, even if it seems to come about by means of an affection, but is nevertheless itself *judgement* (*krisis*)'[553] (*in Sens*. 167.21-22; cf. *Q* 3.9. 97.25-27, 98.6-10; *DA* 63.28-65.1; 84.4-6). We have to see first (in this section) how this account solves PO, and what is the content of a judgment by going through Alexander`s examples; then (in Sect. 5.1.5.6) how judgement relates to the material change involved in perception. The question what judgement (the judging activity) is I shall investigate in Sect. 5.2.

The solution Alexander proposes solves PO in the following way.

(PO-1*) Perception is judgement.
(PO-2*) There is no opposition in a judgement of opposites. (*in Sens.* 167.22-168.2)
So,
(PO-3*) Judgement of opposites that they are opposites can be simultaneous. (*in Sens.* 167.25-168.1)
Hence SIM of opposites is possible.

To see the solution in detail we need to look at the explication of (PO-2*): what it is to be *opposition in judgement*. This also supports the understanding of judgement as involving predicational content. Let us see Alexander`s explanation.

> That which is opposite in affection is different from that which is <opposite> in judgement. For in affection white <is opposite> to black but in judgement the judgement {1a}[554] concerning the white <thing> that it is white and the <judgement> {2a} of the black <thing> that it is black are not opposites. For these <are> *true together*; and it is impossible for opposite judgements to be true together. But what is opposite to the judgement {1a} concerning the white <thing> that it is white is the <judgement> {3a} concerning the white <thing> that it is black. For this reason these latter <judgements> never *exist together in* {4a} *the judgement in accordance with perception*, but the former ones are – for they are not opposite.[555] (*in Sens*. 167.22-168.2)

[553] ἡ αἴσθησις, εἰ καὶ δοκεῖ διὰ πάθους τινὸς γίνεσθαι, ἀλλ' αὐτή γε κρίσις ἐστίν.

[554] I labeled the examples of judgements in this and the following texts for ease of reference.

[555] Italics in the following translations are mine. ἄλλο δὲ τὸ ἐν πάθει ἐναντίον καὶ ἄλλο τὸ ἐν κρίσει. ἐν πάθει μὲν γὰρ τὸ λευκὸν τῷ μέλανι, ἐν κρίσει δὲ οὐχ ἡ κρίσις {1} ἡ περὶ τοῦ λευκοῦ ὅτι λευκὸν οὐδ' {2} ἡ τοῦ μέλανος

> But it is not impossible at all to judge the opposites simultaneously, because to judge that {1b} what is white is white and [to judge] that {2b} what is black is black are not opposites in judgement. […] In this way in judgement it is impossible to suppose that {5b} what is white is white and black together; and for this reason, again, in judgement what is like this *cannot exist together*. But to *say* that {2c} black is black and that {1c} white is white is not impossible, because it is not even opposite.[556] (*Q* 3.9. 97.28-30, 32-35)

> For there is no opposition in a judgement that {6d} concerning the opposites judges <that they are> opposites; what is impossible is that the opposites come to be in the same thing at the same time. For opposition in judgement is not *saying* that {6e} the opposites are opposites, but <saying> that {7d} the same thing is <both> the opposites at the same time. For this reason it is impossible that this belongs to the judging <subject>: saying that {5d} the same thing is white and black at the same time; but judging {6f} the opposites that they are opposites is not impossible.[557] (*DA* 64.12-17, my translation)

Since in all three passages the context is the same (PO), it is safe to take the solutions provided as equivalent. Let us see the account through enumerating the examples given for the content of judgement and through analysing the notion of opposition in judgement.

Despite differences in expression,[558] we may identify two kinds of proposition in the treatment as the content of the perceptual state. First, there are propositions with singular subject and one feature predicated of it: x is F – 'the white is white' {1a, 1b, 1c}, 'the black is black' {2a, 2b, 2c}, 'the white is black' {3a}.[559] Second, there are propositions in which several

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ὅτι μέλαν ἐναντίαι· αὗται μὲν γὰρ ἅμα ἀληθεῖς· ἀδύνατον δὲ τὰς ἐναντίας κρίσεις ἅμα ἀληθεῖς εἶναι. ἀλλ' ἔστι {1} τῇ περὶ τοῦ λευκοῦ κρίσει ὅτι λευκὸν ἐναντίον {3} ἡ περὶ τοῦ λευκοῦ ὅτι μέλαν. διὸ αὗται μὲν οὐδέποτε συνυπάρχουσιν ἐν {4} τῇ κατὰ τὴν αἴσθησιν κρίσει, ἐκεῖναι δέ· οὐ γάρ εἰσιν ἐναντίαι.

[556] κρῖναι δὲ ἅμα τὰ ἐναντία οὐδὲν ἀδυνατεῖ, ὅτι μὴ ἔστιν ἐν κρίσει ἐναντία τὸ τὸ λευκὸν λευκὸν κρῖναι καὶ τὸ μέλαν μέλαν. […] ἐν κρίσει πάλιν ἀδύνατον τὸ τὸ λευκὸν ὁμοῦ μὲν λευκόν, ὁμοῦ δὲ μέλαν ὑπολαμβάνειν εἶναι. διὸ πάλιν ἐν κρίσει τὸ οὕτως ἔχον ἀσυνύπαρκτον. τὸ μὲν μέλαν μέλαν, τὸ δὲ λευκὸν λευκὸν εἰπεῖν οὐκ ἀδύνατον, ὅτι μηδ' ἐναντίον.

[557] οὐ γὰρ ἐναντία κρίσις ἡ περὶ τῶν ἐναντίων κρίνουσα τὰ ἐναντία, ἦν δὲ ἀδύνατον τὰ ἐναντία ἅμα περὶ τῷ αὐτῷ γενέσθαι. ἐν κρίσει γὰρ ἐναντία οὐ τὸ τὰ ἐναντία ἐναντία λέγειν, ἀλλὰ τὸ τὸ αὐτὸ ἅμα εἶναι τἀναντία. διὸ τοῦτο μὲν ἀδύνατον συνυπάρξαι τῷ κρίνοντι ὡς ἅμα ταὐτὸν εἰπεῖν λευκόν τε καὶ μέλαν, τὸ δὲ τὰ ἐναντία κρῖναι ὅτι ἐναντία οὐκ ἀδύνατον.

[558] *in Sens.* is consistent on the use of 'concerning x that it is F'; *Q* 3.9 uses 'what is x is F', but also 'x is F'; and *DA* again has 'concerning x that it is F', 'x is F', and 'judging x that it is F'.

[559] That the subject is an individual is clear from the definite article: *to*. Even though there is the linguistic ambiguity in 'the white is white' (*to leukon leukon esti)* as to whether the subject 'the white' (*to leukon*) picks out the thing that happens to be white, or a whiteness (of a thing), the reference is clearly to the thing. Otherwise

predicates are combined: x is F and G – 'the white is both white and black' {5b}, viz. 'the same thing is white and black' {5d}, and {7d}. It shall turn out that the remaining kind of example – 'the opposites are opposites' {6d, 6e, 6f} – is of the latter type.

Now, the point of the consideration is that when propositions of the former type are combined to form propositions of the latter type, some combination will be possible, others will be impossible. Possibility of combination depends on whether the combined elements are contradictory or not.[560] If they do not contradict each other – can be true together (*in Sens*. 167.25-26) – they can belong together to the judging subject (*DA* 64.16). That is, they can exist together (*synyparkhei*) in a single judgement (*in Sens*. 168.1; *Q* 3.9. 97.34). This single judgement is the perceptual judgement: the '*judgement in accordance with perception'* (ἡ κατὰ τὴν αἴσθησιν κρίσις) (*in Sens*. 168.1).[561]

Thus, two items are involved in opposition in judgement and in the corresponding lack of opposition – since at least two items might be either opposite or not. The two items are either two judgements: {1a} together either with {2a} or with {3a} (*in Sens*. 167.22-27; cf. *Q* 3.9. 97.28-30, 34-35), or two components of one judgement {4a} (*in Sens*. 167.27-168.2; cf. *Q* 3.9. 97.32-33; *DA* 64.12-17). The two components of a judgement seem to be two predicates about one subject: the same thing is white and black; x is F and G. But this is ambiguous between predicating a complex predicate (F-and-G) of a single subject (x),[562] and being a complex of two propositions – x is F and x is G. Since only the case of opposition in judgement involves the same subject – and the point indeed is that when the subjects differ, there is no opposition – clearly the latter is meant. When the same thing (x or the white thing) is said to be both white and black, two propositions are conjoined: 'x is white' and 'x is black'. These cannot hold together, hence this is a case of opposition in judgement. On the other hand, when it is like 'x is F' and 'y is G', there is no opposition in judgement. Since the subjects of the different predicates are different, the composite judgement will not be contradictory even if the predicates are contraries (e.g. white and black).[563]

it would be nonsense to say, not only false, that 'the white is black' – i.e. whiteness is blackness – or that 'the same item is white and black' – i.e. the same quality is whiteness and blackness. Cf. Block 1960.

[560] Compare Aristotle`s introduction of the principle of non-contradiction at *Met*. Γ3. 1005b18-33. It is claimed there that it is concerned with opposite opinions (*doxa*), the opposition being contradiction (esp. *Met*. Γ3. 1005b28-29), hence opposite (contradictory) beliefs may *not* be *endorsed* together by a single person, even if they might be *said* together. Cf. *in Met*. 270.4-25.

[561] Cf. *in Met*. 314.19-22.

[562] This seems to be the view of Hicks 1907. 452.

[563] Cf. Aristotle *Int*. 6. 17a26-37, 7. 17b16-18a8, 14. 23a27-24b9.

Now, since the components of the composite judgement (or proposition) are judgements themselves,[564] the composite judgement is formed by a *conjunction* of its components.[565] For the composite judgement is true if both its components are true. In the explanation, three atomic propositions are involved: 'w is white'; 'b is black'; and 'w is black'. Of these, two combinations are considered: 'w is white and b is black'; and 'w is white and w is black'. The former is possible, the latter is not – for the latter involves contradiction, whereas the former does not.

One last judgement has to be investigated: 'the opposites are opposites' {6d, 6e, 6f} in *DA* 64.12-17. First, in *De Anima* (as well as in *Q* 3.9 and Aristotle`s *De Anima* 3.2) the context is perceptual discrimination, but the treatment of judgement occurs in discussing the possibility of SIM (indeed PO), for SIM is presupposed by perceptual discrimination. So the proposition in question may pick out not that e.g. 'white is opposite to black' or 'white differs from black', but the same complex as before: 'w is white and b is black'. This is clear both from the verdicts made about the judgement: 'there is no opposition in it', 'it is possible'; and from the contrasting {5d} 'the same thing is white and black' – 'w is white and w is black'. The differentiation of the qualities (that white is different from black) is a further judgement that might easily be conjoined to the simultaneous perceiving of the two qualities, thereby making the content even more complex.

Thus, Alexander`s solution for SIM invokes judgements having propositional content with such complexity: a conjunction of propositions with a form of predication. Hence (PO-2*) there is no opposition in a judgement of opposites.

[564] Which means that not only perceptual discrimination (and SIM) is judgement (cf. *DA* 63.28-65.1), but the perception of a single perceptible object as well (see Sect. 5.2.3).

[565] A similar suggestion is made dimly by Beare 1906. 281. Aristotle allows that a statement may be one not only because it reveals one thing (semantic criterion), but also in virtue of being composed from such atomic statements by means of a logical connective, so that making a single assertion about many things (syntactic criterion). See Aristotle *Int*. 5. 17a8-26, cf. Crivelli 2004. 163-166, 171-172; though according to Ackrill 1963. 126-127 the distinctions are confused, for according to the semantic criterion only assertions about one thing may be treated as single, cf. Aristotle *Int*. 8; 11. 20b12-22; cf. Whitaker 1996. 75-76, 95-98; cf. Aristotle *Rhet*. 3.12. 1413b29-1414a1. Alexander refers to the semantic criterion at *in Met*. 289. 14-16, 32-33 in saying that the proposition (*protasis*) 'Socrates is musical and white' is not a single proposition, but presumably the conjunction of two. But the emphasis on the semantic criterion in certain contexts does not make the syntactic criterion (appealing to connectives) useless in others.

5.1.4.6. Material change and judgement

But, even though Alexander asserts PO-1*, that perception is judgement, he also maintains that (PO-1#) *perception is by means of movement*. We have seen (in Sect. 5.1.4.4) that he rejects to solve PO by eliminating all physical change. He has strong reasons to do so, just to mention some without explication: a causal connection to the object is necessary to trigger the activity of the capacity; the fact that the affection is assimilation to the object explains the intentional (and phenomenal) content of the perception, ensures the truth of special perception in normal cases, and enters into the explanation of concept formation.

For this reason, Alexander has to provide a satisfactory explanation how the material change (the movement) is related to the perceptual activity of judging. In particular, he has to offer an account of the role of material alteration in simultaneous perception of opposites, HOM (though as well as of HET).

In his commentary he just summarises the findings that are explicated in detail both in *Q* 3.9 and in *De Anima*. Let us see the relevant passages.

> However when that body is affected in which this < i.e. the perceptive> soul <is located>, and which it is habitual to call the ultimate sense-organ, <it is affected> not in respect of the same part by both <opposites> but rather <the affections> are generated in different <parts> by different <opposites> just as we see in case of the eyes and mirrors when the opposites appear simultaneously.[566] (*in Sens*. 168.2-5)

> For, in case of these [i.e. the opposites] the sense-organ [viz. the peripheral organ] will receive the affections of different opposites simultaneously in respect of different parts of itself, for it is impossible that the opposite affections come to be in the same <thing>[567]. When this [the peripheral organ] is affected in respect of different parts by the opposite perceptible objects, and when it transmits – as it is affected – the affections to the ultimate sense-organ, and when that [the ultimate sense-organ] is affected similarly, in respect of <its different> parts, the capacity, being the same and one both from the whole sense-organ and from each of its parts, will perceive and judge the opposites simultaneously.[568] (*DA* 64.4-11)

[566] πάσχοντος μέντοι τοῦ σώματος ἐν ᾧ ἥδε † ψυχή, ὃ ἔθος ἐστὶ λέγειν ἔσχατον αἰσθητήριον, οὐ κατὰ τὸ αὐτὸ μόριον ὑπ' ἀμφοῖν, ἀλλὰ κατὰ ἄλλο ὑπ' ἄλλου γίνεται, ὡς γὰρ ὁρῶμεν καὶ ἐπὶ τῶν ὀφθαλμῶν καὶ ἐπὶ τῶν κατόπτρων ἅμα ἐμφαινόμενα τὰ ἐναντία.

[567] The same item, τῷ αὐτῷ, might be the same part, but more generally the same thing as well.

[568] καὶ γὰρ ἐπὶ τούτων τὸ αἰσθητήριον ἔσται κατ' ἄλλο καὶ ἄλλο μέρος αὐτοῦ ἅμα τὰ πάθη τῶν ἐναντίων αἰσθητῶν δεχόμενον, ἐπεὶ μὴ οἷόν τε ἅμα τὰ ἐναντία ἐν τῷ αὐτῷ γενέσθαι πάθη. Πάσχοντος δὲ τούτου κατὰ διαφέροντα

Thus, the perceptive capacity judges the opposites that they are opposites, at the same time, when the ultimate sense-organ – of which it is the capacity – is *affected in accordance with different parts* and the forms of the opposite perceptible objects are *reported* to it [to the capacity]. For the same capacity <is operative>, when the sense-organ is affected in accordance with some one perceptible object and from one <thing>, it judges this; when in accordance with many, it judges them. For the capacity makes the judgements about those things simultaneously, of which the sense-organ grasps the forms simultaneously.[569] (*DA* 64.17-65.1)

[I]n the case of that sense-organ [viz. the primary sense-organ] certain of the perceptible things that impinge simultaneously come to be in one part of it, and others of the things that are conveyed to it from the initial sense-organs in this way <come to be> in another <part of it>.[570] (*Q*.3.9. 97.22-25)

But, while the affections come about in the sense-organ, the judgement of the things that come to be in this <takes place> in the capacity; for it is not possible for this too to admit the affections which are corporeal, since it is incorporeal. So the capacity of the entire <sense-organ> is not at all prevented from simultaneously judging the things that come to be in different parts of the sense-organ. For perception is judgement, by the perceptive capacity, of the perceptible things, <coming about> through the affections brought about in the sense-organ through <the objects of perception>, and in this way one and the same capacity in a way becomes many simultaneously, by making a perceptive judgement simultaneously of the affections that come to be in respect of each part of the sense-organ. For the capacity that judges the affection that comes about in some one part of the sense-organ also itself judges the affections that come about simultaneously in all parts of it; the same [capacity] in a way comes to be both one and many according to the division of the parts of the sense-organ as it is affected, in the way in which the point, too, which was single, came to be many, being

μόρια ὑπὸ τῶν ἐναντίων αἰσθητῶν καὶ ὡς πάσχει οὕτως διαδιδόντος ἐπὶ τὸ ἔσχατον αἰσθητήριον τὰ πάθη κἀκείνου παραπλησίως κατὰ μόρια παθόντος, ἡ δύναμις ἡ αὐτὴ καὶ μία οὖσα ἐκ παντός τε τοῦ αἰσθητηρίου καὶ ἑκάστου τῶν μερῶν αὐτοῦ ἅμα αἰσθάνεταί τε καὶ κρίνει τὰ ἐναντία.

[569] κρίνει δὴ ἡ δύναμις ἡ αἰσθητικὴ ἅμα τὰ ἐναντία ὅτι ἐναντία, τοῦ ἐσχάτου αἰσθητηρίου οὗ δύναμίς ἐστιν αὐτὴ κατὰ διαφέροντα μόρια πάσχοντός τε καὶ τὰ εἴδη τῶν ἐναντίων αἰσθητῶν διαγγέλλοντος αὐτῇ. ἡ γὰρ αὐτὴ δύναμις ἂν μὲν κατὰ ἕν τι αἰσθητὸν καὶ ἀφ' ἑνὸς τὸ αἰσθητήριον πάθῃ, τοῦτο κρίνει, ἂν δὲ κατὰ πλείω, ταῦτα. ὧν γὰρ ἅμα τὸ αἰσθητήριον τὰ εἴδη λαμβάνει, τούτων ἅμα τὰς κρίσεις ἐκείνη ποιεῖται·

[570] τοῦ αἰσθητηρίου ἐκείνου κατ' ἄλλο μὲν μόριον τάδε τινὰ τῶν αἰσθητῶν τῶν ἅμα προσπιπτόντων γίγνεται, κατ' ἄλλο δὲ τάδε τῶν ἀπὸ τῶν πρώτων αἰσθητηρίων ἐπ' αὐτὸ φερομένων τὸν τρόπον.

> divided according to the plurality of the lines of each of which it is the terminus.[571] (*Q* 3.9. 98.2-15)

The problematic proposition was PO-3, that *the same thing* cannot admit two incompatible (in particular: opposite) *affections* at *the same time*. This involves three factors: the subject, the affection and the time. First, we are considering the possibility that the affection involved in perception is affection in the strict sense. Again, since what has to be shown is the possibility of SIM, simultaneity cannot be dropped either. The remaining factor is the subject. Hence, there have to be different subjects for the incompatible affections.

We learn elsewhere that the affection involved in perception is *assimilation* to the perceived object (*DA* 38.20-40.3, see Sect. 4.1.2.2). This is a consequence of the Aristotelian theory of causation (Aristotle *Physics* 3.1-3; *GC* 1.7). For if a acts upon b (in virtue of F), then before the process a and b were dissimilar (F and non-F), and in the change a assimilates b to itself, by making b actually F. The perceptual assimilation comes to be through a *qualitative change* (*DA* 39.10-18), for the proper objects of perception are qualities (*DA* 40.20-41.10; cf. Aristotle *DA* 2.6).

Again, since the affection is physical, it requires a body as subject. Thus it is not the capacity that receives the affection, otherwise PO would still arise. But the incorporeal capacity is not even a suitable subject for material affection. Hence, the subject has to be the sense-organ (*Q* 3.9. 97.35-98.4). But being corporeal implies that it is an extended magnitude, so that it is divisible into several parts (*Q* 3.9. 96.31-97.8; cf. *in Met*. 396.20-22; cf. Aristotle *Cat*. 6. 5a15-37). Now, since a part of a magnitude is still a magnitude, and a part of a body is still a body (cf. e.g. *DA* 14.6-7, 18.10-26), the parts of the sense-organ are suitable subjects for receiving affections. Indeed, Alexander appeals to the observation that different colours affect different parts of the eye as well as they appear in different parts of a mirror (*in Sens*. 168.3-5; *Q* 3.9. 97.1-4). Hence the proper subject that receives perceptual change is a part of the sense-organ (*in Sens*. 168.3-4; *DA* 64.4-9, 18-19; *Q* 3.9. 97.5-8, 22-25, 98.4-6). So, assimilation takes

[571] ἐπεὶ δ' ἐν μὲν τῷ αἰσθητηρίῳ τὰ πάθη γίνεται, ἡ δὲ τῶν ἐν τούτῳ γινομένων κρίσις ἐν τῇ δυνάμει (οὐ γὰρ οἷόν τε ἔτι τοῦτο τὰ πάθη δέχεσθαι τὰ σωματικὰ ὂν ἀσώματον), οὐδὲν κεκώλυται τὰ ἐν τῷ αἰσθητηρίῳ γινόμενα κατ' ἄλλο καὶ κατ' ἄλλο μέρος ἅμα κρίνειν ἡ δύναμις ἡ παντὸς αὐτοῦ. ἡ γὰρ αἴσθησις κρίσις ἐστὶ τῆς αἰσθητικῆς δυνάμεως τῶν αἰσθητῶν διὰ τῶν [αὐτῶν] ἐν τῷ αἰσθητηρίῳ γινομένων παθῶν δι' αὐτῶν, γίνεται δὲ οὕτως ἡ αὐτὴ καὶ μία δύναμις πολλαί πως ἅμα γινομένη τῷ τῶν καθ' ἕκαστον μέρος τοῦ αἰσθητηρίου παθῶν γινομένων ἅμα ποιεῖν αἰσθητὴν κρίσιν. ἡ γὰρ κρίνουσα δύναμις τὸ κατά τι ἓν μέρος τοῦ αἰσθητηρίου γινόμενον πάθος αὐτὴ κρίνει καὶ τὰ κατὰ πάντα τὰ μόρια ἅμα [δ'] αὐτοῦ γινόμενα πάθη, ἡ αὐτὴ καὶ μία καὶ πολλαί πως γινομένη κατὰ τὴν τῶν μερῶν τοῦ αἰσθητηρίου καθὸ πάσχει διαίρεσιν, ὡς ἐγίνετο καὶ τὸ σημεῖον ἓν ὂν πολλὰ κατὰ τὸ πλῆθος τῶν γραμμῶν διαιρούμενον ὧν [ἡ] ἑκάστη πέρας.

place in parts of the primary sense-organ. It comes to there by being transmitted to there from the different peripheral sense-organs (*DA* 64.2-3, 7-8, 19-20; *Q* 3.9. 97.22-25).

This explains why the respect in which the one capacity is many may have been cashed out differently (see Sect. 5.1.4.2). Since all these items – the transmission-process itself, the route of transmission, the affection as the product of transmission, and the part of the central-organ as the end-location of transmission – are phases of and items in a single process (the transmission), the claims that the one capacity becomes several in accordance with 'the transmissions', 'the activities in respect of the sense-organs' (i.e. the transmission-processes themselves), 'the lines' (corresponding to the routes), 'the affections', and 'the parts of the organ' are all equivalent. The last of these – the parts – is the most proper item according to which the distinction can be made: for this might differ irrespective of the kind of affection and the corresponding kind of perceptible features involved – HET or HOM in the same way (requirement (vi) in Sect. 5.1.4.1).

Now, since the affections are related to (present in) different parts of the sense-organ, no impossibility arises from the sense-organ being affected by opposites simultaneously. However, that the affections are of diverse subjects seems to contradict the requirement of a single subject.[572] Even though the subject of the perceptual activity is claimed to be the capacity, it needs to be explained, how it is the case that there is only one single capacity if there are several parts of the sense-organ that each may receive different affections simultaneously. How there might be one activity of this capacity, which is related to several parts of the sense-organ?

> This capacity senses and judges the things that come about in that body, of which it is the form and capacity, according to the transmission from the sense-organs. For this capacity is single and, as it were, the terminus of this body of which it is the capacity, since it is to this that the changes are transmitted as their ultimate <destination>. <The capacity,> being *incorporeal* and *indivisible* and *similar in every way*, as being single, in a way becomes many <capacities>, since it senses *similarly* the changes in each part of the body of which it is the capacity, whether the change comes about in it in some one part or in several. For in the judgement of several <parts> the single <capacity> in

[572] Cf. Emilsson 1988. 104-105. Emilsson argues that 'Plotinus` view of the matter is much simpler [than that of Alexander]. Basically all he does is to develop one of Alexander`s two solutions so that a uniform account can be given in terms of it.' This solution is what I explicate below: that the soul as incorporeal is uniformly present to the body. The achievement of Plotinus` that Emilsson refers to is his neglect of the transmission from sense-organs to a central-organ as unnecessary addition. Cf. Henry 1960.

a way becomes several capacities, since it is taken as the proper terminus of each part.[573]
(*Q* 3.9. 97.10-19 = CAP)

What Alexander offers is insisting on *hylomorphism*.[574] Accordingly, as the sense-organ is the matter of the perceiver, the capacity of perception – which makes the judgement – is the form (*Q* 3.9. 97.9-10). Just as any form, the perceptive capacity enforms the sense-organ throughout *uniformly*. That is, it is the same form in relation to the *whole* sense-organ as well as to *all parts* of that (*DA* 63.17-19, 64.9-11; *Q* 3.9. 98.6; cf. *Mant*. 1. 104.21-22). Thus, there is one single form, and it is incorporeal, and similar throughout (*Q* 3.9. 97.14-15).[575] In a sense the perceptual movements are taken to it, 'for the transmission from the perceptible objects through the sense-organs extends to it and is towards it' (*DA* 63.15-16; see text in Sect. 5.1.4.2). For it is the last item concerned with them in making the judgement by means of them, hence in a sense it is the limit of the sense-organ (*Q* 3.9. 97.13-14). It might be called a limit of the body insofar as it might be called the limit of the bodily movements in the diverse parts of the organ (*DA* 63.14-17), and the limit of the parts themselves (*Q* 3.9. 97.18-19). Certainly it is not a physical limit in virtue of being the end-location of the transmission of the movements, but, being incorporeal (not a magnitude), hence also indivisible (*Q* 3.9. 97.14), it might be a limit by analogy, insofar as in making judgements based on the movements (*Q* 3.9. 97.17-18) the movements terminate in the judgement.[576]

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[573] ἴσως δ' ἂν ἐφαρμόζειν δύναιτο μᾶλλον τῇ δυνάμει τῇ τοῦ σώματος ἐκείνου, ὃ λέγομεν ἔσχατον αἰσθητήριον, οὗ ἡ αἰσθητικὴ δύναμις εἶδος, ἥτις δύναμις αἰσθάνεται καὶ κρίνει τὰ ἐν τῷ σώματι, οὗ δύναμις καὶ εἶδός ἐστιν γενόμενα κατὰ τὴν ἀπὸ τῶν αἰσθητηρίων διάδοσιν. ἡ γὰρ δύναμις αὕτη μία οὖσα καὶ ὥσπερ πέρας τοῦ σώματος τούτου οὗ δύναμίς ἐστιν, ἐπειδὴ ἐπὶ τοῦτο τὸ ἔσχατον αἱ κινήσεις φέρονται, ἀσώματός τε οὖσα καὶ ἀδιαίρετος καὶ ὁμοία πάντῃ, μία οὖσα, πολλαί πως γίνονται τῷ τῶν καθ' ἕκαστον μόριον τοῦ σώματος, οὗ δύναμίς ἐστι, κινήσεων αἰσθάνεσθαι ὁμοίως, ἄν τε κατὰ ἕν τι μόριον ἡ κίνησις ἐν αὐτῷ γένηται, ἄν τε κατὰ πλείω. ἐν γὰρ τῇ τῶν πλειόνων κρίσει πολλαί πως δυνάμεις ἡ μία γίνεται ὡς ἑκάστου μορίου πέρας οἰκεῖον λαμβανομένη.

[574] The exact interpretation of Alexander`s hylomorphism, and its relation to Aristotle`s view is an important issue, though beyond the scope of this study. On Alexander see Caston 1997. 347-354; Kuupreva 2003. On Aristotle e.g. Modrak 1987. 25-29, 38-54 arguing for that hylomorphism is essentially psychophysical; Charles 2008 goes even further by emphasising that the psychophysical state is strictly one, its material and formal components are inseparable even in thought; this is criticised as too strong requirement by Caston 2008, who instead insists on supervenience in Caston 1997; for supervenience see also Everson 1997. 243-282; Miller 1999 takes the perceptual judgement to be emergent, yet underdetermined by the material change; Sorabji 1974 argues that Aristotle`s position is sui generis.

[575] On the incorporeality of soul see *DA* 17.15-20.26; *Mant.* 1. 104.17-28; 3. 113.25-118.4.

[576] Compare Aristotle *DA* 1.4. 408b5-18. Corcilius 2014. 44-48 argues (mainly on the basis of this passage of Aristotle, but citing also *Phys*. 7.2. 244b2-245a11) that the soul is *literally the end-point* of the movements that terminate at it, so that it is correct to say that the perceptual motion is juxtaposed to the soul. His analysis of perceptual discrimination (*krisis*) requires this thesis (and in addition that the soul is not affected by the

Again, being the form in the same way of each part of the sense-organ, the capacity can judge the affections in each part *in the same way* (*Q* 3.9. 97.15-17; *DA* 63.20-28). This is a crucial point for two reasons. First, this allows that only one activity may be there to judge several things (requirement (iii) in Sect. 5.1.4.1), by being related to each part of the primary sense-organ uniformly – i.e. picking upon the affections in the parts and judging that corresponding to the affection there is a quality in the environment.[577] So that the same relation allows that each perceived feature comes into the perceptual content as a predicate of its given subject. Second – and most importantly – the uniform relation allows that the objects are perceived distinctively, without interfering, hence as they are (requirement (i) in Sect. 5.1.4.1). For in case several things are perceived, since the affections are in diverse parts, they do not need to affect each other, hence they may remain affections as they would be if only a single thing was perceived. The lack of interference also allows the objects to be perceived as two (requirement (ii) in Sect. 5.1.4.1).

This implies that there are as many objects in the perceptual content as many affections are co-occurring in the several parts of the primary sense-organ (*DA* 64.20-65.1; *Q* 3.9. 98.8-15). In case there is only one affection, what is perceived is only one thing. If there are many affections, all of them will be perceived at the same time. And in this latter case the one capacity *as it were* becomes several (*Q* 3.9. 97.17-18, 98.8-10).

Finally, let us see how the solution that (PO-1*) perception is judgement is applicable to the Point Analogy. As we have seen (Sect. 5.1.4.2) the account of PA describes the point in the same terms as we have just seen for the capacity: single, incorporeal, indivisible. Moreover, the connection is also made in terms of the uniformity of relation. For just as the point is 'insofar as what is from them all [probably from the lines] is one undifferentiated and in every way the same' (*Q* 3.9. 96.26), the capacity as well is the 'limit of all the sense-organs in the

perceptual form juxtaposed to it), for according to him the perceptive-soul discriminates insofar as it provides a standard in relation to which a contrast is manifested when the perceptual form is juxtaposed to it (p 40-43). However, the context of the passage should be taken into account: it is to argue that the soul does not move in itself (*kath` hauto*), rather just accidentally (*kata symbebēkos*), insofar as it is the form of the body that is moved, *DA* 1.3. 405b31-406a12, cf. Menn 2002; Shields 1988. 114-118, 2016. 117-119, 143-145; cf. Alexander *DA* 5.11-19, 21.22-24.17; *Mant.* 3. 115.25-28, 117.11-21; Caston 2012. 108-112; [AD] 110-111. This is connected to the fact that the soul does not have a location in itself, only insofar as it is the form of the body, i.e. accidentally. Hence it may not be juxtaposed to a physical motion properly speaking, but only accidentally. I.e. it may not be literally juxtaposed to it, it may not be the end-point literally. Cf. Sorabji 1974. 85-86.

[577] This does not mean that there would be an inference based on the affection as on evidence, nor that the assimilation would be a representation of the external quality. Cf. Chap. 4.

same way' (*in Sens*. 165.13). There is not only no spatial differentiation in the point and the capacity, but they are also related to the different items with the same kind of relation. The point is the limit of the lines in the same sense, and the capacity is present to its parts, is judging the affections in the parts, and is presented with the affections in the parts through the affections having been transmitted, etc. in the same way.

It is clear that if the unity is given on the level of capacity,[578] there has to be something on a different level that accounts for the required plurality. In the point analogy: the point is one, and there are several lines. The lines and the point are on different level, for the lines are 1D items whereas the point is 0D. Since the capacity is on the level of form, the only possible subject remaining, then, is something bodily.[579] Plurality is indeed accounted for by the several parts of the primary sense-organ. Hence the analogy with the point requires that there are several bodily items (parts of the sense-organ) involved in the solution as subjects for the diverse perceptual affections: i.e. (PO-1*) is necessarily supplemented with (PO-1#).

5.1.5. Perceptual content: complex and simple

5.1.5.1. The content of perception with regard to the different types of object

Now we may turn to our immediate project: to determine the content of perception and phantasia, in each of the three different cases: proper, common and accidental. Since I argued that all perception involves predicational content, it also has to be shown in what sense the simple content mentioned in Sect. 5.1.1 is simple.

Let us start with *accidental perception*. Consider the example of seeing that 'the white thing is Diares` son'.[580] It has a relatively complex content, which is evidently propositional.

[578] It must be noted that the perceptual capacity, i.e. the common sense, is not a unity on account of having a determinate object. This is because the five special senses are parts of the perceptive soul, forming a hierarchical series. In such series, however, it is not possible to give a general account (consisting in the identification of the object) (*DA* 28.14-29.1, 30.17-20). Hence, it is not the case that the unified object of the common sense is the range of common perceptibles, as e.g. Hamlyn 1968b 205 and Modrak 1981a 413-414, 1987. 62-65 suggest for Aristotle. Despite the fact that in Alexander it is indeed the common sense what is responsible for perceiving the common objects (*DA* 65.11-22). Were common sense defined as the faculty for perceiving common perceptibles – common sense would be a special sense distinct from the five special senses. But Aristotle explicitly rules this out in *De Anima* 3.1. The same reasoning applies to the suggestion that the object of common sense is *physical objects as such*, see Charlton 1981. 108. This problem is observed by Marmodoro 2014. 189-212, but her proposal – that the common sense has another type of individuating condition: the type of *content* – is not convincing.

[579] *Pace* Gregorić 2007. 132.

[580] For the sake of simplicity I restrict the analysis to cases of vision, however it applies to all sense-modality.

For one to see Diares` son accidentally one has to see something intrinsically, which must be a coloured thing, e.g. a white thing. Indeed, it is necessary that a proper perceptible is present in the content of any perception (cf. *Q* 3.8. 93.25-28. In case of accidental perception this is due to the fact that accidental perceptibles cannot bring about a perceptual state (not even their own perception). Hence accidental perception presupposes the perception of a proper perceptible.[581] Again, to see Diares` son accidentally one has to *take* the white thing to be Diares` son, i.e. identify the intrinsically perceived thing *as* Diares` son (cf. Sect. 5.1.1.3). This may be done, for this white thing is (accidentally identical with) Diares` son. Thus, accidental perception involves also an identification or predication: the item perceived intrinsically *is* Diares` son. This accidental predication might be identified as a secondary act beyond the identification of the subject as the white thing – i.e. the seeing of the white thing. The propositional (or predicative) content thus contains a proper perceptible as the subject term (a coloured thing) and an accidental perceptible as predicate. So there is a predicative structure in the content: 'S is P'.

Now, the fact that a perceptual judgement concerning accidental perceptibles – i.e. accidental perception – has a content in which the predicate term is an accidental perceptible and the subject term is an intrinsically perceptible does not entail either (1) that proper perceptibles may occupy only the subject position in all cases of perceiving; or (2) that the subject position must be occupied by a proper perceptible as such: e.g. 'white is_'.[582] This fact entails merely that accidental perceptibles may occupy only the predicate position.[583]

(1) Rather, as I suggested, in perceiving something (or having cognition of something, or judging something) the object grasped is such and such that characterises something, and what is grasped is something (x) *as such and such* (*as F*). What the object is in this case is determined not by what this x is, but by what this *F* is.[584] In other words, the object of a given perceptual act is not the subject term of the act but the predicate term. This suggests that in case of intrinsically perceiving e.g. a proper object – seeing a white thing – the white is not in subject position in the content, but it is a predicate: '_ is white' rather than 'white is_'.[585]

[581] Whether or not it might be simply a common object is irrelevant for us, see Sect. 5.1.2.2.

[582] These claims are made by Graeser 1978; see note 460.

[583] However, there might be cases like I see that 'Diares` son is the groom'. Perhaps an Aristotelian would insist that in such cases too there must be some proper perception, and it must figure in the full explanation of the content as a causal basis.

[584] According to Dretske 1981. 66-67 the informational content is what is in the predicate position, the subject term merely attaches to the content what is the individual about which the content is.

[585] This requires perceptual judgement not to be restricted to accidental perception, in line with Sect. 5.1.4.5.

(2) A requirement for the content of accidental perception – that its subject term must be a proper perceptible as such – does not imply any requirement for proper perception. So it is a genuine possibility that proper perception has a content in which the predicate is the proper perceptible as such, and the subject term is something else: '_ is white'. As I already noted (Sect. 5.1.1.2), a good sense may be given to the theory if we assume that the subject term in this case is a *demonstrative* 'this' the denotation of which is the *cause of the perception*. For we have learned that the causal object of perception is an external thing, an individual. This triggers the perceptual activity and provides content to the perception *about itself*. Hence the efficient cause of the state comes to be present in the content of the perceptual state. Moreover, it provides content about itself insofar as bearing some quality, so that it provides content about itself that itself bears that quality. This quality in question is indeed the quality in virtue of which the thing causes the perceptual state. E.g. if the causal object is x, and it causes a perception of white, then the content of that perception is 'x is white'. This is a case of proper perception, for what is predicated in the content is a proper perceptible. This x, referring to the cause of the state, might be described as 'that which caused this state'. Now, since in every case there is exactly one such causal object, 'that which caused the state' might be picked out by a demonstrative 'this', so that it picks out exactly one item, the very thing that caused the state.[586] Hence, perception might be said to be a *de re* attitude, always being about some existent thing, about its cause.[587]

This has the consequence that one may not err concerning what the perception is about (what 'this' refers to), for one`s perception will always be about the thing that causes it. Even if one takes erroneously the thing to be white when it is yellow, since it is the cause of the perception that determines what the perception is about, and not insofar as it is of a certain definite colour (white or yellow) but merely insofar as triggering seeing a colour, one`s perception will be about the thing that is in fact yellow.

But, since the external object, x, causes the perceptual state insofar as it is F, e.g. white, the subject, after all, might be described by F itself, the proper perceptible, as 'the white thing'. But it has to be kept in mind that properly speaking x is the subject not *as F* (not *as white* e.g.), but *as the cause* of the perception, whatever characteristics it may have, even if it is described as 'the white thing' in a certain perceptual report. So the proposition 'the white thing is white',

[586] The idea is similar to Burge 1977, 1986; Dretske 1981 63-83. Cf. Evans 1982. 143-204.

[587] See Sect. 4.2.1. Everson 1997. 206 claims that it is not simply about the cause, but about the cause that is a token of a type that is pictured by the *icon*; i.e. that it has to be 'white' in the example.

that we found in case of SIM in Sect. 5.1.4.5, is far from being tautology. The subject 'the white thing' refers to the thing insofar as it is the cause of the perception, the predicate 'white' picks out the quality insofar as it qualifies the cause. Being so, error as well is possible, which might be expressed naturally as 'the white thing is black'.

5.1.5.2. Simple content

As I have been arguing, each case of phantasia and perception involves a propositional content with the structure 'S is P' – viz. predicational content. Hence simplicity of the content of simple perception and phantasia may not be explained as the lack of predicational or propositional content (cf. Sect. 5.1.1). I have been supposing that the simple case is most plausibly to be found in proper perception. We have just seen that this has a peculiar sort of content: it is a *de re* attitude, the subject is picked out by a demonstrative 'this' which refers to the efficient cause of the state. Before explicating how this can render this kind of content simple, let me return to an unresolved issue regarding Aristotle`s *DA* 3.6, where the purported simple case is suggested to be found (Sect. 5.1.1.2, suggestion B1). This will give us a heuristic analogy.

The difficulty concerning *DA* 3.6 was that proper perception seems to be rendered infallible. This might be resolved by noting that infallibility of proper perception is compared to one specific case of thought only: grasping or *thinking essences*.[588] It is important to emphasise this, for in a likely reference to *DA* 3.6[589] – at *Int*. 1. 16a8-18 – Aristotle summarises the findings as 'thoughts that are without combination and separation; for so far they are neither true nor false.'[590] So it seems that terms in separation, just as simple thoughts which terms signify are not even true after all.

> It is also the case that every assertion, just as every denial, says one thing of another,[591] and is true or false. But not every instance of reason does; rather reason directed to what something is with regard to its essence is true, and does not say one thing of another. Rather just as the seeing of an exclusive object is true, while whether the white

[588] Cf. Berti 1978. 146; Sorabji 1982; Makin 2006. 253-263.

[589] Whitaker 1996. 13-17 takes the reference to explain the likeness relation between thoughts and things at *Int*. 16a6-8 rather than simple and complex thought and truth and falsity at *Int*. 16a9-18, thereby invoking the relevant passages from *DA* 3.4. I do not claim that the reference may not concern this issue as well, but since simple and complex thought and truth are treated in both passages, it is reasonable to connect and to reconcile them.

[590] Translation by Ackrill.

[591] The phrase *ti kata tinos* might be translated as 'one thing of another' rather than 'something about something' in light of the following considerations about definitions.

> thing is a man or not is not always true, so things are with respect to whatever is without matter.[592] (Aristotle *DA* 430b26-31)

It is told that thinking of an essence is always true and it does not involve saying *one thing of another*. Since 'saying one thing of another' is intimately connected to truth and falsity, it should be taken as composition, predicational content: 'S is F'.[593] Thinking of essences is claimed to lack exactly this kind of content.[594] How this might be explained? Let us invoke that the linguistic counterpart of essences are definitions (e.g. *in Met*. 366.8-10; cf. *in Met*. 276.35-277.9, 285.12-286.3, 349.4-6, 374.36-375.2; *Q* 1.3; Aristotle *AnPost*. 2.3. 90b3-4; 2.10. 93b29, 94a11-14; *Top*. 1.4. 101b21-22; 1.5. 101b38-102a2[595]), hence it is plausible to take thoughts of essences to be thoughts in form of definitions[596] – for linguistic items correspond to reality in general through mental items: thoughts (*Int*. 1. 16a3-9). And a definition is most properly an identity statement[597] between the definiendum and the definiens: 'man is biped animal'. It has a form: 'X is D kind of G' (X: definiendum; D: difference; G: genus), or in short: 'X is D'.[598]

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[592] ἔστι δ' ἡ μὲν φάσις τι κατά τινος, ὥσπερ καὶ ἡ ἀπόφασις, καὶ ἀληθὴς ἢ ψευδὴς πᾶσα· ὁ δὲ νοῦς οὐ πᾶς, ἀλλ' ὁ τοῦ τί ἐστι κατὰ τὸ τί ἦν εἶναι ἀληθής, καὶ οὐ τὶ κατά τινος· ἀλλ' ὥσπερ τὸ ὁρᾶν †τοῦ ἰδίου ἀληθές, εἰ δ' ἄνθρωπος τὸ λευκὸν† ἢ μή, οὐκ ἀληθὲς ἀεί, οὕτως ἔχει ὅσα ἄνευ ὕλης.

[593] Cf. Hicks 1907. 524; Cashdollar 1973. 161.

[594] *Pace* Pritzl 1984. 148, who does not even attempt to provide his alternative.

[595] For further references in Aristotle see Makin 2006. 259.

[596] In this consideration I basically follow the suggestion of Sorabji 1982. 296-298; cf. Berti 1996. 393-394; Modrak 2001. 64; Makin 2006. 258-260. But before reiterating Sorabji`s account, Makin 2006. 253-258 invokes a similar idea in explaining the parallel claim about incomposites at *Met.* Θ10. 1051b17-25. Accordingly, an essence-predicate may be quasi-true, if it provides the right definitional predicate for the definiendum indicated by the context. Even though this formulation suggests that the same predicational structure is in the content of such a state, Makin (p 255, 265) makes efforts to show that there is no combination involved, for indeed the definitional-predicate is the expression of the essence in the world, which is *identical* to the 'wordly item *human being*', i.e. the natural kind. So this alternative seems to be dependent on the other which involves identity-statement. Pritzl 1998. 199-201 argues against the identification of thought of essences and thoughts of definitions, claiming that whereas definitions are propositional, thinking of essences should be non-propositional. For a refutation of Pritzl`s account see Caston 1998b 209-210. In contrast, Crivelli 2004. 114-116 argues that definitions are indeed predicative, and also predicating something of something.

[597] According to Polansky 2007. 478 definition is not an assertion, hence not saying something about something, so that it might be simple. Sorabji 1982. 298 adds that it is rather 'referring to the same thing twice'. Cf. Kirwan 1971/1993. 100-101; Owen 1965a 136-139.

Wedin 1988. 128-132 in accepting Sorabji`s main worry about isolated non-discursive thought claims that thoughts of simples occur essentially in predicative propositions. However, he argues that a thought of essence is not identity statement, not even propositional, but rather acquaintance with the concept or the essence of the thing.

[598] It is argued by Aristotle that the last difference contains (entails) all the previous differences and the genus as well, thereby providing unity to the definition by the unity of the definiens. Cf. *Met*. Z12, and it might be gained by the method of division, cf. Modrak 2001. 93-95, 164-167. This type of definition by genus and

The idea here is that this is not saying something of something else, for indeed X=D, and the definition should be understood esp. to stating this identity that 'X=D' (e.g. *in Met*. 287.8-13[599]). The two terms X and D only seemingly differ, in reality they denote the same thing: the essence.[600]

It is also told that this kind of thought is necessarily true if it is successful. That is, if one thinks of a definition (or asserts it, for that matter), one is right. If one gives an account that does not correspond to the definition of the thing, one fails to give the definition, so that one has not given a definition. Thus there is no false definition. This is partly because there are no two different items combined in the definition. If there were two different items in the would-be-definition, it would not be genuine definition. In 'human is triped animal' the 'human' and the 'triped animal' denote two different items, for human is not triped animal. Thus the thought and sentence 'man is triped animal' may not be a definition, despite the fact that it looks like one. It is an ordinary false statement saying something of something else.

What about perception of proper objects? It is claimed here after all that it is comparable to thinking of essences, hence always true. First, the analogy might be restricted to some aspects of the case. It need not be implied that just as thinking essences requires success (or contact, see Sect. 5.1.1.2, B1) perception too does.[601] The point of the comparison may be merely that just as thinking essences does not involve saying one thing of another, neither does proper perception. This need not imply that the content of proper perception is a genuine identity statement. For its subject is an individual, the predicate is a universal, so that they might not be identical. Rather, as we have seen it involves only one thing: the quality, the predicate. And since it is predicated of the cause, which might be the cause precisely because it bears the quality in question, perhaps it might be said that the quality is predicated of itself. At least it might be said that proper perception involves only one universal feature, the predicate: the subject is the same as this, insofar as it is the subject because it instantiates the predicate quality. But this account allows for error: it may be the case that the thing causes a perception, but it

difference should not be confused either (a) with definitions of substances by form and matter (see esp. *Met*. H3. 1043b31), that which is most properly the subject of definition, *AnPost*. 84b33-85a1, cf. Modrak 2001. 157; 179-193; or (b) with definitions of events by cause and effect (e.g. *AnPost*. 2.8. 93a30); both of which involves predicating something of something else, but by the same token they are explanatory of the question why (*dioti*), cf. LeBlond 1939; Modrak 2001. 91-95.

[599] Cf. Madigan 1993. 162n485.

[600] The definition (i.e. the definiens phrase) signifies the essence, hence it might substitute the name that signifies the definiendum, see Whitaker 1996. 205-213. However, not in all context (e.g. 'know that_') as Charles 2000. 95-100 explains.

[601] Cf. Charles 2000. 136.

fails to cause a perception that corresponds to the quality in virtue of which it causes the perception. That is, even though proper perception is simple in the same way as thinking of essences (not involving saying something of something else), unlike thinking of essences it is not infallible because of this.

Even though I have been trying to give an interpretation of Aristotle`s passage, and the problem stemming from his formulation, this whole account might be put in brackets in considering Alexander. Alexander apparently avoids the problematic claims of Aristotle`s, and does not commit himself to the infallibility of proper perception, only in case of normal conditions. Thus I terminate this account here, even if it may not be entirely convincing for Aristotle. Let us see what we could learn from this consideration.

In what sense can be the content of proper perception, 'this is white', 'x is F', said to be simple? And why cannot it be the content of opinion? As we have seen, there is only one item involved: F; and x is the same as this insofar as x instantiates F. More properly, both the reference to x and the denotation of F is determined by the same causal factor: in virtue of the fact that x *qua* being F caused the perceptual state. For clarification, consider accidental perception: 'the white thing is Diares` son'. The reference of 'the white thing' is determined by the cause of the perceptual state; the denotation of 'Diares` son' is determined by the fact that the cause of the state is accidentally identical with Diares` son. There are two different factors involved. Moreover, it is not essential, rather irrelevant to the determination of the reference and to causing the state with what items the cause is identical accidentally. In contrast, in proper perception there is only one factor: x being F; and for the causation it is necessary that x is F (or have some other quality in the appropriate range, e.g. colour).

This also shows why 'this is white' may not be the content of opinion, despite the contrary appearance. The opinion is not about the thing that brings it about, it is not about its cause: opinion is not a *de re* attitude. It is possible that one has an opinion about a non-existent thing. Surely this is possible for phantasia as well. But the point is that there are cases of phantasia – when the residue preserves faithfully the content – which are simple in the above sense. Moreover, in having an opinion, the two terms (subject and predicate) are determined independently of each other. It is irrelevant for the reference what is predicated of it. The subject is determined by a sort of 'referring', the predicate by a sort of 'predicating' – which are not complete acts, rather, components of the act of making the opinion-judgement.[602] This

[602] This might be compared with speech acts. A full speech act consists of abstractable acts that may not be performed on their own, only in the context of performing a full speech act. The locutionary act (proposition)

is picked out by the claim that it is 'predicating something of something else'.

Finally, let us see how truth applies to simple cases like 'this is white' or 'x is F', and how it is different from truth for complex cases. We have seen that truth in ordinary or complex cases of predicational content depends on correspondence to a state of affairs in the world, i.e. to one thing being ontologically predicated of another thing. 'Socrates is white' is true if white inheres in Socrates at the time of reference of the assertion or mental state. Again, we have also seen that the simple case too involves both correspondence and predication. The peculiar feature of simple case was that both terms in the content are determined by the same causal factor. Let us see whether this makes a difference.

Let us consider the complex case, accidental perception, or phantasia: 'the white thing is Diares` son'. The definition of true phantasia says this phantasia is true (T1) if it came to be from a real object[603] and (T2) it is such as the object. T1 amounts to that the object picked out by the description in the subject term 'the white object' is a real object (which is white)[604] and the phantasia is caused by this object. T2 amounts to that the phantasia represents this (white) object as being Diares` son, and Diares` son is in fact accidentally identical with the (white) object.

Now, the simple case is: 'this is white'. This is true, again, if T1 and T2 apply. Since 'this' refers to whatever item that caused the phantasia, T1 amounts to that *there is a real object that caused one phantasia*. T2 says that phantasia represents this object as being white, and the object is indeed white.

As the difference in the content is a difference in the subject term – 'the white thing' vs. 'this'; description vs. demonstrative – the difference between the truth conditions should also be connected to the subject term, to condition T1. And it is clear that T1 is more complex in case of accidental perception than in proper perception. In proper perception it is just the requirement that the cause of the state is an existent thing. As we have seen repeatedly, this is by default satisfied in perception. In contrast, in accidental perception the description has to

may indeed be abstracted into referring and predicating. However a full act requires that it is performed with an illocutionary force. Cf. Searle 1969.

[603] This is a simplification of: it is concerned with a residue that came to be from a real object.

[604] I have put the description of the subject term 'white' into brackets, for it is unclear whether the description should apply to the real object picked out by the description. For it seems that it is possible to refer to something with an incorrect description (the description need not be definite either). For what is important is that the person is able to identify the referent. This might be done by so to say appealing to the best explanation: the item that best fits the description, as it seems. So the same item might be picked out by 'the white thing' if that happens to be yellow.

pick out a thing, which has to be a real object and the cause of the state (and the description has to apply to it).

5.1.6. Non-conceptual propositional content

It is often suggested that propositional content must be conceptual. So if perceptual content is propositional, it must be conceptual. The idea is represented in Johansen 2002. 179 quite succinctly: 'The fact that the object of vision is propositional suggests that vision is also representational ('seeing *as*') and therefore conceptual.'[605] But if the content of perception is conceptual, since animals can perceive, they should have concepts. But Alexander and Aristotle denies that animals have concepts.

The problem points to a huge philosophical problem that may not be solved, or even discussed in detail here.[606] Instead, I offer a few remarks that at least indicate the possibility of non-conceptual propositional content.

First, it is arguable that what makes a mental state conceptual is not the type of content it has ('content view'), but the fact that the subject of the mental state has (or even uses) conceptual capacities ('state view').[607] Accordingly, the very same content (including propositional content) might be possessed by mental states in different ways: e.g. *conceptually* vs. *perceptually*. The problem with propositional content in perception stems from the content-view of conceptuality, but it vanishes if the state-view is adopted.[608] Hence I suggest to apply the state-view.

Now, to give substance to the distinction, it should be clarified what it mean that one has a mental content conceptually and perceptually. Again, I just mention two options (cf. Sect. 5.2.3). Sorabji 1990, 1992 suggests that having a content conceptually implies that the subject is able to verbalise it, hence non-conceptual means that the subject is unable to do so. So conceptuality would require linguistic abilities.[609] Or it might be argued that having a content conceptually amounts to being able to use the content in certain mental operations, like

[605] It is true that Johansen does not draw conclusions from this conceptuality, just that the same form is already in the world that is in the content. Earlier, even Caston 1998a 284-287 adopted the argument.

[606] Many contemporary philosophers argue for non-conceptual content, esp. for perceptual states, e.g. Evans 1982; Peacocke 1986, 1994; Crane 1988. A good survey of the arguments may be found in Márton 2010.

[607] E.g. Cussins 1990; Stalnaker 1998; Byrne 2003; Márton 2010; cf. Caston [Content].

[608] Arguably it is the content-view that leads many, e.g. Modrak 1987. 99-100 to argue that phantasia is sensory representation: complex cluster of sensory features representing a state of affairs.

[609] Cf. Wedin 1988. 133-134, 141-159; Caston [Content].

reasoning, justification and so.[610]

Second, the Argument from Concept Acquisition (Sect. 5.1.1.3) shows that concepts may be acquired only if the same *universal* is present in the content of the perception that leads to the concept. E.g. to acquire the concept of *human* one must first perceive *humans*, and the universal *human* must be in one`s perceptual content. The point is that it is not the *concept* of human that is required to be perceived, but the universal. Since universals are not mind-dependent entities for Aristotelians,[611] they are not concepts (which are indeed mind-dependent). One might probably insist that a universal may be in the content of a mental state only insofar as it is represented by a concept. However, this most probably should be restricted to the *full grasp* of universals: it seems possible that concepts indeed are acquired (according to Aristotle) by an ascending generality of grasping (cf. *AnPost*. 2.19).

[610] E.g. Osborne 2000; Márton 2010.

[611] This is not uncontroversial, though, see e.g. Garcia-Ramirez 2010.

5.2. Judgement

In order to get an understanding of what the activity of phantasia is, two questions must be answered: (1) what is the genus of this activity: what is *krisis*; and (2) what is its distinguishing mark differentiating it from other cognitive activities that are also *kriseis*. We have been considering the first step towards answering (1) the first question (Sect. 5.1): that the content of phantasia and of perception is propositional. This is crucial, for identification of a cognitive activity is in large part made in terms of its content. Now we can take the further step (Sect. 5.2.1), and see what *krisis* consists in. As I argue, *krisis* should be taken to be judging, i.e. making judgements that such and such is the case, with propositional content: 'S is P'. Then (Sect. 5.2.2) we can see, in short, what is it that does the judging, what is responsible for it. In particular: whether it is one single capacity for all kinds of *krisis* or the different types of judgement are made by distinct, relatively autonomous capacities? By these we will have answered our first question: what *krisis* consists in. Then, we can have a look at the distinguishing features of phantasia-judgement in relation to other kinds of judgement – esp. perception and opinion, the capacities with which phantasia may be mistaken (Sect. 5.2.3). Finally, we can see the relation of this phantasia-judgement to the material change involved in phantasia and to the object of phantasia (Sect. 5.2.4), which shows the difference between perception and phantasia most clearly.

5.2.1. What is judgement?

5.2.1.1. The meaning of krisis

Let me start with a remark on the translation of the term *krisis*. First, the traditional translation in the context of Aristotle`s psychology is *judgement* – as I have been rendering it.[612] This was challenged by Ebert 1983, relying both on the contemporary Greek usage of *krisis* and on philosophical reasons concerning the connotations of the terms *judgement* and the alternative proposed: *discrimination* or *discerning*. His argument is mostly endorsed as conclusive, so that his terminology, with a few exceptions, is adopted.[613] A further alternative is suggested by

[612] E.g. Polansky 1999. 62n15, 75; Hamlyn 1968a; Hicks 1907. For Alexander, the traditional translation is mostly endorsed: e.g. [BD]; Towey 2000; Sharples 1994; Madigan 1993; Emilsson 1988. 121-125.

[613] E.g. Shields 2016; Corcilius 2014; Gregorić 2007; Johansen 2002; Polansky 2007, though he uses both terminology, just as Fotinis 1980 for Alexander; and Ross 1961; Rodier 1900. Ebert 1983. 182-183 gives a comprehensive survey of usage in previous translations which shows the diversity of use usually without

Caston 2012. 139-140n346: *cognition*, at least in Alexander`s *De Anima*.[614] To make a case for my preferred rendering as 'judgement' I reconsider first some of Ebert`s reasons to replace it with 'discrimination'; then I turn to Caston`s proposal. I aim to show that *krisis* is judging (or deciding) that a certain predicate applies to a certain subject, so that it is a *propositional attitude* with predicational content.

Ebert 1983. 184-185 identifies seven differences[615] between discriminating and judging (Fig. 1), and argues that this strongly suggests that perceptual *krisis* is discriminating rather than judging. I argue for the contrary, which has the additional advantage of being applicable to all types of *krisis*, including the activities of the rational soul.

discriminating/discerning	judging
(i) success	possibility of mistake
(ii) clearly, insufficiently	truly, falsely
(iii) cognitive	propositional
(iv) ability depends on circumstances	no dependence on circumstances
(v) durational	not durational
(vi) may involve effort	no effort
(vii) basic	on the basis of evidence

Fig. 1

Among these features we have seen (Sect. 5.1) that (iii) phantasia and perception involve *propositional content* in all cases, partly because (ii) they might be *true or false* (this is what Alexander emphasises as characterising *krisis* at *DA* 66.9-14), so that (i) even *mistaken* cases are to be taken as genuine acts of *krisis*. This already favours the traditional judgement-view. Ebert, however, emphasises the other features, in case of which perception seems to fit better with discriminating. Accordingly, he claims that perception (vii) is a basic activity that (v) may go on for a time, and (iv) the ability for it depends on the circumstances.[616] All this I concede, but I doubt that this indeed favours the discrimination-view. Two of these differences – (iv) and (vii) – are supposed and distributed between the competing terms without argument. Contrary to Ebert it is safe to suppose that (iv) one`s judgemental abilities may depend on one`s

making a distinction between the terms. Despite the influence of this paper the situation seems to be mostly similar.

[614] For Aristotle cf. Ross 1906. 217, 233.

[615] Or eight, if (vii) is taken to encompass two differences: basic vs. non-basic; and involving vs. not involving evidence.

[616] Ebert has to admit that it is only some specific perceptual activities (to observe, to listen) that (vi) may involve an effort, but the basic ones (to see, to hear etc.) may not. This makes his argument suspicious from the start.

circumstances;[617] and (vii) after all Ebert himself admits that there may be basic judgements. The only feature that requires to stretch the meaning of *judging* is (v) the durational nature of the activity of perceiving. The most that may be said in this regard is pointing to the fact that just as judging, the switch to perceiving is not a process, but instantaneous.[618] It is possible to say, however, that one is having a judgement for a while. Considering all this, the ill-fit between perception and discriminating with regard to features (i)-(iii) strongly suggests to take *krisis* to be judging rather than discriminating, although we have to bear in mind that this kind of activity is durational, yet starts instantaneously.

So let us take the core of *judgement* to be (i)-(iii) that it has propositional content, hence it might be true or false, and erroneous. This allows that (vii) it is basic, (v) durational, and (iv) the ability to *krinein* may depend on circumstances. In addition to these features we should add one that has also been pointed out by Ebert 1983. 185-187, that *krinein* is a kind of *deciding*. The decision-aspect of *krisis* is exploited by Alexander mainly in the context of responsible action: what depends on us is what we have decided (*krinein*) or chose (*proairetai*) to do on the basis of deliberation (cf. *Mant*. 23). Again, in cases of distinguishing different perceptible objects (i.e. perceptual discrimination) *krisis* clearly means some kind of decision: deciding whether the objects differ or not, or wherein lies their difference. But a place may be found for deciding even in perception (although somewhat metaphorically[619]): deciding as to that the predicate applies to the subject.

In contrast, in Ebert`s view discrimination means 'singling out and separating by singling out', especially sensible qualities (Ebert 1983. 188). Even though this may allow for propositional content,[620] but according to Ebert that might only be of some rudimentary type,

[617] E.g. one`s ability to judge (rightly) that it is a white object before one`s eyes may depend on circumstances of lighting, the state of one`s eyes etc. Or a less question-begging example: one`s ability to judge that it is night may depend on the circumstance whether one is locked in a building without windows, whether one is given strong painkillers so that one is drowsy, etc.

[618] For the instantaneous *switch* to the activity of perceiving see *in Sens*. 124.20-126.2; *Q* 3.2; 3.3. 83.16-30; cf. Aristotle *Sens*. 6. 446b3-6; cf. Wedin 1988. 31-33. Cf. *DA* 2.5; cf. Heinaman 2007.

[619] Certainly, this does not imply that perceptual judgement is made consciously, by the soul making a decision whether a predicate applies to a subject; nor that this is done by effort on part of the agent. The application of the predicate – viz. the 'decision' – is a subconscious spontaneous action. Though this aspect points to the feature of judging that it is not a totally passive effect, but the agent is responsible for doing it.

[620] Ebert 1983. 192 distinguishes the discerning and its result: the propositional content. But since he takes this latter – viz. the judgement – to be the main result of the activity in question, it would have been better for him to call the activity 'judging', i.e. producing its characteristic result. A similar distinction is made by Corcilius 2014. 50: discrimination is the production of phenomenal content, but awareness is the immediate consequence of the discrimination – the reception of the content – yet discrimination itself does not involve awareness. He

not with a predicational form 'S is F', but rather expressing either sameness or difference: 'x differs from y'.[621] This is supposed to be a basic operation done by the individual senses. However, as we have seen (Sect. 5.1.4.5), the judgement that one proper object differs from another (perceptual discrimination), is far from being a basic act: rather, it depends not only on proper perception of one object at one time: 'this is white', or 'this is black'), but also on simultaneous perception of several (two) objects ('this is white and that is black').[622] Hence, rendering *krisis* as 'discrimination' in Alexander by no means works, and I believe it does not work for Aristotle either.[623]

To move further, let us consider Caston`s suggestion: to render *krisis* as *cognition*. 'Cognition', as he makes clear is quite broad a term, so that it can cover the different activities that are said to be *krisis* (see Sect. 5.2.2). Moreover it has a clear contrast with practical capacities (*DA* 73.20-26, 75.13-15); even though the functioning of these – *hormē* ending up in choice or avoidance (*hairesis* or *phygē*) – requires some grasp of the environment, hence some use of judgemental or cognitive capacities (cf. *DA* 71.21-72.5). This is all true, but I think the term '*judgement*' puts more emphasis on (iii) propositional content and picks out this as the core meaning of *krisis*. This is even strengthened by the frequent use of the term '*saying*' in connection to this activity, which occurs also in Aristotle (for perception e.g. *DA* 426b20, 427a1, 9).[624] 'Cognition', in contrast, does not have such a core meaning that is applicable to all cases and picks out a highly relevant feature of *krisis*.

On the other hand, Caston 2012. 139 describes judgement just like belief: as a propositional attitude with a *commitment* to the content which is *conceptual*. Obviously, I do not mean that the content of judgement must be conceptual. The fact that it involves conceptual apparatus in some cases (even if these are the core cases) does not restrict the use of the term

clarifies somewhat that what is needed in addition to discrimination to have awareness is 'the animal body`s reaction to it [the phenomenal content] as phenomenal content'. This however may be required for us to attribute awareness to the animal in explaining its behaviour, but is irrelevant to 'the metaphysics of awareness'. Notwithstanding reducing *krisis* to differential responses (a sort of behaviourism) is also too strong suggestion, cf. Garcia-Ramirez 2010. 54-55.

[621] See Ebert 1983. 192-195, calling this content relational.

[622] Corcilius 2014 too objects to this view that the discrimination of difference is not that basic act. Instead, he interprets discrimination as transforming the sensory input into phenomenal content, separating the perceptible form from its matter. This is not yet awareness, the latter being the immediate consequence of the separation, leading to motor responses in the animal. This account cannot be applied to Alexander, for this seems to involve a too rudimentary content, not even with propositional form.

[623] I am inclined to think that most of Sect. 5.1 apply to Aristotle too.

[624] Cf. Emilsson 1988. 122. For Aristotle see Hicks 1907. 448; Cashdollar 1973. 162; Polansky 2007. 396; [BD] 307.

to such cases – 'judgement' may be applied to basic cognitive activities, bearing in mind that it need not involve using concepts (cf. Sect. 5.1.6). However, I acknowledge Caston`s point that 'judgement' connotes involvement of endorsement, which in phantasia is indeed not default (*DA* 67.18-20; 71.10-21). I suggest to take the same attitude towards this feature as towards (v) the durational nature of perceiving: bear in mind that it need not involve endorsement in all cases. What we gain is a term with a core meaning that picks out a highly relevant aspect of *krisis*: that it has *propositional content*, especially in the form of '*S is F*', hence it might be true or false; and that may easily be used in cases where a certain decision is made. This is the most general account of *krisis* that may be given. To distinguish different kinds of judging – perceptual, phantasia, doxastic, etc. – further features of the activity must be mentioned: e.g. restrictions on the content (in perception: the subject must be an individual, the predicate a perceptible feature), or features of the activity (whether it involves endorsement). I turn to some distinctions (phantasia, perception, opinion) in Sect. 5.2.3.

5.2.1.2. The doctrine of the mean

An influential, yet (due to obscurity) controversial approach to the Aristotelian understanding of *krisis* appeals to the doctrine of the mean.[625] In two passages *krisis* (and the capacity to perceive) is connected to the idea of a *mean* state of the perceptive body: the primary sense-organ,[626] Aristotle *DA* 2.11. 423b30-424a10; 2.12. 424a25-b3. Even though Alexander himself endorses this tenet in Aristotle, he does not give it such an importance as modern commentators. Alexander applies the idea merely to the sense of touch (*DA* 59.1-12; 93.14-17), avoiding the problems stemming from the generalization to other senses (*DA* 59.12-20). I shortly describe the main idea without going into the intricacies of different interpretations; and show that it is intuitively applicable to the sense of touch, so that it is reasonable for Alexander himself to endorse it (cf. *DA* 59.8); and how it is problematic for other senses, not to mention judging of the rational part. Finally I give some remarks that make the attribution problematic even for Aristotle.

The idea is simple: in order to be able to perceive the whole range of perceptible objects in a given domain, the relevant sense-organ needs to be in an appropriate state that is not too far from either extreme of the scale. The best position is, hence, some intermediate state: the

[625] Notable recent interpretations are Corcilius 2014; Murphy 2005; 2006; de Haas 2005; Johansen 2002.

[626] Some interpret the mean state as applying to the capacity as well, or even exclusively to it, cf. Corcilius 2014. 40-41; Johansen 2002. 180. But even a proponent of spiritualism acknowledges that this is implausible: Murphy 2006. 309.

exact middle – the mean.[627] This state allows each perceptible quality to act upon the organ (with the exception of the quality that is identical in form with the mean state – hence constituting a blind spot), so that each one is perceptible by the animal (except the blind spot) (Aristotle *DA* 2.12. 423b30-424a5; cf. Alexander *DA* 59.5-12). In perceiving a given quality the mean state may be used as a standard (as the other extreme on the scale) to which each quality may be compared (Aristotle *DA* 2.12. 424a5-10).[628] This comparing is *krisis*, hence strictly speaking what is perceived is some difference from the mean state.[629]

Now, certain features make this account applicable to touch (to which it is introduced), that at the same time make it problematic for other senses.

(M1) The object of touch is qualities of bodies *qua* bodies – i.e. the main qualities in nature, to which probably all the various tangible qualities might be reduced (cf. Aristotle *GC* 2.2): hot/cold, wet/dry (*DA* 58.25-59.1; cf. Aristotle *DA* 2.11. 423b27-29).

(M2) The organ of touch[630] is a body (for each organ is a body).

Hence, this organ must possess a *definite quality* on the range of the tangible qualities: a certain quality on the ranges hot–cold and wet–dry (*DA* 59.4-5; cf. Aristotle *DA* 2.11. 424a3-10).

According to the above consideration the organ of touch must be the *mean*-state of hot and cold; and wet and dry. Again, in perceiving tangible qualities, since the organ is acted upon by the quality, the mean state of the organ is modified somewhat (*DA* 59.1-4; cf. Aristotle *DA* 2.11. 424a8-10). It is claimed that this modification has to remain between certain limits, for too extreme qualities may destroy the organ`s perceptivity (Aristotle *DA* 2.12. 424a28-32). This seems to follow from the main idea: if the mean serves as to provide a standard for comparison, if it is modified, it does not remain to be the same invariant standard, so perception

[627] The doctrine of the mean most probably originates from medical writings, being the standard explanation of health – which is endorsed by Aristotle too, see Tracy 1969.

[628] See de Haas 2005. 335-336; Johansen 2002. 181. Alternatively, on sub-personal level: the mean state may constitute a standard in relation to which each quality may manifest a difference, and this manifestation of the difference is the result of *krisis* – the separating of the sensible form, see Corcilius 2014. 40-43. Accordingly, it is the *mean* itself that discriminates the quality from *itself*. Cf. Murphy 2006. 316-319, but compare Shields 2016. 246-247.

[629] Johansen 2002. 187n35 wants to deny this consequence, but without argument.

[630] It is clear that the organ of touch here is its peripheral-organ, for it is compared to the peripheral-organs of the other senses, *DA* 59.12-20; cf. [AD] 221. Though whether it is an internal organ around (or even in) the heart, or the flesh (as [BD] 305 suggests; cf. *DA* 93.14-17), is unclear, cf. *DA* 56.14-58.25.

becomes unreliable.[631]

The organs for the other senses are described in different terms. Since they serve to perceive not the qualities of bodies *qua* bodies, but certain qualities in specific ranges, they need not possess a definite position on the scale corresponding to the sense-modality (*DA* 59.12-17; cf. *Mant*. 2. 106.30-107.7).[632] The organ of sight need not be coloured, but it may possess a *neutral* state: indeed it has to be transparent (*DA* 44.3-5; *Mant*. 2. 106.30-107.1; cf. Aristotle *DA* 2.7. 418b26-29; *Sens*. 3. 439b6-10) (this applies to the other senses as well, cf. 54.23-55.5; e.g. the organ and medium of smell must be transodorant (*diosmos*), *in Sens*. 88.17-89.5).[633] But being a neutral state – without a definite position on the respective scale of perceptibles – may be said to be a mean state only in an extended sense.[634] First, it does not imply a blind spot (*DA* 59.17-20), for the neutral quality is not perceptible as such: insofar as it acts upon the organ. If it is perceptible at all, it is perceptible in a specific sense (cf. *in Sens*. 45.12-21 on transparent that through which colours are seen; cf. Aristotle *DA* 2.7. 418b4-9; *Sens*. 2. 438a12-15[635]). Again, it is not a definite quality on the scale, rather it is the *pre-condition* of the kind of perception (in that sense-modality). Without there being transparent, no colour could be perceived, no seeing could occur. This is rather different from the role of the mean-state in touch.

Since intellect does not even have a proper organ, intellect may not be *mean* in the proper sense. If it is said to be a mean, it might be only metaphorically: mean as neutral state: not possessing in actuality any intelligible forms. However, in this context, this neutral feature is picked out by the term 'material' or 'potential' (first at *DA* 81.24-26, see esp. 84.14-24; cf.

[631] Alexander argues that a given perceptible feature (a quality) is perceived invariantly (e.g. sweet appears to be always the same 'separative', *diakritikon*), *in Met*. 314.30-315.10. This would not allow the smallest change in the mean-state according to the mean-view. Murphy 2006. 317-318 connects this even to the preservation of the balanced heat in the body maintained by the nutritive soul, which thereby is literally responsible for preserving the perceptive capacity insofar as it preserves the mean temperature of the heart. Since the mean-state is allegedly not modified, this interpretation has its preference to spiritualist interpretations of Aristotle`s theory of perception. Though Corcilius is an explicit exception, cf. Johansen 2012. 158-169.

On the other hand, Johansen 2002. 182-184 allows that the senses may change and adapt to the circumstances of differing perceptual conditions, and identifies this as the active aspect of perception. Instead of invariance of the mean-state, he argues, adaptability is required for consistency of perception.

[632] Cf. [AD] 222; Caston 2012. 160-161.

[633] Cf. Johansen 1998.

[634] *Pace* Johansen 2002. 180-181, who takes the neutral sense to be basic. His suggestion that the mean-state for touch is 'the point at which the two extremes cancel each other out' is interesting, but cannot accommodate the blind-spot phenomenon that applies to touch.

[635] Cf. Caston 2012. 163-165; [AD] 185-186.

Mant. 2. 106.20-29), rather than 'mean': indeed quite properly, for 'mean' would involve having one definite, intermediate state, whereas matter is potentially all the forms. The intellect is material precisely because it is that which is capable of receiving any intelligible form (84.18-19).

As it is clear that Alexander endorses the mean-view only for touch,[636] it might be shown that this is the case with Aristotle too. First, the term 'mean' (*mesotēs*) is used only in connection to touch. *DA* 2.11 discusses the sense of touch; as *DA* 3.13. 435a21-24 too is explicitly about it. At *DA* 2.12. 424a32-b3 Aristotle explains why plants cannot perceive, and he cites that they do not possess a mean-state required for the capacity to perceive. However it is perception as touch only (424a34-b1) which is denied here of plants, being the most basic type of perception, without which no other sense may be possessed either.[637] The last passage where the term occurs – *DA* 3.7. 431a10-12, 17-20 – is too obscure to allow for any generalization.[638]

Second, the reason cited as a support for generalization is insufficient to justify it. The claim is that the organ is perceptive not insofar as it is the organ – hence a magnitude – rather insofar as it is a *logos* (Aristotle *DA* 2.12. 424a24-28). Then this logos is understood as *proportion* – and proportion of the perceptible opposites in question –, which in turn is supposed to allude to being in *mean proportion*, hence a mean state.[639] This sense, however is far from being required. First, 'logos' may mean quite a number of things apart from proportion. Second, the phrasing is: 'perception is not a magnitude, but a kind of *logos*, i.e. (*kai*) capacity'[640] (Aristotle *DA* 2.12. 424a27-28). This suggests that *logos* should be taken in the sense of capacity rather than proportion.[641]

[636] However, at *in Sens*. 27.1-7 he appeals to the idea of mean-state in explaining why the eye must be of water rather than air or transparent solid. But the mean-state here is not the mean of the perceptible extremes in the relevant range, and it is unclear whether Alexander endorses the point.

[637] On this passage see Murphy 2005; Caston 2005. 300-301; Sorabji 1992. 215-218.

[638] However see de Haas 2005. 339-340; Osborne 1998.

[639] Cf. Corcilius 2014. 36-37; de Haas 2005. 332-335; Modrak 1987. 56-61.

[640] οὐδ' ἡ αἴσθησις μέγεθός ἐστιν, ἀλλὰ λόγος τις καὶ δύναμις ἐκείνου.

[641] One might object that since the sense of capacity is to be clarified here (Aristotle *DA* 2.12. 424a24-25), it would be trivial to claim that it is capacity. Moreover, in the immediately preceding paragraph Aristotle has just claimed that perception, in receiving the perceptible form of the object without matter, is affected according to the *logos* (*kata ton logon*) (Aristotle *DA* 2.12. 424a17-24); and this *logos* is most probably the proportion between the opposites defining the ranges of proper perceptibles. Thus the *logos* in our passage should also mean proportion, cf. Sect. 4.1.2.2. note 306.

Alexander is even more cautious in formulating this claim: 'perception is not the magnitude, but the *logos*, i.e. the form (*eidos*) of such magnitude'[642] (*DA* 60.8-9). He goes on to explain the destructive effect of strong perceptible motions in terms of destroying the *balance (symmetria)* of the body, *DA* 60.9-14, on which the form (viz. the soul-capacity) supervenes in his view (cf. *DA* 2.25-11). This balance is quite different than the mean of the perceptible opposites (e.g. extreme colours, white and black): it is the *balance of the constituent bodies* in the mixture of the living body. So that it is rather a balance of the primary opposites, the tangibles. In other words: for Alexander the *logos* mentioned by Aristotle is nothing but the *capacity* that emerges from the balanced mixture of the elements in the body of the animal, and it is the latter (the balance of body) that may be called mean-state rather than the capacity itself.[643]

5.2.2. Judgemental faculties

Judgement (*krisis*) is the activity of all kinds of cognitive capacities: not only of perception, but of phantasia, opinion (*doxa*), knowledge (*epistēmē*), and intellect (*nous*) (*DA* 66.9-19). Elsewhere an even longer list of judging activities is provided: awareness (*antilēpsis*), endorsement (or assent; *synkatathesis*), supposition (*hypolēpsis*), calculation (*logizesthai*), thinking (*dianoeisthai*), and securing (*katalēpsis*) are also subsumed under *krisis* (*DA* 78.10-21).[644] In Sect. 5.2.3 I investigate the difference between some most important of these: perception, phantasia and opinion.

In this section I discuss a single issue: whether these diverse judging activities are activities of a single subject, a single *judging thing*; or they are of different subjects, distinct faculties of the soul. If the activities are of diverse subjects – the capacities – it fits well with my interpretation of the division of soul into autonomous capacities that constitute parts of the soul as put together conceptually (Sect. 3.3). But if it is one single subject that makes all kinds of diverse judgements (though different types of judgement in different ways), it seems to constitute a serious objection to my reading. Let us see how this problem appears, by considering the relevant passages, starting with Aristotle.

[642] ἡ γὰρ αἴσθησις οὐ τὸ μέγεθος, ἀλλὰ ὁ λόγος καὶ τὸ εἶδος τοῦ μεγέθους τοῦ τοιούτου.

[643] However, Aristotle should not be judged by Alexander`s interpretation, esp. because it depends on many controversial premises of Alexander`s.

[644] For Aristotle too *krisis* encompasses perception as well as intellect: e.g. *DA* 3.3. 427a17-21, 428a3-5; 3.4. 429b12-18, 3.9. 432a15–20; *Mot.* 6. 700b18-23; *AnPost.* 2.19. 99b35.

> One judges flesh and being flesh either by means of different things or by means of something in a different condition. For flesh is not without matter, but is rather just as the snub: a this in a this. One judges by means of the perceptual faculty the hot and the cold, those things of which flesh is a *logos*. But it is by means of something else, something either separate or something which is as a bent line is to itself when it has been straightened out, that one judges being flesh.
>
> Generally, then, as things are with respect to things separate from matter, so too are they with respect to things concerning reason.[645] (Aristotle *DA* 3.4. 429b12-18, 21-22, Shield`s translation, *krinein* rendered as 'to judge')

Aristotle here wonders whether intellectual judgement is made by some different subject as perceptual judgement. More specifically, whether the *being of things* or kinds of things – i.e. the essence – is judged by a different subject than the *thing itself*. The thing itself is a composite of matter and form, whereas the essence is form without matter; hence they are not identical (*DA* 3.4. 429b10-12), indeed they are *different types* of things. Hence it is plausible that they are judged by different subjects. The qualities (hot and cold) of the composite (flesh) are judged by perception. And the being of flesh as a *logos*, form, is judged by some other thing. For flesh is the *logos* of these perceptible qualities, probably because these are the material components of flesh, mixed in a certain proportion, *according to a certain form*.[646] And perception is not judging the *logos* in the sense of essence or form, but the individual as it is an enmattered composite thing, insofar as it has perceptible features (see Sect. 5.2.3).

The other judging thing is either a separate subject or it is the same subject in a different state. The latter option is further elaborated on analogy: one single line may be the same, yet having different states: being straight and being bent. Since both the straight and the bent line are judged by means of the straight line – which is used as a measure for the line – the idea is

[645] τὸ σαρκὶ εἶναι καὶ σάρκα ἢ ἄλλῳ ἢ ἄλλως ἔχοντι κρίνει· ἡ γὰρ σὰρξ οὐκ ἄνευ τῆς ὕλης, ἀλλ' ὥσπερ τὸ σιμόν, τόδε ἐν τῷδε. τῷ μὲν οὖν αἰσθητικῷ τὸ θερμὸν καὶ τὸ ψυχρὸν κρίνει, καὶ ὧν λόγος τις ἡ σάρξ· ἄλλῳ δέ, ἤτοι χωριστῷ ἢ ὡς ἡ κεκλασμένη ἔχει πρὸς αὐτὴν ὅταν ἐκταθῇ, τὸ σαρκὶ εἶναι κρίνει. πάλιν δ' ἐπὶ τῶν ἐν ἀφαιρέσει ὄντων τὸ εὐθὺ ὡς τὸ σιμόν· μετὰ συνεχοῦς γάρ· τὸ δὲ τί ἦν εἶναι, εἰ ἔστιν ἕτερον τὸ εὐθεῖ εἶναι καὶ τὸ εὐθύ, ἄλλο· ἔστω γὰρ δυάς. ἑτέρῳ ἄρα ἢ ἑτέρως ἔχοντι κρίνει. ὅλως ἄρα ὡς χωριστὰ τὰ πράγματα τῆς ὕλης, οὕτω καὶ τὰ περὶ τὸν νοῦν. (429b12-22)

[646] Even though one might argue that *logos* here must mean 'ratio', for flesh seems to be a mixture – hence ratio – of hot and cold (and also wet and dry, for that matter). Indeed flesh seems to be a fitting material for receiving tangible qualities, hence a candidate for being the organ of touch (and even the heart is composed of fleshy material), thus it is the mean of the tangible differences. But, at the same time, flesh is not just a ratio of the tangible qualities, but it is the *form* that makes the mixture of these qualities to be a kind of stuff that is fitting to be the component matter of animal bodies. Thus, logos here may mean form.

that the intellect is the measure or judge both of its own domain and of the domain of perceptibles. Yet it judges in the different domains in a different mode: it is a strict measure of the essences of things, but works differently in perceiving them.[647]

Probably Alexander has this passage in mind in writing:

> For even that which judges the difference of perceptibles in relation to intelligibles is one thing; for it is the intellect; for it has intellection of everything and judges the being in case of each particular thing. For the differences of perceptibles *qua* perceptibles are judged by means of perception; but the differences of them in accordance with their substance in relation to each other and that which are intelligible in their nature are judged by the intellect when it has intellection of them.[648] (*DA* 61.3-8)

This passage occurs in the context of perceptual discrimination, serving to motivate that the subject of this is one single perceptual faculty. The contrast Alexander draws here is clear-cut, though. He claims that perceptible things may be judged in different ways: *qua* perceptibles, when they are judged by perception; and *qua* intelligibles, when judged by intellect (cf. *DA* 91.7-18).[649] It seems that judgement is either perceptual or intellectual, with different objects (see Sect. 5.2.3).

Elsewhere, however, Alexander talks about one judging part of the soul, as if it were one single subject that is responsible for all kinds of judging activity. At *DA* 99.15-30 Alexander presents his last argument for the cardiocentric view about the soul. First, two parts of the soul may be distinguished: practical (*praktikon*) and judgemental (*kritikon*) (*DA* 99.15-19; cf. *DA* 98.24-99.6). Both of these have their origin in the same part of the body (the heart), so that both these parts must be in the same part of the body in their entirety. The nutritive soul-part is the origin of the practical soul, and the perceptive capacity is the origin of the judging

[647] Notwithstanding, Aristotle most probably accepted the former alternative, that there are different subjects for the different types of judging. This follows from FAO, for the objects of these judgements are thoroughly distinguished. Cf. Shields 2016. 306-308; Johansen 2012. 228-237. However contrast Modrak 1987. 122-124, who opts for the alternative.

[648] καὶ γὰρ τὴν τῶν αἰσθητῶν πρὸς τὰ νοητὰ διαφορὰν τὸ κρῖνον ἕν· ὁ γὰρ νοῦς· πάντα γὰρ οὗτος νοεῖ καὶ κρίνει, ἐν τίνι ἑκάστῳ τῶν ὄντων τὸ εἶναι. ὡς μὲν γὰρ αἰσθητῶν τῶν αἰσθητῶν τὰς διαφορὰς αἰσθήσεως κρῖναι, τὴν δὲ κατὰ τὴν οὐσίαν αὐτῶν διαφορὰν πρὸς ἄλληλά τε καὶ τὰ τῇ αὐτῶν φύσει νοητὰ ὁ νοῶν αὐτὰ νοῦς κρίνει).

[649] Even though here Alexander is discussing the issue of perceptual discrimination, and shortly after the problem of SIM – which I have identified as the problem of the unity of perceptual awareness (Sect. 5.1.5) –, he does not seem to be sensitive to a possible worry of the unity of awareness in general, including perceptual as well as intellectual judgements; cf. Modrak 1981c, arguing that probably the common sense is responsible for this. According to Frede D 1992. 292-294 Aristotle did not solve the problem. Magrin 2015 argues that Plotinus took up the issue, and provided a solution by applying Alexander`s account of SIM for the whole soul: single subject, complex in its activities through different means.

part (*DA* 99.19-25). And since each part contains the ruling capacity of its own, which uses its subservient capacities as organs (*DA* 99.26-30), the ruling capacity of the soul (*to hēgemonikon*) as well is in the same part of the body (*DA* 99.25-26).

Even though this passage for the first sight presents the subject of all judging as a single thing, one part of the soul, but in fact this implies the kind of division of soul presented in Chap. 3. For the judging part is said to be consisting of at least two capacities that must have some distinctness, autonomy, in order that they may serve their respective roles as *ruling* and *subservient*.[650] One may rule only something else, and one may serve only something else: ruling and subservient are correlatives.[651] So there must be at least two capacities constituting the judging part of the soul. Now, the two capacities are said to be the perceptual capacity and the intellect. Presumably they represent the whole range of judging capacities, by being the two ends of the spectrum – perception is the most basic, intellect is the highest form of judging. A more specific account is given elsewhere (corroborating that all judging capacities are meant):

> It has been told[652] that there are differences among apprehending and judging capacities. For there is one judging capacity which is subservient (for such are perception and phantasia); and there is one judging <capacity> which is ruling of the soul (for such is the calculative <faculty>), which is for thinking and for intellection. For the perceptual capacity is directed towards the thinking capacity (in <animals> in which both capacities are present), in order to report and to communicate the differences of perceptibles to it [i.e. to the thinking capacity].[653] (*DA* 76.8-14)

We find here an explication of the relationship between subservient and ruling capacities: the subservient one *reports* what it grasps to the higher one that is able to process it further. This suggests that the higher capacity could not possess its content without the subservient capacity reporting that to it.[654] Thus the activity of thinking depends in some way on perceiving.

[650] Aristotle also seems to suggest this teleological relationship between different parts of the soul, though not primarily in the *De Anima*, but in his biological works. See Johansen 2012. 278-283.

[651] On relatives cf. *Q* 2.9; Aristotle *Cat*. 7 esp. 6b28-35, cf. 10. 11b24-32.

[652] This refers to the immediately preceding passage: *DA* 75.24-76.6. What is added there is that the subservient capacity is for the benefit (for the sake) of the higher capacity it serves. And since the relation is analogous to the relation between soul and bodily organ, the subservient capacity may be said to be the organ (or instrument) of the higher, ruling capacity.

[653] προείρηται δέ, ὅτι καὶ τῶν γνωστικῶν τε καὶ κριτικῶν δυνάμεών ἐστι διαφορά. ἡ μὲν γάρ τίς ἐστι δύναμις ὑπηρετικὴ κριτικὴ (τοιαύτη γὰρ ἥ τε αἴσθησις καὶ φαντασία), τὸ δέ τι τῆς ψυχῆς ἡγεμονικόν ἐστι κριτικόν (τοιοῦτον γὰρ τὸ λογιστικόν), ὃ διανοητικόν τέ ἐστι καὶ νοητικόν. τὸ γὰρ αἰσθητικὸν ἐπὶ τὸ διανοητικὸν ἔχει τὴν ἀναφοράν, ἐν οἷς ἐστιν ἄμφω, ὅπως γὰρ εἰσαγγέλλῃ καὶ μηνύῃ τὰς τῶν αἰσθητῶν αὐτῷ διαφοράς.

[654] Reporting gets even more emphasis in Plotinus (cf. Magrin 2015. 872) and later Neoplatonists.

One may wonder how there might be a part of the soul that consists both of perception and of intellect, if these capacities are constituents of different parts of the soul: perceptual and intellectual respectively (cf. Chap. 3). The answer lies in that just as the division into perceptual and intellectual parts serves a particular *purpose* of providing a taxonomy of living beings; the division into judgemental and practical parts as well serves a certain purpose. The purpose may be identified as to account for different kinds of animal (and in particular: human) behaviour; namely: pursuing knowledge on the one hand, and moving about and acting on the other (cf. *DA* 81.5-13, 82.16-19; *Mant*. 4. 118.38-119.6; cf. Aristotle *EN* 6.2. 1139a3-15; *DA* 3.10. 433a13-17). We have seen that the taxonomical division is indeed a *construction* from thoroughly distinguished capacities, guided by the purpose it serves: classification. It seems to be perfectly acceptable that with different aims one will end up identifying different parts of the soul, which might even be constituted of the very same capacities. For the parts do not have independent existence over and above the capacities that constitute them, they are just collections or *sets of capacities* that have some sort of autonomy of each other.[655]

There is yet another passage that poses a problem. Alexander is enumerating the activities of the different parts of the soul (*DA* 78.2-4), primarily to show that the impulsive or desiring part (*to hormētikon, to orektikon*) has a unity. He starts with nutrition (78.4-6), recapitulates perception by the special senses (78.6-10), and that it is the common sense that is perceptive of each perceptible, though those from different sense-modality by different senses and sense-organs (78.10-14), and finally he turns to judgement. Once he has enumerated the types of judging (78.14-16), he claims:

> It must be supposed that all the judgements come about by some identical and common thing (for it is the judging thing), though each particular judgement is made by it in accordance with different capacities, as it was the case with perception. For it is of the judging thing to have phantasia, to endorse, to have awareness, to suppose, to opine, and to secure; among which the differences we judge by the common judging capacity (*koinōi kritikōi*).[656] (*DA* 78.16-21)

[655] Against the idea that Arisotle`s soul (or parts of the soul) were 'merely' sets of capacities see Johnston 2011; cf. Granger 1990. 39-45, who takes the soul to be instead a 'power-thing'. But for Alexander the soul consists certainly of capacities, for it is the form of the living being, and a form is capacity (*dynamis*) rather than actuality, cf. *DA* 9-15-17, 16.8-10; *Mant*. 1. 103.11-20; cf. Caston 2012. 85.

[656] ὑποληπτέον πάσας μὲν τὰς κρίσεις ὑπὸ τοῦ αὐτοῦ τινος καὶ κοινοῦ γίνεσθαι (τοῦ γὰρ κριτικοῦ), ἑκάστην δὲ κρίσιν κατ' ἄλλην καὶ ἄλλην ὑπ' αὐτοῦ γίνεσθαι δύναμιν, ὡς εἶχεν καὶ ἐπὶ τῆς αἰσθήσεως. τοῦ γὰρ κριτικοῦ τό τε φαντασιοῦσθαι καὶ τὸ συγκατατίθεσθαι καὶ τὸ ἀντιλαμβάνεσθαι καὶ τὸ ὑπολαμβάνειν καὶ τὸ δοξάζειν καὶ τὸ καταλαμβάνειν, ὧν τὰς διαφορὰς κρίνομεν τῷ κοινῷ κριτικῷ.

The problem this passage poses is this. So far we have seen that the judging thing or judging part is a conceptual construction, which is useful to be made in order to distinguish behaviours that have knowledge as their aim from those that have action. This account entails that the capacities making up the judging part are autonomous and distinct from each other: indeed, perception serves intellect. In the present passage, however, it is told that the judging thing is a *common capacity* on analogy with common sense. But common sense can fulfil its function of providing unity to perceptual consciousness, as we have seen (Sect. 5.1.4), only if it has a *genuine unity*. Accordingly, the real subject of any perceptual activity is the common sense, the individual special senses do not have autonomous activities on their own. The activity of sight, e.g., is the activity of the common sense by means of the eyes. What is specific in seeing, in contrast to hearing, is that the perceptual stimuli are transmitted through the eyes, rather than through the ears. Perception happens in the primary sense-organ, and it is done by the common sense. If the analogy with common sense stands for the judging thing, the different capacities of the judging part may not fulfil their activities until it is done by the common judging thing.

One may follow here two approaches: (a) either to accept the consequences; (b) or to explain away the problematic claims. The former (a) has the advantage of providing a clear account of an otherwise untouched issue: the unity of all experience in general, comprising non-rational (perceptual) and rational judgements as well.[657] On the other hand, it is detrimental for the account of parts and capacities I provided. Moreover, together with the principle that by one capacity at one time only one activity may be done, this leads to the unacceptable consequence that there may not be conflicting contents in one`s experience. But the phenomenon of conflict was one of the main reasons to suppose distinct capacities in the first place (*DA* 27.5-8; *Mant*. 1. 118.6-9, 31-35).

For these reasons I believe that it is better (b) to explain away the difficulty. Taking the context into account, a case may be made for this. For Alexander`s aim here is to show that the practical or the impulsive part of the soul is a unitary part that comprises several capacities at the same time. In order to show this, he appeals to the fact that the judging part of the soul as well has a kind of unity. Since there is a clear account at disposal of the perceptual capacity, of the common sense, he uses that as a paradigm for all unities he proposes here. What is important from that account is just this: unity of perception that allows for certain diversity in activities, content, objects, and capacities. That the special sense-capacities are not self-standing is irrelevant to the analogy. In a sense, they are independent: from each other; even though they

[657] See note 649. Modrak 1981c; Magrin 2015.

are not independent of the common sense. In case of the judging part and its component capacities, however, the capacities may independently function both from each other and from the part they constitute. In other words: the judging part is nothing but the set of the judging capacities; whereas the common sense is a genuine unity – hence the judging part is not the ultimate subject of judging (rather it is the diverse judging capacities); whereas the common sense is. Even though this account does not give a neat answer to the problem of unity of experience in general, probably it might be said that it is the highest available capacity (in humans, the intellect) that can explain this.

5.2.3. Phantasia-judgement

We have been discussing judgement in general: through its content, what kind of activity it is, and what is the subject of its different kinds. Being interested in the distinguishing feature of phantasia-judgement we should turn to the question what differentiates the kinds of judgement, and in particular the phantasia-judgement. I do not describe all these activities, wherein their differences lie – this would require a separate study.[658] I restrict the investigation to two activities beyond phantasia, those with which it is mistakable: perception and opinion. As we have seen each of these involves a distinct faculty of their own, though apparently some activities do not. These may be another description of the characteristic activity of a given capacity or additional one, as we shall see with regard to awareness (*antilēpsis*), which is used in describing perception together with judging.

We have seen several times that the capacities for the diverse activities are all different, and defined, on account of having their own characteristic object. In this regard all these three activities (phantasia, perception, and opinion) differ. Moreover, even though these activities share the structure of their content (predicational), opinion differs from perception and phantasia in that it may only have complex content (Sect. 5.1.1). Whereas simple perception and phantasia is a *de re* attitude, and the predicate in their content may be perceptual feature only (Sect. 5.1.5); opinion may take all kinds of attributions, and it is not *de re*. We might say that opinion is conceptual, whereas perception and phantasia are not (Sect. 5.1.6).

However, since all these activities have propositional content, the activities themselves – the judgements – seem to be the same in type: propositional attitudes. Indeed, this is why I suggested to translate the term for the activity – *krisis* – as judgement. Now, there are two options to understand the situation. These judgemental activities are either (A) the same in

[658] A good survey on this is Miller 2013; see also Engmann 1976.

kind, and what differentiates the cases is merely the object to which they are related; or (B) there is some difference in the judging activities themselves: in a certain respect they are different attitudes. The latter approach leads to two options: either (B1) perception and phantasia are the same types of attitude – just as they share the type of content –, differing only according to their objects, and they both differ from opinion, e.g. in the type of content; or (B2) each of the three are of different kind. This may probably be extended in turn to all of the judgemental activities that Alexander distinguishes. Similarly, if (B1) is to be assumed, probably the further judging activities may be associated with the two main types: as rational (opinion) and perceptual (perception–phantasia).

Of these options (A) should be taken only if there is no case to defend (B). In what follows I argue that there are good reasons to suppose (B); and even though some considerations suggest (B1), there is no decisive reason to rule out (B2). So I suggest to adopt (B) without deciding between (B1) and (B2).

It seems clearly asserted that phantasia is a different type of attitude than opinion. First, opinion involves the endorsement of the truth of its content (*DA* 67.16-17), for it is supposition *DA* 66.15); whereas phantasia does not (*DA* 67.18-20; 71.10-21).[659] One may have a phantasia-appearance without thereby endorsing its content. For a second difference, let us consider how Alexander differentiates them.

> It might seem that regarding that it can be true and false, phantasia is identical with opinion. For among opinions some are true and some are false. However it is not the case. For (i) on the one hand conviction follows necessarily an opinion (for one having an opinion about something always will also endorse that that is the case; for an opinion about something is an endorsement about it that that is the case; but endorsement is accompanied with conviction, for opinion is rational endorsement accompanied with judgement), but not all phantasia is accompanied with conviction. Indeed though among non-rational animals each has phantasia, but none has conviction. But if they have no conviction, there is no endorsement accompanied with judgement either.[660] (*DA* 67.12-20)

[659] Securing also involves endorsement (*DA* 71.12). In case of other types of judgement this is not explicit.

[660] δόξαι δ' ἂν κατὰ τὸ ἀληθὴς καὶ ψευδὴς γίνεσθαι φαντασία ἡ αὐτὴ εἶναι τῇ δόξῃ. καὶ γὰρ τῶν δοξῶν αἱ μὲν ἀληθεῖς εἰσιν, αἱ δὲ ψευδεῖς. οὐ μὴν οὐδὲ οὕτως ἔχει. τῇ μὲν γὰρ πάντως πίστις ἕπεται (ὁ γὰρ δοξάζων περί τινος πάντως καὶ συγκατατίθεται ὡς οὕτως ἔχοντι· ἡ γὰρ περί τινος δόξα συγκατάθεσις ἐκείνῳ ὡς οὕτως ἔχοντι· ἡ δὲ συγκατάθεσις μετὰ πίστεως, λογικὴ γὰρ συγκατάθεσις ἡ δόξα καὶ μετὰ κρίσεως), οὐ πᾶσα δὲ φαντασία μετὰ πίστεως. τῶν γοῦν ἀλόγων ζῴων φαντασίαν μὲν ἔχει πολλά, πίστιν δὲ οὐδέν. εἰ δὲ μὴ πίστιν, οὐδὲ τὴν μετὰ κρίσεως συγκατάθεσιν.

The difference lies in that opinion involves conviction, and at bottom *rational* (*logikē*) judgement, whereas phantasia does not. This rationality, as it is connected to action-contexts, is most probably some reasoning, reflection on the situation, deliberation over the means of action,[661] and justification for choosing a certain course of action, or at least some sort of capacity to justify one`s belief if pressed.[662] Something may appear to one without having any further mental content related to this appearing, thereby not anything with which one could justify it.[663] This last feature – justification, and in general connections to other mental contents – may be extended to cover theoretical thinking too.

In addition to this difference, as we have seen concerning Aristotle (Sect. 5.2.2; *DA* 3.4. 429b12-22), perception and intellect grasps individual composite substances in two clearly distinguishable ways. As perception grasps the objects (the perceptible forms) necessarily as being enmattered, intellect grasps the forms in abstraction, in separation from any material condition, as they are in themselves: the universals, the essences. This account is endorsed by Alexander with an even clearer and more systematic analysis at *DA* 83.13-84.10[664] (cf. *DA* 84.19-21, 87.5-23). This, however, partly reduces to a difference in objects: perception is of the composite, intellect is of the form only. Nevertheless this is made possible by the fact that by possessing intellect one is capable of using concepts, so that intellectual grasp after all seems to differ in this: it is *conceptual*, in contrast to perception.[665]

Now, to see whether phantasia and perception differ only because they have different objects, or the attitudes are also of different type, let us consider the acknowledged differences between them.

[661] Hence belief is up to us, cf. Barnes 2006.

[662] For this understanding of rationality see note 134.

[663] Cf. Modrak 1986. 56-57, 1987. 129.

[664] Cf. note 645. He argues that the fact that common perceptibles necessarily accompany proper ones renders the perception of proper objects as connected to material conditions (*DA* 83.17-22). What follows from accompanying is at least that proper perceptibles may not be perceived in isolation. How this is related to *being in matter* is a further issue I do not pursue here.

[665] Cf. e.g. Modrak 1987. 32-35, 99-101 argues that they differ in the morde of representation: perception is pictorial, iconic (p 61-65), only implicitly propositional; whereas supposition involves linguistic composition, involving symbolic representation (p 117-122, 127-128).

> Then the phantasia that is such[666] is distinct from perception, because (i) perception is of perceptibles that are present, whereas phantasia comes to be even of [objects] not [being] present. (ii) And perception comes to be when we are awake, but phantasia also [comes to be] when we are asleep. (iii) Again, perception is not up to us: for it is not up to us to perceive perceptibles not being present. But phantasia is also up to us: for it is up to us to grasp a phantasia of something even if it is not present. (iv) And all [kinds of] animals have a share in perception, but some do not seem [to have a share] in phantasia, as oyster-shaped sea-animals or worms. (v) And the perception of proper [perceptibles] is always true, but most of the phantasiai are false. (vi) And that perception and phantasia are not identical is clear also from the fact that whenever we perceive something accurately we are not said to have a phantasia of it, but when we perceive something indistinctly we do say that it appears to us. However, if they were identical, it would follow that the more [intense] perception is a more [intense] phantasia, and that the more accurate perception is a more accurate phantasia.[667] (*DA* 66.24-67.9; cf. *in Met*. 312.5-10)

In order for the phantasia-judgement to differ in kind from perceptual judgment there must be some difference between them that is irreducible to the difference in their respective objects. Among the features cited (i)-(vi) the only one which apparently may not be explained by appealing to this difference (and which is endorsed) is (iii) that phantasia may, whereas perception may not be up to us.[668] It is possible that we voluntarily search for or imagine some

[666] I.e. phantasia in the proper, non-metaphorical sense.

[667] τῆς μὲν οὖν αἰσθήσεως χωρίζεται ἡ τοιαύτη φαντασία τῷ (i) τὴν μὲν αἴσθησιν παρόντων εἶναι τῶν αἰσθητῶν, φαντασίαν δὲ γίνεσθαι καὶ μὴ παρόντων, καὶ (ii) αἴσθησιν μὲν ἐγρηγορότων γίνεσθαι, φαντασίαν δὲ καὶ κοιμωμένων. ἔτι (iii) αἴσθησις μὲν οὐκ ἐφ' ἡμῖν (οὐ γὰρ ἐφ' ἡμῖν μὴ παρόντων τῶν αἰσθητῶν αἰσθάνεσθαι), φαντασία δὲ καὶ ἐφ' ἡμῖν· ἐφ' ἡμῖν γὰρ φαντασίαν τινὸς καὶ μὴ παρόντος λαβεῖν. καὶ (iv) αἰσθήσεως μὲν πάντα μετέχει τὰ ζῷα, φαντασίας δὲ οὐ δοκεῖ, ὡς τά τε ὀστρεώδη τῶν θαλασσίων καὶ οἱ σκώληκες. καὶ (v) ἡ μὲν αἴσθησις ἀεὶ τῶν ἰδίων ἀληθής ἐστι, τῶν δὲ φαντασιῶν αἱ πλεῖσται ψευδεῖς. (vi) ὅτι δὲ μὴ ταὐτὸν αἴσθησις καὶ φαντασία, δῆλον καὶ ἐκ τοῦ ὅταν μὲν ἀκριβῶς αἰσθανώμεθά τινος μὴ λέγεσθαι ἡμᾶς φαντασίαν ἔχειν αὐτοῦ, ἀμαυρῶς δέ τινος αἰσθανόμενοι φαίνεσθαι ἡμῖν ἐκεῖνο λέγομεν. καίτοι, εἰ ἦν ταὐτά, ἔδει τὴν μᾶλλον αἴσθησιν μᾶλλον φαντασίαν εἶναι, καὶ τὴν ἀκριβεστέραν αἴσθησιν καὶ φαντασίαν ἀκριβεστέραν.

[668] Of the others (i) explicitly points to the difference of the objects; (ii) follows from this difference: in sleep, since perception of external objects does not work, we may only be concerned with internal objects; even if (v) is not true as it stands (Sect. 5.1.1.2), it concerns the relative reliability of perception and phantasia, which is indeed explained in terms of difference of the objects (Sect. 4.2.3.3). Again, (vi) is contradicted at *DA* 71.5-21, implying that phantasia may well be vivid, which indeed is required for the possibility of hallucination – to have an appearance about something that is not there. Finally, (iv) too seems to be preliminary; even if it is endorsed, it should be qualified: stationary animals do not lack phantasia altogether, but only in its full capacity – they have only a basic type of phantasia, indistinctly. This is because they do not need it, for their purposive behaviour is limited: they do not move locally. And one of the main functions of phantasia is to represent the

content; but perception is involuntary and may not be avoided.[669] But arguably this difference too follows from the difference of the objects. Since phantasia is concerned with objects that are internal, hence always present and accessible (cf. Sect. 3.2), it might be said that it is up to us to access these contents (at least in some cases).[670] And since objects of perception lie external to us, we have to wait for them to act upon our sense-organs if we are to have them in our perceptual judgements.[671] They are not accessible for us in the same way as the objects of phantasia are. Hence it is not the case that our attitudes in the two judgements differ *as attitudes*, but they differ insofar as they are concerned with different kinds of object.

One place to find a difference between the phantasia-activity and perception is the characterization of perception as *awareness* that seems not to be extended to phantasia. To describe perception, Alexander uses *krisis* and *antilēpsis* (awareness) interchangeably in general, and many times both in tandem – especially in his definition of perception in general and that of the special senses (*DA* 39.4-5; 46.20-21; 50.9-11; 53.26-29; 53.30-54.2; 55.12-14; 60.2-3; 61.24-27). It would be interesting to see how these two terms might be distinguished, but since this would require a longer treatment, I just consider a few options to see whether 'awareness' might apply for phantasia as well.

For the relationship between judging and awareness there are basically four alternatives. Either (a) they are *two activities* both of which one performs in perceiving; or (b) they are *two components* or phases of the one single activity of perceiving; or (c) one of them modifies the other, i.e. awareness is the specific mode of judging that constitutes perceiving; or – if no distinction can be made – (d) they are merely two descriptions of the same activity.

Of these (a) might easily be ruled out, for it would imply that one may be aware of a perceptible object (e.g. white) without making the corresponding judgement ('this is white') and *vice versa*. But one may not make a judgement without being aware of its content. Rather, the judgement consists in being aware of the corresponding object.

If (b) awareness is an identifiable part or aspect of the perceptual activity of judging, probably judging is making the predication 'S is P', or 'this is white'; whereas awareness is to

object of desire, esp. for non-rational animals. Cf. Aristotle *DA* 3.11. 433b31-434a5; cf. Johansen 2012. 217-218. But most probably Aristotle himself allows all animals to have phantasia, cf. Caston 1996. 23n9.

669 As e.g. Schofield 1978. 268 distinguishes phantasia and *doxa* in Aristotle.

670 An analogous argument is put forward for intellect at *Q* 3.3. 85.14-19, summarising Aristotle *DA* 2.5. 417b23-28.

671 It is noteworthy that the fact that phantasia is up to us is used by Aristotle to distinguish phantasia not from perception but from supposition (*hypolēpsis*), *DA* 3.3. 427b16-20, hence this distinction requires other force, cf. Wedin 1988. 74-77 who connects it to the use of memory.

provide the components of the predication: the subject and the predicate terms (or one of them).[672] This seems to be appealing, insofar as this analyses the act of having a complex content. Accordingly, there are the parts that are abstracted from the act: having simple content; and combining the components into the complex. This would, however, require a comparable analysis of each kinds of judging. This would be easiest by using 'awareness' for all of them; but Alexander does not do so.[673] Again, this does not fit with the fact that Alexander subsumes awareness under judgement (*DA* 78.10-21).

Probably then, (c) awareness characterises some judging activities: either (c1) perception only, or (c2) phantasia as well; whereas it does not apply to others. If (c1) it modifies perception but not phantasia, awareness may point to the fact that perception is a most intimate grasp of its object[674] with a sort of vivid phenomenology. In contrast, phantasia would be a sort of faint appearance. One may refer to difference (vi) above that claims 'phantasia' to be used in contexts where what appears to one is unclear.[675] This, however is not true for all cases of phantasia: as it is clear both from the fact that one may mistake one`s phantasia for perception, hence hallucinate or dream; and from Alexander`s account of the Stoic epistemological use of phantasia (*DA* 71.5-21).

Probably (c2) awareness modifies both perception and phantasia, despite the fact that it is not indicated for phantasia. Then, perhaps awareness might be contrasted with supposition (*hypolēpsis*). The latter involves *endorsement* (esp. as it appears in the definition of opinion, *doxa*, *DA* 66.15-16; or it is even identified with endorsement, *in Met*. 300.5-6) and probably also justification or *conviction* based on justification, so that it is a necessary precondition of acting (*in Met*. 299.5-20, 299.37-300.3). Accordingly, awareness should emphasise that the

[672] This is comparable to Wedin`s interpretation that analyses each mental state into abstracted acts. On analogy with speech acts where the illocutionary act consists of the propositional content and the illocutionary force; or the proposition itself consists of referring and predicating – and none of the components may be done on its own: Wedin 1988. 73-74, 100-109 argues that e.g. thinking is analysed by Aristotle into *phantasia* – representing the content – and *supposition* (*hypolēpsis*) – taking something to be the case, that only together constitute a thought (cf. Aristotle *DA* 3.3. 427b27-28). This he applies to every mental state, including perception.

[673] However, at *Mant*. 2. 107.7-9 it is claimed that intellect is for awareness (*antilēptikē*), and that it can be aware of anything. However, three remarks are sufficient to downplay the force of this occurrence. (1) This occurs on the analogy with perception, hence it may just pick up the terms for perception; cf. Caston 2012.139n346. (2) In introducing the idea, it is qualified as *nous* is a *kind of* awareness (*antilēpsis tis*), suggesting that it is not strictly speaking awareness as perception. (3) The authorship of the treatise is highly debated.

[674] Caston 2012. 139n346.

[675] Cf. Johansen 2012. 209-210, connecting this to the fact that perception presents the object in the present environment but phantasia not necessarily.

activity is non-committal to the obtaining of the state of affairs represented in its content, or that it is not the result of justification, measuring the pros and cons (cf. *DA* 67.12-20). As we have seen, the former feature applies clearly for phantasia, for it does not automatically involve endorsement. However it seems perception does involve.[676] Nevertheless it remains to be common in phantasia and perception that neither involves a justification procedure or conviction (see above), so the content of neither is connected to other propositions.

Setting aside the issue: awareness either (c1) distinguishes the type of judgment in perception and in phantasia – hence supporting (B2); or (c2) unifies them in opposition to suppositional (*hypolēptikē*) judgements (which I tend to think) – supporting (B1). In either case it might be concluded that there is at least (B) a clearly identifiable difference between the type of judgment in perception and phantasia on the one hand; and in opinion on the other. Opinion is conceptual, involving endorsement, and even conviction which is based on justification. Perception and phantasia are perceptual, being restricted to perceptible features, not involving conviction (or phantasia even endorsement of the truth of its content).

A conclusion might be drawn about the activity of phantasia. It is certainly having a propositional content, appearing something to the subject without endorsing it (either passively: in dreaming; or voluntarily: in imagining), without having conviction of it (that would be based on justification), perceptually (the content is restricted as that of perception),[677] something of which one had experience in the past (either as the previous experience presented or otherwise).[678]

5.2.4. The relation of judging to the phantasia-change, to the object

Since it was settled that plausibly the difference between the activities of phantasia and of perception may reduce to the difference of their objects, to see the difference clearly, it is instructive to compare the relation of the activities to the respective objects, and what happens when the activities occur, how the activities are related to the material changes involved in the respective states. This will give us a better grasp of the phantasia-activity itself.

[676] One withdraws one`s endorsement to a perceptual judgement only if a more authoritative capacity tells against, cf. Aristotle *DI* 2. 460b16-22, 3. 461b3-7; cf. Everson 1997. 212-213.

[677] Since the judging activity of phantasia is perceptual rather than conceptual, as a consequence, a certain interpretation of phantasia may be dismissed: namely, according to which phantasia is identical to the passive intellect. Cf. Philoponus *On Aristotle`s De Anima* 490.20-25, 506.25. For the history of the concept of passive, material intellect see Blumenthal 1991.

[678] This has much similarity with perceptual belief of Dretske 1981. 190-213.

Perceptual judgement is made by means of the perceptual capacity – residing in the primary sense-organ – in accordance with the perceptual movements (the assimilations to the perceived objects) arriving in certain parts of the primary sense-organ by having been transmitted through – and by the contribution of – the peripheral sense-organs. The assimilation is caused by the object that defines a particular sense – the causal object: so it is the final cause of that kind of perception. This object is efficient cause insofar as it triggers the activity by acting on the sense-organ fitted to receive the appropriate kind of affection; it is also formal cause: the item that determines the content of the perceptual state. It provides content about itself, so the causal object is the same as the intentional object.

The primary sense-organ must have (in order to provide an account for SIM) several parts that receive different perceptual movements at different times. But several parts may be affected simultaneously, yet a single perceptual activity may occur, though with complex content. This is possible, because the activity is the activity of the capacity, which is single, because it is (part of) the form of the living being, and in particular of the primary sense-organ: so it is immaterial, and enforms the whole organ and its parts uniformly.

Even though the perceptual movements correspond to the external objects causing them, it is inappropriate to say that the perceptual movements are representations of the external objects. For the perceptual movement is necessarily co-occurring with the presence and the agency of the object, hence it does not have independent persistence. The perceptual change is rather the material constituent of the occurrence of the perceptual event. But representation requires *persistence* in the absence of what is represented, in order that the representation may be *used in other cognitive activities* in place of the object that is absent.[679]

Let us see first how phantasia is similar. The phantasia-judgement is made by the capacity of phantasia – residing in the primary sense-organ. The capacity is also part of the form, so it is single, incorporeal, uniformly related to the parts of the sense-organ. There are also some sort of physical changes in the parts of the organ: the residues from perceptual changes and activities.

However, the main difference from perception lies exactly in this. Unlike the perceptual change, the residue is the object of phantasia. Residue is the causal object in virtue of which phantasia is defined. But it does not pick out a kind of intentional object, which could settle a goal for phantasia – so that phantasia were for the sake of grasping it; so phantasia does not have such a final cause. Instead of being an intentional object, residue is the causal object of

[679] On representation in general, and types of representations see Dietrich 2007.

phantasia. It is what triggers phantasia-activity as efficient cause, and by means of triggering the activity, it provides content to the phantasia-state, as formal cause. The content it provides is not about itself, but about what it represents. The whole content is determined by what is represented by the residue, so that the residue is the whole formal cause, the only factor relevant in determining the content. In particular, the accidental identities of the residue do not intrude into the content.

As *representation* of the external object, the residue *persists* in the primary sense-organ, so that it is available to be used by phantasia and in turn by other activities, hence the subject has an access to it, and through this access to the content represented by it. Since it persists in the primary sense-organ, the phase of transmission that is necessary for perception is not needed for phantasia. It bears its representational content entirely in virtue of preserving some material aspects that embody this content. In particular, a residue is a representation of a perceptual state of affairs in virtue of being a full preservation. Even though phantasia may modify the residue – esp. in cases when it fails to be a full preservation – and thereby phantasia modifies the content the residue represents, this process is not the activity of phantasia. This is done sub-consciously, hence involuntarily as a pre-requisite of any full phantasia-activity. Phantasia is rather a kind of propositional attitude: appearing something to the subject without endorsing that it is the case.

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