

Three Kinds or Grades of *Phantasia* in Aristotle's *De Anima**

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Phantasia/imagination (φαντασία) in Aristotle is one of the parts (μέρη) or faculties/powers (δυνάμεις) of the soul that cannot exist apart from sensation (αἴσθησις) and thought (διάνοια). The function of *phantasia* and its connection with *phantasmata* (φαντάσματα), the products of this faculty, plays a significant role in the psychological treatises of the Aristotelian Corpus. The purpose of this paper is to examine the concept of *phantasia* in Book III, Chapter 3 of *De Anima*, and to show that the Stageirite philosopher distinguishes three and not two kinds of *phantasia*, starting from the lowest, which is found in imperfect creatures, to the highest, which appears only in the human beings.

Introduction

Aristotle's *De Anima* (Περὶ Ψυχῆς) is one of the major treatises. In this treatise the nature and the role of the soul (ψυχῆς) are analyzed and for this reason it is often characterized as Aristotle's psychology. Most of the discussion is concerned with 'mental' functions, however there is also a certain amount of physiology and biology. As Michael Durrant stresses «the *De Anima* presents the first *systematic* attempt to deal with a whole range of topics and problems falling under the general heading of 'Philosophical Psychology'»¹.

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In this paper I shall try to elaborate systematically the role of *phantasia*/imagination (φαντασία) and its relation to *phantasmata* (φαντάσματα), namely the products of the faculty/power of *phantasia*, in Aristotle's *De Anima*. To be more precise, I shall examine the unified concept of *phantasia* in *De Anima* as follows:

I. I shall present briefly Aristotle's concepts of the various parts (μέρη) or faculties/powers (δυνάμεις) of the soul. Namely, I shall focus my attention on the Aristotelian psychic faculties/powers and the way they correlate with the living beings.

II. I shall outline and explore the notion of *phantasia*, which is described by the Stageirite philosopher as: (a) the faculty/power (δύναμις) by which a *phantasma* is presented to us («εἰ δὴ ἐστὶν ἡ φαντασία καθ' ἣν λέγομεν φάντασμα τι ἡμῖν γίγνεσθαι»)², (b) the faculty/power which is not sensation (αἴσθησις), or opinion (δόξα), or knowledge (ἐπιστήμη), or intellect (νοῦς), and (c) the type of motion (κίνησις), which is generated by actual perception («ἡ φαντασία ἂν εἴη κίνησις ὑπὸ τῆς αἰσθήσεως τῆς κατ' ἐνέργειαν γιγνομένη»)³. Furthermore, I shall argue that we need to be very careful about how we interpret the word «φάντασμα» in the Aristotelian texts.

III. Finally, I shall try to demonstrate that when we study in depth the notion of *phantasia* (φαντασία), as it is described in Book III of *De Anima*, we can realize that Aristotle speaks about three and not two kinds or grades of *phantasia*.

I. Parts (Μέρη) or Faculties/Powers (Δυνάμεις) of the Soul

In Book II, Chapter 1 of *De Anima* Aristotle describes the soul as «ἐντελέχεια ἡ πρώτη σώματος φυσικοῦ ὁργανικοῦ» («the first actuality of a natural organic

¹ Aristotle, *Aristotle's De Anima in Focus*, edited by Michael Durrant (London and New York: Routledge, 1993), p. 3.

² Aristotle, *De Anima*, III, 3, 428 a 1-2.

³ *Ibid.*, III, 3, 429 a 1-2.

body»⁴. The soul is organically connected with the body. The soul is the form (μορφή or εἶδος) of the body, while the body is the matter (ὕλη) of the soul (hylomorphism). According to Aristotle, the soul is inseparable from the body. The soul and body are not two separate entities but *one* composite substance.

In addition, the philosopher distinguishes different parts (μέρια) or faculties/powers (δυνάμεις) of the soul corresponding to different kinds of living beings. These parts perform, as we shall see later in the present paper, specific functions; however they form a unified whole.

Aristotle in Book III of *De Anima* refers to an infinite number of parts of the soul:

«ἔχει δὲ ἀπορίαν εὐθὺς πῶς τε δεῖ μέρια λέγειν τῆς ψυχῆς καὶ πόσα. τρόπον γὰρ τινα ἄπειρα φαίνεται»⁵.

But which are the parts (μέρια) or faculties/powers (δυνάμεις) of the soul according to Aristotle? The Stageirite philosopher defines the soul as «τοῦτο ᾧ ζῶμεν καὶ αἰσθανόμεθα καὶ διανοούμεθα πρώτως» («that with which we primarily live, perceive and think»)⁶ and as that which is associated with the following faculties/powers (δυνάμεις). In the next passages Aristotle distinguishes three faculties of the soul:

(a) *De Generatione Animalium*, Book II, Chapter 3, 736 b 8-14:

«Τὴν μὲν οὖν θρεπτικὴν ψυχὴν⁷ τὰ σπέρματα καὶ τὰ κυήματα τὰ <ἀ>χώριστα δῆλον ὅτι δυνάμει μὲν ἔχοντα θετέον, ἐνεργείᾳ δ' οὐκ ἔχοντα, πρὶν ἢ καθάπερ τὰ χωριζόμενα τῶν κυημάτων ἔλκει τὴν τροφήν καὶ ποιεῖ τὸ τῆς τοιαύτης ψυχῆς

⁴ *Ibid.*, II, 1, 412 b 5-6. This is the last of the three general definitions of the soul outlined by Aristotle in Book II, Chapter 1 of the treatise *De Anima*. The other two are the following: (i) *Ibid.*, II, 1, 412 a 19-21: «τὴν ψυχὴν οὐσίαν εἶναι ὡς εἶδος σώματος φυσικοῦ δυνάμει ζῶν ἔχοντος», «the soul is substance in the sense of a natural body having life in potentiality» and (ii) *Ibid.*, II, 1, 412 a 21-22: «ἢ δ' οὐσία ἐντελέχεια τοιούτου ἄρα σώματος ἐντελέχεια», «And substance is actuality. Therefore it is actuality of such as this body».

⁵ Aristotle, *op. cit.*, III, 9, 432 a 22-24: «in what sense we are to speak of parts of the soul and how many they are. For in a sense their number is innumerable».

⁶ *Ibid.*, II, 2, 414 a 12-13.

⁷ The emphasis in the present paper is added.

ἔργον· πρῶτον μὲν γὰρ ἅπαντ' ἔοικε ζῆν τὰ τοιαῦτα φυτοῦ βίον. ἐπομένως δὲ δῆλον ὅτι καὶ περὶ τῆς αἰσθητικῆς λεκτέον ψυχῆς καὶ περὶ τῆς νοητικῆς»⁸

(b) *De Anima*, Book II, Chapter 4, 415 a 14-18 and Book III, Chapter 9, 432 b 6-7:

«Ἀναγκαῖον δὲ τὸν μέλλοντα περὶ τούτων σκέψιν ποιεῖσθαι λαβεῖν ἕκαστον αὐτῶν τί ἐστίν, εἴθ' οὕτως περὶ τῶν ἐχομένων καὶ περὶ τῶν ἄλλων ἐπιζητεῖν. εἰ δὲ χρὴ λέγειν τί ἕκαστον αὐτῶν, οἷον τί τὸ νοητικόν ἢ τὸ αἰσθητικόν ἢ τὸ θρεπτικόν, πρότερον ἔτι λεκτέον τί τὸ νοεῖν καὶ τί τὸ αἰσθάνεσθαι»⁹

«εἰ δὲ τρία ἢ ψυχῆ»¹⁰.

(c) *Ethica Nicomachea*, Book I, Chapter 7, 1098 a 1-5:

«ἀφοριστέον ἄρα τὴν τε θρεπτικὴν καὶ τὴν ἀνδρητικὴν ζώην. ἐπομένη δὲ αἰσθητικὴ τις ἂν εἴη· φαίνεται δὲ καὶ αὐτὴ κοινὴ καὶ ἵππῳ καὶ βοῖ καὶ παντὶ ζῳῷ. λείπεται δὲ πρακτικὴ τις τοῦ λόγου ἔχοντος· τούτου δὲ τὸ μὲν ὡς ἐπιπειθὲς λόγῳ, τὸ δ' ὡς ἔχον καὶ διανοούμενον»¹¹.

As it has been shown these faculties are: (a) the nutritive (θρεπτική), (b) the sensitive (αἰσθητική), and (c) the rational (νοητική) faculty/power of the soul.

The nutritive faculty/power (θρεπτικὴ δύναμη) of the soul, being the same as the reproductive (γεννητική) («ἐπεὶ δ' ἡ αὐτὴ δύναμις τῆς ψυχῆς θρεπτικὴ καὶ

⁸ Aristotle, *De Generatione Animalium*, II, 3, 736 b 8-14: «As regards nutritive Soul, then, it is clear that we must posit that semens and fetations which are not separated <from the parent> possess it *potentially*, though not in *actuality*—i.e., not until they begin to draw the nourishment to themselves and perform the function of nutritive Soul, as fetations which get separated <from the parent> do; for to begin with it seems that all things of this sort live the life of a plant. And it is clear we should follow a similar line also in our statements about *sentient* [or *sensitive*] Soul and *rational Soul*» trans. by A. Peck.

⁹ Aristotle, *De Anima*, II, 4, 415 a 14-18: «The enquirer who approaches this subject must ascertain what each of these faculties is before he proceeds to investigate the questions next in order and so forth. But if we are asked to state what each of these is; that is to say, what the *rational, sensitive and nutritive faculties/powers* respectively are, we must begin by stating what thinking is and what sense perception is» see R. D. Hicks.

¹⁰ *Ibid.*, III, 9, 432 b 6-7: «and if the soul is tripartite».

¹¹ Aristotle, *Ethica Nicomachea*, I, 7, 1098 a 1-5: «Let us exclude, therefore, the life of nutrition and growth. Next there would be a life of perception, but it also seems to be common even to the horse, the ox, and every animal. There remains, then, an active life of the element that has a rational principle; of this, one part has such a principle in the sense of being obedient to one, the other in the sense of possessing one and exercising thought» trans. by W. D. Ross.

γεννητική»)¹², exists in all living beings, including plants and animals. It is the first and most common faculty of the soul and is essential to all living beings. Its works are reproduction and nutrition («ή γὰρ θρεπτική ψυχή και τοῖς ἄλλοις ὑπάρχει, και πρώτη και κοινοτάτη δύναμις ἐστι ψυχῆς, καθ' ἣν ὑπάρχει τὸ ζῆν ἅπασιν. ἥς ἐστὶν ἔργα γεννῆσαι και τροφή χρῆσθαι»)¹³. It does its own work better when the animal is asleep than when it is awake¹⁴.

Next comes the sensitive faculty/power (αἰσθητική) of the soul, which exists in all animals. In plants there is no sensitive faculty/power apart from the nutritive. The sensitive part of the soul cannot exist without the nutritive, and it exists not in actuality (ἐνεργεία), but only in potentiality (δυνάμει)¹⁵.

Finally, species like man have in addition the rational (νοητικόν) or discursive (διανοητικόν) faculty/power of the soul and the mind/intellect (νοῦς):

«ἐνίοις δὲ πρὸς τούτοις ὑπάρχει και τὸ κατὰ τόπον κινητικόν, ἑτέροις δὲ και τὸ διανοητικόν τε και νοῦς, οἷον ἀνθρώποις και εἴ τι τοιοῦτον ἕτερόν ἐστιν ἢ τιμιώτερον»¹⁶.

¹² Aristotle, *De Anima*, II, 4, 416 a 19-20.

¹³ *Ibid.*, II, 4, 415 a 23-26.

¹⁴ See also Aristotle, *De Anima*, II, 2, 413 b 7-8: «θρεπτικόν δὲ λέγομεν τὸ τοιοῦτον μόριον τῆς ψυχῆς οὗ και τὰ φυόμενα μετέχει», «by the nutritive part we mean that part of the soul which is common even to plants». *Ibid.*, II, 3, 414 a 32-33: «ὑπάρχει δὲ τοῖς μὲν φυτοῖς τὸ θρεπτικόν μόνον», «plants have only the nutritive part». *Ibid.*, III, 9, 432 a 28-29: «τὸ τε θρεπτικόν, ὃ και τοῖς φυτοῖς ὑπάρχει και πᾶσι τοῖς ζώοις», «the nutritive part, which belongs to plants and to all animals». *Idem.*, *Ethica Eudemia*, II, 1, 1219 b 22-23: «ἐν τῷ ὕπνῳ γὰρ μᾶλλον ἐνεργεῖ τὸ θρεπτικόν», «for the nutritive part functions more in sleep» etc.

¹⁵ See Aristotle, *De Anima*, II, 3, 414 a 32-414 b 1: «ὑπάρχει δὲ τοῖς μὲν φυτοῖς τὸ θρεπτικόν μόνον, ἑτέροις δὲ τοῦτο τε και τὸ αἰσθητικόν», «plants have only the nutritive part, while other [living beings] have this and in addition the sensitive part». *Ibid.*, II, 3, 415 a 1-3: «ἀνευ μὲν γὰρ τοῦ θρεπτικοῦ τὸ αἰσθητικόν οὐκ ἔστιν τοῦ δ' αἰσθητικοῦ χωρίζεται τὸ θρεπτικόν ἐν τοῖς φυτοῖς», «the sensitive part does not exist without the nutritive; but in plants the nutritive part exists without the sensitive». *Ibid.*, II, 5, 417 a 6-7: «δῆλον οὖν ὅτι τὸ αἰσθητικόν οὐκ ἔστιν ἐνεργεία, ἀλλὰ δυνάμει μόνον», «it is clear that the sensitive part is in actuality not in potentiality». *Idem.*, *Ethica Eudemia*, II, 1, 1219 b 23-24: «τὸ δ' αἰσθητικόν και ὀρεκτικόν ἀτελεῖ ἐν τῷ ὕπνῳ», «the sensitive and appetitive parts are ineffective/incomplete in sleep» etc.

¹⁶ Aristotle, *De Anima*, II, 3, 414 b 16-19.

The ancient Aristotelian commentator, Philoponus, explains «διανοητικόν»¹⁷, namely the discursive faculty/power of the soul, as «δυνάμει νοῦς», namely as the «potential mind»:

«ἑτέροις καὶ τὸ διανοητικόν, ὅπερ ἐστὶ δυνάμει νοῦς, οἷον ἐν ἀνθρώποις»¹⁸.

The «potential mind» is analogous to the «passive mind», «which becomes all things» («τῷ πάντα γίνεσθαι») ¹⁹. Apart from the «potential mind» there is also the «ἐνεργεία or ἐντελεχεία νοῦς» (actuality mind), which is analogous to the «ποιητικὸς νοῦς» (active mind). So, according to the previous remarks we could say that in line 414 b 18 of *De Anima* the term «νοῦς» («mind») probably refers to the «active mind», which is the superior part of the soul. This part of the soul is strongly related to the discursive (διανοητικόν) part of the soul, and their difference is indiscernible (indistinguishable). Consequently, when Aristotle says that «others have also the discursive faculty/power and mind» («ἑτέροις δὲ καὶ τὸ διανοητικόν τε καὶ νοῦς») he probably means that: (a) the discursive faculty/power is this part of the soul where the passive mind acts, and (b) the mind is the active mind, which is the superior part of the soul²⁰.

¹⁷ *Ibid.*, II, 3, 414 b 18.

¹⁸ Ioannes Philoponus, *Aristotelis de Anima*, 15, 255, 4-5.

¹⁹ Aristotle, *op. cit.*, III, 5, 430 a 14-15. The «passive mind», which is called by Simplicius (Idem., *Aristotelis De Anima*, 11, 242, 17-18: «Ὁ τοιοῦτος ὁ ὡς ὕλη πρὸς γὰρ τὸ ἔσχατον ἀποδίδεται καὶ ὅπως ὡς ὕλη, ἐδήλωσεν, ὅτι τῷ πάντα γίνεσθαι») and Alexander of Aphrodisias (Idem., *De Anima*, 81, 24-25: «ὕλικός νοῦς καλεῖται τε καὶ ἔστι (πᾶν γὰρ τὸ δεκτικόν τινος ὕλη ἐκείνου)») as «ὕλικός νοῦς» («mind which is like matter»), is a mind which becomes all the intelligible objects («τὰ νοητά»). And since this mind is like matter, and matter as Aristotle says is identical to potentiality (Aristotle, *De Anima*, II, 1, 412 a 9: «ἔστι δ' ἡ μὲν ὕλη δύναμις»), then this mind is a «potential mind» («δυνάμει νοῦς»). This mind is receptive of the forms of the objects. It is a kind of substratum that receives the forms («εἶδη») of the intelligible objects.

²⁰ In a certain chapter of my dissertation [see Christina S. Papachristou, *The Cognitive Process in the Aristotelian Philosophy: Αἴσθησις (Sense), Αἴσθημα (Sensation), Φαντασία (Phantasia), Φάντασμα (Phantasma), Μνήμη (Memory), Μνημόνευμα (Mnemonic Image), Νοῦς (Mind), Νόημα (Noêma)*, Ph.D. Thesis (in Greek) (Thessaloniki: Aristotle University of Thessaloniki, 2008), Part 4, Ch. 3, pp. 273-300] I consider and I try to rebut several arguments that commentators have advanced in favor of the thesis that in *De Anima*, III, 5 Aristotle is referring to two distinct minds, which correspond to the human (παθητικὸς νοῦς) and the active mind (ποιητικὸς νοῦς), which is analogous, as certain Aristotelian scholars believe, to the divine mind. Besides that, I argue that this

Aristotle in lines 413 b 11-13 determines the soul according to the following faculties/powers, the nutritive, sensitive, discursive and locomotive:

«νῦν δ' ἐπὶ τοσοῦτον εἰρήσθω μόνον, ὅτι ἐστὶν ἡ ψυχὴ τῶν εἰρημένων τούτων ἀρχὴ καὶ τούτοις ὄρισται, θρεπτικῶ, αἰσθητικῶ, διανοητικῶ, κινήσει»²¹.

As we can see in this passage, the philosopher adds another part or faculty of the soul, the locomotive (κίνησις ⇒ κινήτικόν κατὰ τόπον). This faculty is related to the local movement of animals and is also described as the «progressive motion» («πορευτικὴ κίνησις»):

«τί τὸ κινουῖν κατὰ τόπον τὸ ζῶον ἐστίν;...ἀλλὰ περὶ τῆς κατὰ τόπον κινήσεως, τί τὸ κινουῖν τὸ ζῶον τὴν πορευτικὴν κίνησιν, σκεπτέον»²².

In lines 414 a 31-32 Aristotle adds another faculty of the soul, the appetitive (ὄρεκτικόν):

«δυνάμεις δ' εἴπομεν θρεπτικόν, ὄρεκτικόν²³, αἰσθητικόν, κινήτικόν κατὰ τόπον, διανοητικόν»²⁴.

And in lines 414 b 1-2 he says that:

division is related to the duality of a single mind, and I put forward the view that this distinction could find its parallel in the distinction between the physical brain (the physical and biological matter contained within the skull) and the energetic function of thought [Charalambos S. Ierodiakonou, *Psychological Issues in the Writings of Aristotle* (in Greek) (Thessaloniki: Mastorides, 2004), p. 243]. Cf. also Christina S. Papachristou, «The Puzzling Role of the Brain in Aristotle's Theory of Sense Perception», herausgeber von Jochen Althoff, Sabine Föllinger, Georg Wöhrle, *Antike Naturwissenschaft und ihre Rezeption*, Band XVIII (Trier: Wissenschaftlicher Verlag, 2008), pp. 18-19.

²¹ Aristotle, *De Anima*, II, 2, 413 b 11-13.

²² *Ibid.*, III, 9, 432 b 8-14.

²³ See *Ibid.*, III, 9, 432 b 3-4, «πρὸς δὲ τούτοις τὸ ὄρεκτικόν, ὃ καὶ λόγῳ καὶ δυνάμει ἕτερον ἂν δόξειεν εἶναι πάντων», «In addition to these there is the *appetitive faculty*, which would seem to be different from all both in concept and in potentiality». *Ibid.*, III, 10, 433 a 21: «ἐν δὲ τι τὸ κινουῖν τὸ ὄρεκτικόν», «Thus that which produces movement is one in kind, *the appetitive faculty*». *Ibid.*, III, 10, 433 b 27-29: «ὅλως μὲν οὖν, ὥσπερ εἴρηται, ἡ ὄρεκτικόν τὸ ζῶον, ταύτη ἑαυτοῦ κινήτικόν· ὄρεκτικόν δὲ οὐκ ἄνευ φαντασίας», «thus, in general, as we have already said, the animal is capable of movement itself so far as it is *appetitive* and it cannot be *appetitive* without imagination». Idem., *Ethica Eudemia*, II, 1, 1219 b 23-24: «τὸ δ' αἰσθητικόν καὶ ὄρεκτικόν ἀτελῆ ἐν τῷ ὕπνῳ», «the sensitive and *appetitive* parts are ineffective/incomplete in sleep» etc.

²⁴ Aristotle, *De Anima*, II, 3, 414 a 31-32.

«εἰ δὲ τὸ αἰσθητικόν, καὶ τὸ ὀρεκτικόν· ὄρεξις μὲν γὰρ ἐπιθυμία καὶ θυμὸς καὶ βούλησις»²⁵.

The previous remark allows us to assert that the appetitive power (ὀρεκτικόν) is part of the sensitive power (αἰσθητικόν) or that the possession of the sensitive faculty involves the possession of the appetitive faculty. In other words, ὀρεκτικόν belongs to everything that has sensation.

Elsewhere, specifically in lines 432 b 3-6, Aristotle says:

«πρὸς δὲ τούτοις τὸ ὀρεκτικόν, ὃ καὶ λόγῳ καὶ δυνάμει ἕτερον ἂν δόξειεν εἶναι πάντων. καὶ ἄτοπον δὴ τὸ τοῦτο διασπᾶν· ἐν τε τῷ λογιστικῷ γὰρ ἡ βούλησις γίνεται, καὶ ἐν τῷ ἀλόγῳ ἡ ἐπιθυμία καὶ ὁ θυμὸς»²⁶

Therefore, the philosopher remarks here that the appetitive faculty is both rational (ἡ βούλησις, namely wish) and irrational (ἡ ἐπιθυμία καὶ ὁ θυμὸς, namely desire and spiritedness).

Aristotle in lines 432 a 28- 432 b 4 adds another part of the soul, the imaginative (φανταστικόν)²⁷, which is distinct from the other parts (μέρη) or faculties (δυνάμεις), and it is difficult to say with which of the parts it is identical or not:

²⁵ *Ibid.*, II, 3, 414 b 1-2: «and if any class of living things has the sensitive [faculty/power] it must also have the appetitive; where under appetite we include desire, spiritedness and wish».

²⁶ *Ibid.*, III, 9, 432 b 3-6: «In addition to these there is the appetitive faculty, which would seem to be different from all both in concept and in potentiality. And it is absurd to separate this; For in the rational part of the soul corresponds wish and in the irrational part of the soul desire and spiritedness».

²⁷ See Aristotle, *De Insomniis et De Divinatione per Somnum*, I, 458 b 29-31: «ἀλλ' εἴτε δὴ ταῦτον εἶθ' ἕτερον τὸ φανταστικόν τῆς ψυχῆς καὶ τὸ αἰσθητικόν, οὐδὲν ἦττον οὐ γίνεται ἄνευ τοῦ ὄραν καὶ αἰσθάνεσθαί τι», «But whether *the imaginative faculty* of the soul and the sensitive are the same or different, nevertheless the affection does not occur without our seeing or perceiving something». *Ibid.*, I, 459 a 14-22: «ἐπεὶ δὲ περὶ φαντασίας ἐν τοῖς περὶ ψυχῆς εἴρηται, καὶ ἔστι μὲν τὸ αὐτὸ τῷ αἰσθητικῷ τὸ φανταστικόν, τὸ δ' εἶναι φανταστικῷ καὶ αἰσθητικῷ ἕτερον, ἔστι δὲ φαντασία ἡ ὑπὸ τῆς κατ' ἐνέργειαν αἰσθήσεως γινομένη κίνησις, τὸ δ' ἐνύπνιον φάντασμα τι φαίνεται εἶναι (τὸ γὰρ ἐν ὕπνῳ φάντασμα ἐνύπνιον λέγομεν, εἶθ' ἀπλῶς εἴτε τρόπον τινὰ γινόμενον), φανερόν ὅτι τοῦ αἰσθητικοῦ μὲν ἔστι τὸ ἐνυπνιάζειν, τούτου δ' ἡ φανταστικόν», «And since *phantasia* has been discussed in [the treatise] on the soul, and *the imaginative faculty* is the same as the sensitive, though their function is different for the *imaginative* and the sensitive; and *phantasia* is the movement produced by the active sense, and the dream appears to be a kind of *phantasma* (for a *phantasma* which appears in sleep, is what we call a dream, whether it occurs simply or in a particular way), it is obvious that dreaming is the work of the sensitive faculty, but belongs to this faculty qua *imaginative*» see D. Gallop.

«περὶ ὧν καὶ νῦν εἴρηται, τό τε θρεπτικόν, ὃ καὶ τοῖς φυτοῖς ὑπάρχει καὶ πᾶσι τοῖς ζώοις, καὶ τὸ αἰσθητικόν, ὃ οὔτε ὡς ἄλογον οὔτε ὡς λόγον ἔχον θεῖη ἂν τις ῥαδίως. ἔτι δὲ τὸ φανταστικόν, ὃ τῷ μὲν εἶναι πάντων ἕτερον, τίνι δὲ τούτων ταῦτόν ἢ ἕτερον, ἔχει πολλήν ἀπορίαν, εἴ τις θήσει κεχωρισμένα μόρια τῆς ψυχῆς. πρὸς δὲ τούτοις τὸ ὀρεκτικόν, ὃ καὶ λόγῳ καὶ δυνάμει ἕτερον ἂν δόξειεν εἶναι πάντων»²⁸.

Consequently, according to the previous analysis, the parts (μόρια) or faculties (δυνάμεις) of the soul—«with an order of succession within...living beings...going from the most widely shared to the less widely shared capacities»²⁹—can be summed up in the following table:

| Aristotle's Division of the Parts or Faculties/Powers of the Soul |
|--|
| 1. Nutritive (Θρεπτικόν) or Reproductive (Γεννητικόν) |
| 2. Appetitive (desire, spiritedness, wish) [Ὀρεκτικόν (ἐπιθυμία, θυμός, βούλησις)] |
| 3. Sensitive (Αἰσθητικόν) |
| 4. Locomotive/Motive according to place (Κινητικόν κατὰ τόπον) |
| 5. Imaginative (Φανταστικόν) |
| 6. (a) Rational (Νοητικόν) or Discursive (Διανοητικόν) ³⁰ ⇒ Passive Mind (Παθητικός Νοῦς) |

²⁸ Aristotle, *De Anima*, III, 9, 432 a 28-432 b 4: «those [parts] which we have just discussed, the nutritive, which belongs both to plants and to all animals, and the sensitive, which could not easily be classed either as irrational or rational. There is also the imaginative, which is different from all of them, while it is very difficult to say with which of them it is identical or not identical, if someone will set up separate parts of the soul. In addition to these there is the appetitive, which would seem to be different from all both in concept and in potentiality».

²⁹ Ronald Polansky (ed.), *Aristotle's De Anima: A Critical Commentary* (Cambridge, New York: Cambridge University Press, 2007), p. 9.

³⁰ For a useful analysis of the meanings νοητικόν and διανοητικόν cf. Klaus Oehler, *Die Lehre vom Noetischen und Dianoetischen Denken bei Platon und Aristoteles: Ein Beitrag zur Erforschung der*



(b) Mind (Νοῦς) ⇒ the Active Mind (Ποιητικὸς Νοῦς) acts on the Passive Mind

Table 1

II. *Phantasia* (Φαντασία) and *Phantasma* (Φάντασμα) in *De Anima III*, 3³¹

It is generally agreed that Aristotle analyses the function of *phantasia* (φαντασία)³² and its relation to *phantasmata* (φάντασμα) in his psychological treatises³³. *Phantasia* (φαντασία)³⁴ is the main subject of discussion in *De Anima III*, 3³⁵.

Geschichte des Bewusstseinsproblems in der Antike (München: Zetemata, Heft 29, C. H. Beck, 1962), pp. 131-244.

³¹ An earlier version of this topic was presented at the 35th Annual Conference of the Panhellenic Association of Philologist: *Aristotle: Leading Teacher and Thinker* (October 6-8, 2008, Benaki Museum, Athens). Cf. Christina S. Papachristou, «The Influence of the Aristotelian Theory of *Phantasia* in the Stoic Philosophy and in the Scientific Work of George J. Romanes» (in Greek), in Anastasios Stephos – Spiros Touliatos (eds.), *Seminar 36: Aristotle: Leading Teacher and Thinker*, (Athens: Ellinoekdotiki, Panhellenic Association of Philologist, 2009), pp. 72-89.

³² Even though the Greek word '*phantasia*' is usually translated it as 'imagination', I prefer to leave the word untranslated. I believe that the word 'imagination' does not convey Aristotle's notion of '*phantasia*' as honestly and as understandably as possible.

³³ Aristotle's psychological treatises are *De Anima* (Περὶ Ψυχῆς) and *Parva Naturalia* (Μικρὰ Φυσικά). The *Parva Naturalia* is a collection of short treatises: (1) *De Sensu et Sensibilibus* (Περὶ Αἰσθήσεως καὶ Αἰσθητῶν). (2) *De Memoria et Reminiscentia* (Περὶ Μνήμης καὶ Αναμνήσεως). (3) *De Somno et Vigilia* (Περὶ ὕπνου καὶ Ἐγρηγόρσεως). (4) *De Insomniis* (Περὶ Ἐνυπνίων). (5) *De Divinatione per Somnum* (Περὶ τῆς Καθ' ὕπνου Μαντικῆς). (6) *De Longitudine et Brevitate Vitae* (Περὶ Μακροβιότητος καὶ Βραχυβιότητος). (7) *De Iuventute et Senectute* (Περὶ Νεότητος καὶ Γήρωος). (8) *De Vita et Morte* (Περὶ Ζωῆς καὶ Θανάτου). (9) *De Respiratione* (Περὶ Ἀναπνοῆς). In addition the Stageirite philosopher investigates briefly several psychological phenomena in his political [e.g. *Politica* (Πολιτικά)], metaphysical [e.g. *Metaphysica* (Μετὰ τὰ Φυσικά)], ethical [e.g. *Ethica Nicomachea* (Ἠθικά Νικομάχεια)], and biological [e.g. *De Motu Animalium* (Περὶ Ζῴων Κινήσεως)] treatises.

³⁴ Some indicative readings for the Aristotelian notion of *phantasia* are listed below: Jakob Freudenthal, *Ueber den Begriff des Wortes Φαντασία bei Aristoteles* (Göttingen: 1863). David A. Rees, «Aristotle's Treatment of Φαντασία», in J. P. Anton and G. L. Kustas (eds.), *Essays in Ancient Greek Philosophy*, (Albany, New York: State University of New York Press, 1971), pp. 491-504. Malcolm Schofield, «Aristotle on Imagination», in G. E. R. Lloyd and G. E. L. Owen (eds.), *Aristotle on Mind and the Senses: Proceedings of the Seventh Symposium Aristotelicum* [Cambridge: Cambridge University Press, 1978 (1975¹)], pp. 99-140. Joyce Engmann, «Imagination and Truth in Aristotle», *Journal of the History of Philosophy* 14 (1976): pp. 259-65. Martha C. Nussbaum, «The Role of

«εἰ δὴ ἔστιν ἡ φαντασία καθ' ἣν λέγομεν φάντασμα τι ἡμῖν γίγνεσθαι»³⁶.

According to the contemporary view of 'imagination' – *phantasia* – we define 'imagination' as the capacity or power of the mind to create, to recombine or reproduce and to call up mental images of objects, events, faces or scenes, which are not present to the senses³⁷.

Aristotle's concept of *phantasia* in comparison to the contemporary concept of 'imagination' has a wider meaning. David Ross, in his book entitled *Aristotle*, lists the main functions of *phantasia* as: (a) the formation of after-images; (b) memory (μνήμη); (c) recollection (ἀνάμνησις); (d) dreams (ἐνύπνια); (e) in relation to desire (ἐπιθυμία); (f) in relation to thought (τὸ νοητικόν)³⁸.

According to Malcolm Schofield «it was Aristotle who gave the first extended analytical description of imagining as a distinct faculty of the soul»³⁹ [imaginative part (τὸ φανταστικὸν μέρος)], which cannot be independent of the body:

Phantasia in Aristotle's Explanation of Action», in *Aristotle's De Motu Animalium: Text with Translation, Commentary, and Interpretative Essays* by Martha C. Nussbaum (Princeton, New Jersey: Princeton University Press, 1978), pp. 221-269. Kevin White, «The Meaning of *Phantasia* in Aristotle's *De Anima*, III, 3-8», *Dialogue* 24 (1985): pp. 483-505. Deborah K. W. Modrak, «Phantasia Reconsidered», *Archiv für Geschichte der Philosophie* 66 (1986): pp. 47-69. Michael V. Wedin, *Mind and Imagination in Aristotle* (New Haven and London: Yale University Press, 1988). Dorothea Frede, «The Cognitive Role of *Phantasia* in Aristotle», in M. C. Nussbaum and A. O. Rorty (eds.), *Essays on Aristotle's De Anima*, [Oxford: Clarendon Press, 1996 (1992¹)], pp. 279-295. Victor Caston, «Why Aristotle Needs Imagination», *Phronesis* 41, Number 1 (1996): pp. 20-55. Kenneth Turnbull, «De Anima iii 3*», in L. P. Gerson (ed.), *Aristotle: Critical Assessments, Vol. I: Psychology and Ethics*, (London and New York: Routledge, 1999), pp. 83-120 etc.

³⁵ Castoriadis argues that «Aristotle discovers the imagination philosophically – *phantasia* – but what he says about it thematically, when he treats it *ex professo* (fixing the imagination in its alleged place, between sensation, of which it would be a reproduction, and intellection, thereby governing for 25 centuries what everybody thinks about it) is of little consequence next to what he has truly to say about it, which he says elsewhere, and which he has no way of reconciling with what he thinks about *phusis*, the soul, thinking and being». See Cornelius Castoriadis, *The Imaginary Institution of Society*, translated by Kathleen Blarney [Cambridge: MIT Press, 1998 (1975¹)], pp. 174-175.

³⁶ Aristotle, *De Anima*, III, 3, 428 a 1-2: «*phantasia* is the faculty/power by which a *phantasma* [(mental) representation] is presented to us».

³⁷ See Ted Honderich (ed.), *The Oxford Companion to Philosophy* (Oxford, New York: Oxford University Press, 1995), p. 395.

³⁸ See Sir David Ross, *Aristotle*, with a new introduction by John L. Ackrill [New York: Routledge, 1995 (1923¹)], pp. 90-91.

³⁹ Malcolm Schofield, «Aristotle on Imagination», in G. E. R. Lloyd and G. E. L. Owen (eds.), *Aristotle on Mind and the Senses: Proceedings of the Seventh Symposium Aristotelicum* [Cambridge: Cambridge University Press, 1978 (1975¹)], p. 99.

«μάλιστα δ' ἔοικεν ἴδιον τὸ νοεῖν· εἰ δ' ἔστι καὶ τοῦτο φαντασία τις ἢ μὴ ἄνευ φαντασίας, οὐκ ἐνδέχουσιν ἂν οὐδὲ τοῦτ' ἄνευ σώματος εἶναι»⁴⁰.

Aristotle remarks that *phantasia* (φαντασία) is different from sensation (αἴσθησις), and thought (διάνοια)⁴¹. And that means that Aristotle's conception of *phantasia* differs from that of Plato's *Sophist*. In other words, *phantasia* for Aristotle is not «a mixture of sensation and judgement» («σύμμιξις αἰσθήσεως καὶ δόξης»), as Plato believed⁴². Also the Stageirite philosopher asserts that *phantasia* (φαντασία) is a kind of motion (κίνησις) in the soul that cannot exist apart from sensation (αἴσθησις) —it is caused by the activity of sensation⁴³— and supposition (ὑπόληψις), and the term 'ὑπόληψις', as Philoponus notes, includes «knowledge, right thinking/practical wisdom and opinion» («ὑπόληψις κατ' ἐπιστήμης καὶ φρονήσεως καὶ δόξης λέγεται»)⁴⁴. *Phantasia*, according to Aristotle, is an affection (πάθος) and «this affection is in our own power whenever we wish». So, it is up to us to imagine, but it is not up to us to believe, «for the belief that we hold must be either false or true»:

«φαντασία γὰρ ἕτερον καὶ αἰσθήσεως καὶ διανοίας· αὐτὴ τε οὐ γίγνεται ἄνευ αἰσθήσεως, καὶ ἄνευ ταύτης οὐκ ἔστιν ὑπόληψις⁴⁵. ὅτι δ' οὐκ ἔστιν ἢ αὐτὴ νόησις

⁴⁰ Aristotle, *De Anima*, I, 1, 403 a 8-10: «Thinking seems to be peculiar to the soul; But if thinking is a kind of *phantasia*, then it would not be possible even for thinking to be independent of the body».

⁴¹ *Ibid.*, III, 3, 427 b 14-15.

⁴² See Plato, *Sophist*, 264 a 4-264 b 3: «{ΞΕ.} Τὶ δ' ὅταν μὴ καθ' αὐτὸ ἀλλὰ δι' αἰσθήσεως παρῆ τι, τὸ τοιοῦτον αὖ πάθος ἄρ' οἷόν τε ὀρθῶς εἰπεῖν ἕτερόν τι πλὴν φαντασίαν; {ΘΕΑΙ.} Οὐδέν. {ΞΕ.} Οὐκοῦν ἐπέπερ λόγος ἀληθῆς ἦν καὶ ψευδῆς, τούτων δ' ἐφάνη διάνοια μὲν αὐτῆς πρὸς ἑαυτὴν ψυχῆς διάλογος, δόξα δὲ διανοίας ἀποτελεῦτησις, «φαίνεται» δὲ ὁ λέγομεν σύμμιξις αἰσθήσεως καὶ δόξης, ἀνάγκη δὴ καὶ τούτων τῷ λόγῳ συγγενῶν ὄντων ψευδῆ [τε] αὐτῶν ἕνια καὶ ἐνίοτε εἶναι».

⁴³ Aristotle, *De Anima*, III, 3, 428 b 11-13: «ἢ δὲ φαντασία κίνησις τις δοκεῖ εἶναι καὶ οὐκ ἄνευ αἰσθήσεως γίγνεσθαι ἀλλ' αἰσθανομένοις καὶ ὧν αἴσθησις ἔστιν». *Ibid.*, III, 3, 429 a 1-2. *Phantasia* is a type of motion that arises by actual sensation. Sensation is activated by the presence of the external object.

⁴⁴ Ioannes Philoponus, *Aristotelis de Anima*, 15, 492, 12.

⁴⁵ The term «ὑπόληψις» has puzzled many Aristotelian scholars. For example Philoponus, as we have already noticed, says that «ὑπόληψις κατ' ἐπιστήμης καὶ φρονήσεως καὶ δόξης λέγεται». Robert D. Hicks notices that «ὑπόληψις» and «διάνοια» are closely related, «for in 429 a 23

καὶ ὑπόληψις, φανερόν. τοῦτο μὲν γὰρ τὸ πάθος ἐφ' ἡμῖν ἐστίν, ὅταν βουλόμεθα⁴⁶ (πρὸ ὀμμάτων γὰρ ἔστι τι ποιήσασθαι, ὥσπερ οἱ ἐν τοῖς μνημονικοῖς τιθέμενοι καὶ εἰδωλοποιοῦντες)⁴⁷, δοξάζειν δ' οὐκ ἐφ' ἡμῖν ἀνάγκη γὰρ ἢ ψεύδεσθαι ἢ ἀληθεύειν⁴⁸.

In this passage it is important the phrase «πρὸ ὀμμάτων γὰρ ἔστι τι ποιήσασθαι»⁴⁹, which means our ability to voluntarily («ὅταν βουλόμεθα») set before our eyes mental images, as do those who use memorization techniques, which are based on sight and the powers of visualization. Therefore, *phantasia* in the above passage seems to be associated or even identified with *visual imagery*, that is, the

ὑπολαμβάνει is obviously added to explain διανοεῖται [«(λέγω δὲ νοῦν ᾧ διανοεῖται καὶ ὑπολαμβάνει ἢ ψυχῇ)»]...The term ὑπόληψις is not a technical term, and is chosen here because it will include ἐπιστήμη, δόξα, and φρόνησις» [see Aristotle, *De Anima*, with translation, introduction and notes by Robert D. Hicks [New York: Arno Press, 1976 (1907¹)], p. 457]. David W. Hamlyn asserts that the word ὑπόληψις «is a difficult word to translate since it appears to express a very general notion which functions somewhat as the notion of judgement did in the writings of the Absolute Idealists...» [see Aristotle, *De Anima, Books II and III* (with certain passages from Book I), translated with introduction and notes by D. W. Hamlyn, Clarendon Aristotle Series (Oxford: Clarendon Press, 1968), p. 130]. David W. Hamlyn and Ronald Polansky [see Ronald Polansky, *op. cit.*, 2007), p. 411] translate the word ὑπόληψις as «supposition». For further discussion and definition of the term «ὑπόληψις» see Françoise Caujolle-Zaslavsky, «L' Emploi d' Hupolèpsis dans le *De Anima*, III, 3», sous la direction de Gilbert Romeyer-Dherbey, études réunies par Cristina Viano, *Corps et Âme: Sur le De Anima d' Aristote* (Paris: J. Vrin, 1996), pp. 349-365.

⁴⁶ Aristotle in lines 427 b 17-18 of the treatise *De Anima* says that «this affection [namely *phantasia*] is in our power, whenever we wish». But Aristotle's concept of *phantasia* is connected not only with mental images formed in the course of waking thought, but also with dream images (ἐνύπνια) formed while we are asleep. And while we are asleep, as Aristotle remarks, perception and judgement do not occur. Therefore, dream images, which are one of the works of *phantasia*, do not occur whenever we wish (see *De Insomniis*, I, 459 a 15-23 and III, 462 a 27-31).

⁴⁷ Aristotle by the phrase «those who set things out in mnemonic systems» («οἱ ἐν τοῖς μνημονικοῖς τιθέμενοι») he probably means those who used Mnemonics, the mnemonic art, which was invented by a Greek lyric poet, Simonides of Ceos (556-469 B.C.).

⁴⁸ Aristotle, *De Anima*, III, 3 427 b 14-21: «Because *phantasia* is different from sensation and thought; this [namely *phantasia*] cannot exist apart from sensation and supposition. It is manifest that [*phantasia*] is not the same kind of thinking as supposal. For this affection is in our own power whenever we wish (for it is possible to represent an object before our eyes, as do those who set things out in mnemonic systems and form [mental] images of them), but believing/forming opinions is not in our own power; For it is necessary to be either false or true».

⁴⁹ Vasileios Tatakis translates the passage «πρὸ ὀμμάτων γὰρ ἔστι τι ποιήσασθαι» as «for it is possible to represent an object before the soul's eye». He justifies the translation of «πρὸ ὀμμάτων» as «before the soul's eye» by citing the passage «ἢ δ' ἔξις τῷ ὀμματι τούτῳ γίνεται τῆς ψυχῆς», namely, «and this eye of the soul acquires its formed state» (*Ethica Nicomachea*, VI, 13, 1144 a 29-30).

ability to form mental images, or to 'see with the mind's eye'. For example, if someone asks us to describe in detail a lion that is not physically present, we will probably find ourselves 'looking at' or 'visualizing' lions with 'our mind's eye'.

Moreover, I would like to note that we should be very careful about how we interpret the product of the faculty of *phantasia*, φάντασμα, in the Aristotelian texts. My suggestion is that the word «φάντασμα», which is mentioned twelve times in *De Anima*⁵⁰, may conveniently and aptly be translated as: (a) «representation» or «image» in contexts where «φάντασμα» is related only with the faculty of *phantasia* (e.g. «εἰ δὴ ἐστὶν ἡ φαντασία καθ' ἣν λέγομεν φαντασμά τι ἡμῖν γίνεσθαι»)⁵¹, and (b) as «mental representation» or «mental image», when «φάντασμα» is described by the philosopher as the substratum upon which the mind works (e.g. «(διὸ οὐδέποτε νοεῖ ἄνευ φαντάσματος ἢ ψυχῆ)»)⁵².

III. Indefinite/Indeterminate (Ἄοριστος), Sensitive (Αἰσθητική) and Calculative or Deliberative (Λογιστική or Βουλευτική) Phantasia (Φαντασία)

On the basis of Aristotle's discussion concerning the role and function of *phantasia* in certain chapters and passages of the treatise *De Anima*, we could say that

⁵⁰ The word «φάντασμα» is mentioned twelve times in the treatise *De Anima*. See Aristotle, *De Anima*, III, 3, 428 a 1-2: «εἰ δὴ ἐστὶν ἡ φαντασία καθ' ἣν λέγομεν φαντασμά τι ἡμῖν γίνεσθαι». *Op. cit.*, III, 7, 431 a 14-17: «τῇ δὲ διανοητικῇ ψυχῇ τὰ φαντάσματα οἷον αἰσθήματα ὑπάρχει. ὅταν δὲ ἀγαθὸν ἢ κακὸν φήσῃ ἢ ἀποφήσῃ, φεύγει ἢ διώκει (διὸ οὐδέποτε νοεῖ ἄνευ φαντάσματος ἢ ψυχῆ)». *Op. cit.*, III, 7, 431 b 2-8: «τὰ μὲν οὖν εἶδη τὸ νοητικὸν ἐν τοῖς φαντάσμασι νοεῖ, καὶ ὡς ἐν ἐκείνοις ὄρισται αὐτῶ τὸ διωκτὸν καὶ φευκτὸν, καὶ ἐκτὸς τῆς αἰσθήσεως, ὅταν ἐπὶ τῶν φαντασμάτων ἢ, κινεῖται οἷον αἰσθανόμενος τὸν φουκτὸν ὅτι πῦρ, [τῇ κοινῇ] γνωρίζει, ὁρῶν κινούμενον, ὅτι πολέμιος. ὅτε δὲ τοῖς ἐν τῇ ψυχῇ φαντάσμασιν ἢ νοήμασιν ὥσπερ ὁρῶν λογίζεται καὶ βουλευέται τὰ μέλλοντα πρὸς τὰ παρόντα». *Op. cit.*, III, 8, 432 a 8-14: «ὅταν τε θεωρῇ, ἀνάγκη ἅμα φαντάσματι θεωρεῖν τὰ γὰρ φαντάσματα ὥσπερ αἰσθήματά ἐστι, πλὴν ἄνευ ὕλης. ἔστι δ' ἡ φαντασία ἕτερον φάσεως καὶ ἀποφάσεως· συμπλοκὴ γὰρ νοημάτων ἐστὶ τὸ ἀληθές ἢ ψεῦδος. τὰ δὲ πρῶτα νοήματα τίνι διοίσει τοῦ μὴ φαντάσματα εἶναι; ἢ οὐδὲ τὰλλα φαντάσματα, ἀλλ' οὐκ ἄνευ φαντασμάτων». *Op. cit.*, III, 11, 434 a 9-10: «ὥστε δύναται ἐν ἐκ πλειόνων φαντασμάτων ποιεῖν».

⁵¹ Aristotle, *op. cit.*, III, 3, 428 a 1-2.

⁵² *Ibid.*, III, 7, 431 a 16-17.

the philosopher distinguishes three kinds or grades of *phantasia* (φαντασία): (a) indefinite/indeterminate (ἀόριστος), (b) sensitive (αἰσθητική) and (c) calculative (λογιστική) or deliberative (βουλευτική) *phantasia*. Let us now examine each one of these kinds or grades of *phantasia* in more detail.

(a) Indefinite/Indeterminate *Phantasia* (Ἀόριστος Φαντασία)

«Σκεπτέον δὲ καὶ περὶ τῶν ἀτελῶν, τί τὸ κινουῦν ἐστίν, οἷς ἀφ᾽ ἑνὸς ὑπάρχει αἰσθησις, πότερον ἐνδέχεται φαντασίαν ὑπάρχειν τούτοις, ἢ οὐ...φαντασία δὲ πῶς ἂν ἐνείη; ἢ ὥσπερ καὶ κινεῖται ἀορίστως, καὶ ταῦτ' ἐνεστι μὲν, ἀορίστως δ' ἔνεστιν»⁵³.

Certain Aristotelian commentators have interpreted the passage cited above as follows: Themistius explains that imperfect animals (τὰ ἀτελέστερα ζῶα), which are the lowest forms of animals, have *phantasia*, but in an inarticulate (ἀδιάρθρωτον) and confused (συγκεχυμένην) way:

«φαντάζεται ἀορίστως, ὥστε ἔχει μὲν φαντασίαν, ἀδιάρθρωτον δὲ καὶ συγκεχυμένην»⁵⁴.

Philoponus says that zoophytes (animals that resemble plants)⁵⁵ have an indefinite kind of *phantasia*, because the movements of these creatures are indeterminate:

«ἐν τοῖς ζωοφύτοις, φησὶν, ἀορίστως ἐστὶν ἡ φαντασία, ὡς δηλοῖ τὸ ἀόριστον τῆς κινήσεως αὐτῶν. ἀόριστον δὲ καλεῖ τῶν ζωοφύτων τὴν κίνησιν διὰ τὸ μὴ ὁμοίως συστέλλεσθαι τε καὶ διαστέλλεσθαι, ἀλλὰ ποτε μὲν μᾶλλον, ποτὲ δὲ ἥττον· ἢ ἀορίστως λέγει ἀντὶ τοῦ ἀμυδροῦς καὶ πεπλανημένως»⁵⁶.

⁵³ *Ibid.*, III, 11, 433 b 31-434 a 5: «We must also consider what it is that produces movement in the imperfect animals, which have no sense but touch, whether they have *phantasia* or not,... But how could they have *phantasia*? Or is it that as their movements are indefinite/indeterminate, they have *phantasia*...but indefinitely?» based on D. W. Hamlyn's translation, but with some alterations.

⁵⁴ Themistius, *Libros Aristotelis de Anima Paraphrasis*, 5, 3, 122, 11-12: «they imagine indeterminately, and so they have *phantasia*, but in an inarticulate and confused form».

⁵⁵ Zoophytes or animal plants, such as corals, sea anemones and sponges, molluscs etc. are the lowest forms of animals.

⁵⁶ Philoponus, *Aristotelis de Anima*, 15, 592, 26-29.

Thomas Aquinas explains that imperfect animals (*animalia imperfecta*) possess an indeterminate *phantasia* (*phantasia indeterminata*). This *phantasia* is indeterminate because the motion of *phantasia* (*motus phantasiae*) does not remain in this kind of creatures after the sense object is gone:

«Videtur tamen hoc esse contrarium ei quod supra dixerat: quia si pars decisa habet sensum et appetitum, habet etiam phantasiam; si tamen phantasia est idem cum imaginatione, ut videtur. Dicendum est igitur, quod animalia imperfecta, ut in tertio dicitur, habent quidem phantasiam, sed indeterminatam, quia scilicet motus phantasiae non remanet in eis post apprehensionem sensus: in animalibus autem perfectis remanet motus phantasiae, etiam abeuntibus sensibilibus. Et secundum hoc, dicitur hic quod imaginatio non est eadem omnibus animalibus. Sed quaedam animalia sunt, quae hac sola vivunt, carentia scilicet intellectu, et directa in suis operationibus per imaginationem, sicut nos dirigimur per intellectum»⁵⁷.

From the above analysis we conclude that imperfect or indefinite creatures, which have no sense except that of touch⁵⁸, possess an indefinite/indeterminate kind of *phantasia*. Representations of touch⁵⁹ (*phantasmata*) or tactile representations are the products of this kind of *phantasia*. In imperfect animals tactile representations are usually diffuse and indefinite, and do not remain in them, after the sense object is gone⁶⁰ (see *table 2*).

⁵⁷ Sancti Thomae de Aquino, *Corpus Thomisticum. Sententia Libri De Anima, Liber II*, textum Taurini 1959 editum ac automato translatum a Roberto Busa SJ in taenias magneticas denuo recognovit Enrique Alarcón atque instruxit <<http://www.corpusthomicum.org/can2.html>>: «Nevertheless, this seems to be contrary to what he said above; because if a part cut off has sense and appetite, it also has phantasy; provided that phantasy is the same as imagination, as it seems. It must be said, therefore, that imperfect animals, as is said in the third book, do really have phantasy, but it is one which is indeterminate because the motion of phantasy does not remain in them after the apprehension of the sense; however in perfect animals the motion of phantasy remains even after the sensible thing is gone. And according to this it is said here that imagination is not the same for all animals. But there are certain animals which live by this alone, lacking the intellect and being directed in their operations by imagination, just as we are directed by the intellect» trans. by R. A Kocourek.

⁵⁸ Imperfect creatures cannot sense objects at a distance, but only the percepts of touch. Polansky asserts that the word «ἀφῆ in 434 a 1 may apply to both [touch and taste]» [see Ronald Polansky, *op. cit.*, p. 527].

⁵⁹ I translate *phantasmata* that are generated by the sense of touch, as representations of touch or tactile representations. The same applies to the rest of the senses, e.g. representations of taste, sight, smell and hearing.

⁶⁰ They lack the capacity for retaining sensory impressions (*phantasmata*).

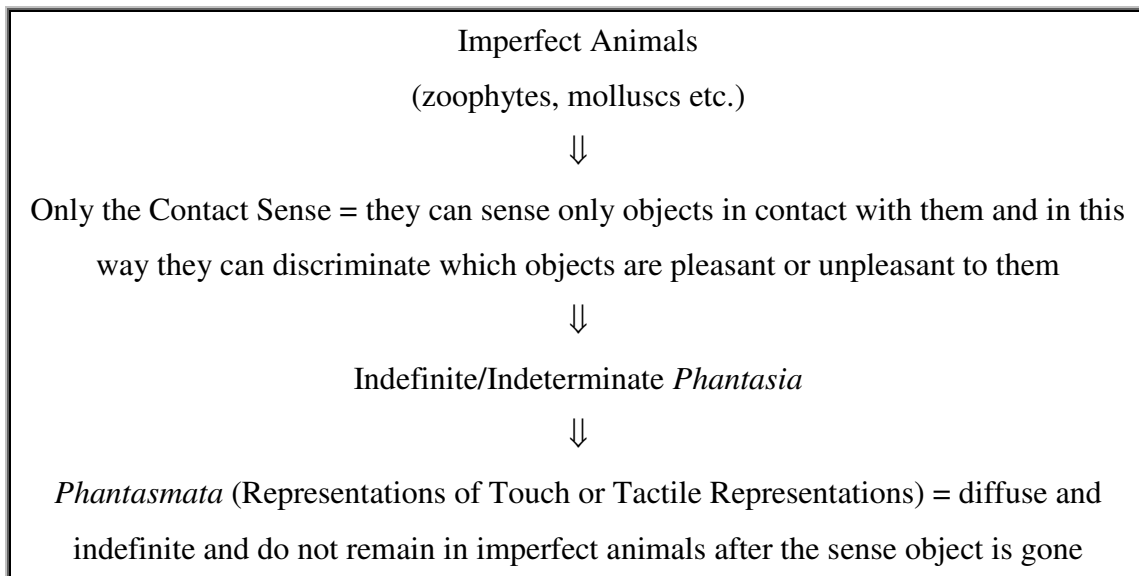


Table 2

(b) Sensitive *Phantasia* (Αισθητική Φαντασία)

Regarding the next kind or grade of *phantasia*, we should remark the following: Aristotle says that *sensitive phantasia* is generated by sense perception (αισθάνεσθαι). It does not occur without sense perception. Such kind of *phantasia* is found in all animals other than man (see Aristotle's classification of animals, table 4), namely the irrational animals:

«ταύτης μὲν οὖν καὶ τὰ ἄλλα ζῶα μετέχει»⁶¹.

«ἢ μὲν οὖν αἰσθητικὴ φαντασία, ὥσπερ εἴρηται, καὶ ἐν τοῖς ἄλλοις ζῴοις ὑπάρχει»⁶².

At this point we can pose the question: If such kind of *phantasia* is shared by all animals, even the 'imperfect' ones, then, what will be the difference between the indefinite (ἀόριστος) and sensitive (αἰσθητική) kind of *phantasia*? We shall return to this question later.

⁶¹ Aristotle, *op. cit.*, III, 10, 433 b 29-30: «So in the later [sensitive *phantasia*] and other animals partake».

⁶² *Ibid.*, III, 11, 434 a 5-7: «Sensitive *phantasia*, then, as it has been said, exists also in the other animals».

In order to fully understand what the Stageirite philosopher is saying about sensitive *phantasia* (αἰσθητικὴ φαντασία) —and as we shall examine later about calculative or deliberative *phantasia* (λογιστικὴ ἢ βουλευτικὴ φαντασία)—, it is necessary first to explain some of his views related to desire (ἐπιθυμία) and animal movement (κίνησις). Aristotle identifies two kinds of desire (ἐπιθυμία). David Ross says that «desire, however, is of two kinds, wish [βούλησις] or rational desire, which desires the good, and appetite [ὄρεξις] or irrational desire, which desires the apparent good. Or, to put the antithesis otherwise, wish is for future good, appetite for present pleasure mistaken for absolute pleasure and absolute good»⁶³:

«ἢ γὰρ βούλησις ὄρεξις...ἢ γὰρ ἐπιθυμία ὄρεξις τίς ἐστίν»⁶⁴.

The Stageirite philosopher stresses that appetite is the cause of movement or the moving power in animals:

«(κινεῖται γὰρ τὸ κινούμενον ἢ ὀρέγεται, καὶ ἡ ὄρεξις κίνησις τίς ἐστίν ἢ ἐνέργεια), τὸ δὲ κινούμενον τὸ ζῶον· ᾧ δὲ κινεῖ ὄργάνῳ ἢ ὄρεξις, ἤδη τοῦτο σωματικόν ἐστίν»⁶⁵

Also, in another perhaps important remark Aristotle specifically notes that animals cannot be appetitive without *phantasia* («ὄρεκτικὸν δὲ οὐκ ἄνευ φαντασίας»)⁶⁶. Appetite moves the animal but not without the mediation of *phantasia*. And this kind of *phantasia* is what the philosopher calls sensitive *phantasia*.

Very slight traces of sensitive *phantasia* are found in indefinite animals, since these creatures have the capacity to perceive objects that are in contact with them and in this way they can discriminate which objects are pleasant or unpleasant to them. But they cannot sense objects at a distance, and as Aquinas says «the motion of

⁶³ Sir David Ross, *op. cit.*, p. 91.

⁶⁴ Aristotle, *op. cit.*, III, 10, 433 a 23-26: «For wish is appetite;...for desire is a form of appetite».

⁶⁵ *Ibid.*, III, 10, 433 b 17-19: «(for the animal which is set in motion is set in motion in so far as it desires, and desire is a kind of motion or actuality), and that which is set in motion is the animal; and the instrument by which desire moves it is something bodily».

⁶⁶ *Ibid.*, III, 10, 433 b 28-29.

phantasy does not remain in them after the apprehension of the sense»⁶⁷. However in animals other than indefinite creatures, in other words in animals that possess more than one sense (normal animals), and for this reason they can discriminate even the objects at a distance, the product of *phantasia* or *phantasma* remains in them even after the sense object is gone. Therefore, the difference between the indefinite and sensitive kind or grade of *phantasia* is based on their capacity to perceive and retain a sense object (see *table 3*).

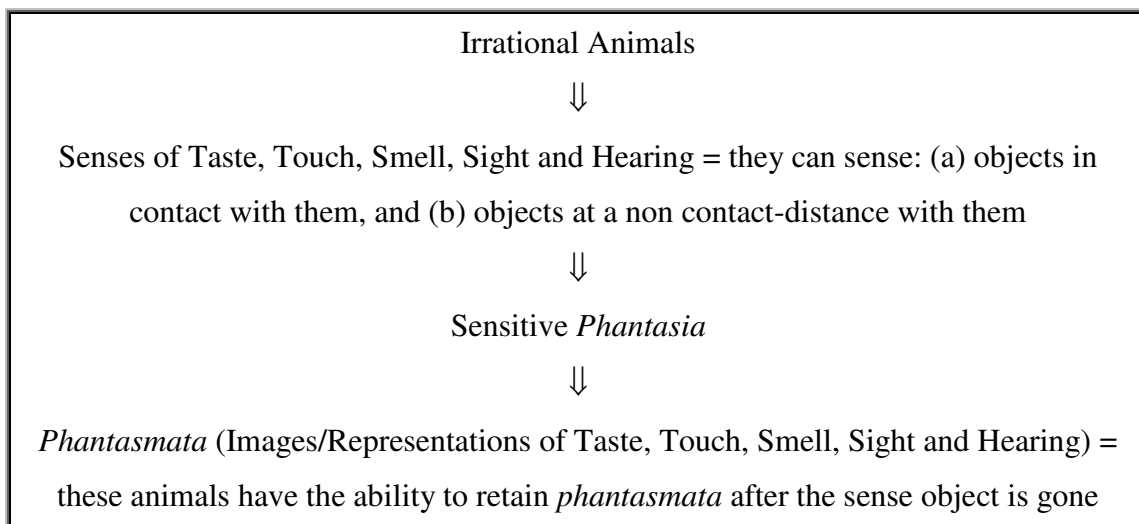


Table 3

Finally there is a passage in *De Anima* that has puzzled many ancient commentators and contemporary scholars. Aristotle in Book III, Chapter 3, says that the ant, the bee and the scolex do not have *phantasia*:

«εἴτα αἰσθησις μὲν ἀεὶ πάρεστι, φαντασία δ' οὐ. εἰ δὲ τῇ ἐνεργείᾳ τὸ αὐτό, πᾶσιν ἂν ἐνδέχοιτο τοῖς θηρίοις φαντασίαν ὑπάρχειν· δοκεῖ δ' οὐ, οἷον μύρμηκι ἢ μελίττη ἢ σκώληκι»⁶⁸.

David W. Hamlyn says that this passage «is puzzling since it is doubtful whether Aristotle would have denied imagination to ants and bees»⁶⁹. I agree with Hamlyn's

⁶⁷ St. Thomas Aquinas, *The Commentary of St. Thomas Aquinas on Aristotle's Treatise On the Soul*, translated by R. A. Kocourek (St. Paul, Minnesota: College of St. Thomas, 1946), p. 19.

⁶⁸ Aristotle, *op. cit.*, III, 3, 428 a 8-11: «And then sense is always present, but not *phantasia*. But if [*phantasia*] was the same in actuality [with sense], it would be possible for all beasts to have *phantasia*; but it seems not to be the case; as the ant, the bee and the scolex».

remark and I argue that it is not possible for Aristotle to deny some kind of *phantasia* to the ants and the bees, since:⁷⁰

(a) in *Historia Animalium* I, 1 488 a 7-10 he includes ants and bees among the political animals:

«Πολιτικά δ' ἐστὶν ὧν ἓν τι καὶ κοινὸν γίνεται πάντων τὸ ἔργον· ὅπερ οὐ πάντα ποιεῖ τὰ ἀγελαῖα. Ἔστι δὲ τοιοῦτον ἄνθρωπος, μέλιττα, σφήξ, μύρμηξ, γερανός»⁷¹.

(b) in *De Partibus Animalium* II, 2, 648 a 6-7 he says that bees are more intelligent than many other animals:

«διὸ καὶ μέλιτται καὶ ἄλλα τοιαῦτα ζῶα φρονιμώτερα τὴν φύσιν ἐστὶν ἐναίμων πολλῶν»⁷².

(c) in *Metaphysica* I, 1, 980 b 22-25 he notices that bees are prudent/intelligent and have memory:

«φύσει μὲν οὖν αἰσθησιν ἔχοντα γίγνεται τὰ ζῶα, ἐκ δὲ ταύτης τοῖς μὲν αὐτῶν οὐκ ἐγγίγνεται μνήμη, τοῖς δ' ἐγγίγνεται. καὶ διὰ τοῦτο ταῦτα φρονιμώτερα καὶ μαθητικώτερα τῶν μὴ δυναμένων μνημονεύειν ἐστὶ, φρόνιμα μὲν ἄνευ τοῦ μανθάνειν ὅσα μὴ δύναται τῶν ψόφων ἀκούειν (οἷον μέλιττα καὶ εἴ τι τοιοῦτον ἄλλο γένος ζῶων ἔστι), μανθάνει δ' ὅσα πρὸς τῇ μνήμῃ καὶ ταύτην ἔχει τὴν αἰσθησιν»⁷³.

⁶⁹ See Aristotle, *De Anima, Books II and III* (with certain passages from Book I), translated with introduction and notes by David W. Hamlyn, Clarendon Aristotle Series (Oxford: Clarendon Press, 1968), p. 54.

⁷⁰ Cf. Aristotle, *De Anima*, with translation, introduction and notes by Robert D. Hicks [New York: Arno Press, 1976 (1907¹)], pp. 462-463.

⁷¹ Aristotle, *Historia Animalium* I, 1, 488 a 7-10: «Political animals are those that have one and common activity for all; and that thing is not in effect for all the gregarious animals. Such political animals are the human being, the bee, the wax, the ant and the crane».

⁷² Idem., *De Partibus Animalium*, II, 2, 648 a 6-7: «wherefore bees and other such as these animals are of a more prudent/intelligent nature than many blooded animals».

⁷³ Idem., *Metaphysica* I, 1, 980 a 27-980 b 25: «Now animals are by nature born with the power of sensation and from this some acquire the faculty of memory, whereas others do not. Accordingly the former are more intelligent and capable of learning than those, which cannot remember. Such as cannot hear sounds (as the bee, and any other similar type of creature) are intelligent, but cannot learn; those only are capable of learning which possess this sense in addition to the faculty of memory» trans. by H. Tredennick.

and (d) in *De Memoria et Reminiscentia* I, 450 a 12-17 Aristotle notes that memory involves *phantasia*:

«ἡ δὲ μνήμη, καὶ ἡ τῶν νοητῶν, οὐκ ἄνευ φαντάσματος ἐστίν· ὥστε τοῦ νοῦ μὲν κατὰ συμβεβηκὸς ἂν εἴη, καθ' αὐτὸ δὲ τοῦ πρώτου αἰσθητικοῦ. διὸ καὶ ἑτέροις τισὶν ὑπάρχει τῶν ζώων, καὶ οὐ μόνον ἀνθρώποις καὶ τοῖς ἔχουσι δόξαν ἢ φρόνησιν»⁷⁴.

Furthermore, as David Ross points out, Aristotle «says none of these things about grubs [scolexes]»⁷⁵, except that: (a) «a scolex is that out of which in its entirety an animal is produced whole, by differentiation and growth of the foetus» («σκώληξ δ' ἐστὶν ἐξ οὗ ὅλου ὅλον γίνεται τὸ ζῶον, διαρθρουμένου καὶ ἀυξανομένου τοῦ κυήματος»)⁷⁶, (b) «just as the animal is perfect but the scolex and the egg are imperfect» («ὥσπερ δὲ τὸ μὲν ζῶον τέλειον, ὁ σκώληξ καὶ τὸ δ' ᾠόν ἀτελές»)⁷⁷ etc. So, according to the American entomologist William Forbes, the σκώληξ has to be «the first stage of the life-history of an insect or other creature which he [Aristotle] did not recognize as produced by birth or hatching from a real egg. Sometimes he actually had an egg in mind (when he refers to it as hard shelled but soft inside), while in other cases it is obviously the first-stage larva»⁷⁸.

Accordingly, in view of all of these facts, I accept Torstrik's emendation of the text «δοκεῖ δ' οὐ, οἷον μύρμηκι ἢ μελίττη ἢ σκώληκι»⁷⁹, as «δοκεῖ, οἷον μύρμηκι μὲν ἢ μελίττη ἢ σκώληκι δ' οὐ» («it seems that it [*phantasia*] is found in the ant and

⁷⁴ Idem., *De Memoria et Reminiscentia* I, 450 a 12-17: «and memory even of *noêmata* is not without a *phantasma*; therefore memory belongs to the rational part only *per accidens*, while *per se* to the primary part of the sensitive part. Therefore some other animals have memory, and not only human beings and those beings that have opinion or judgment».

⁷⁵ Aristotle, *De Anima*, edited with introduction and commentary by Sir David Ross (Oxford: Clarendon Press, 1961), p. 286. William Forbes stresses that the word σκώληξ in the Aristotelian texts «is not a 'grub' in general as usually translated, and never a 'worm' (vermis or vermiculus)», but it corresponds in a way with the «earthworm» and «the maggot-like larvae of the wasps» [cf. William T. M. Forbes, «The Silkworm of Aristotle», in *Classical Philology*, Vol. 25, No. 1 (Jan. 1930): p. 23].

⁷⁶ Aristotle, *Historia Animalium*, I, 5, 489 b 9-11.

⁷⁷ Idem., *De Generatione Animalium*, II, 1, 733 a 1-2.

⁷⁸ See William T. M. Forbes, *op. cit.* p. 23.

⁷⁹ Aristotle, *De Anima*, III, 3, 428 a 10-11.

the bee, but not in the scolex»). And, as Robert Hicks⁸⁰, Edwin Wallace⁸¹, and David Ross⁸² point out, Torstrik's emendation of the text is based on the reading of Themistius⁸³ and Sophonias⁸⁴.

Therefore, from the previous analysis, we may conclude that the ants and the bees, which are intelligent creatures and have memory, should be included to the animals that possess the sensitive kind of *phantasia* (αἰσθητικὴ φαντασία). Whereas the scolex, which has to be «the first stage of the life-history of an insect or other creature», does not have *phantasia*.

| Aristotle's Classification of Animals | |
|---------------------------------------|---------------------------------|
| Blooded Animals ⁸⁵ | Bloodless Animals ⁸⁶ |

⁸⁰ Aristotle, *De Anima*, with translation, introduction and notes by Robert D. Hicks [New York: Arno Press, 1976 (1907¹)], p. 462.

⁸¹ Aristotle, *Aristotle's Psychology*, with introduction and notes by Edwin Wallace (New York: Arno Press, 1976), p. 263.

⁸² Aristotle, *De Anima*, edited with introduction and commentary by Sir David Ross (Oxford: Clarendon Press, 1961), pp. 286-287.

⁸³ Themistius, *op. cit.*, 5, 3, 90, 5-8: «ἔπειτα αἰσθησις μὲν πᾶσιν ὑπάρχει τοῖς ζώοις, φαντασία δὲ τοῖς μὲν τοῖς δὲ οὐ, μύρμηκι μὲν ἴσως καὶ μελίττη καὶ πολλῶ μᾶλλον κυνὶ καὶ ἵππῳ καὶ ὅσα μετέχει αἰσθήσεως, σκώληκι δὲ οὐ».

⁸⁴ Sophonias, *Aristotelis Libros De Anima Paraphrasis*, 55, 27-32: «μύρμηξι μὲν γὰρ καὶ μελίτταις καὶ τοῖς ὁμοίοις, ἔτι δὲ καὶ τοῖς ὑπὲρ ταῦτα, καὶ ἀπλῶς οἷς τισιν οὐκ ἀόριστος οὐδ' ἀνεπίστροφος κίνησις, ἀνάγκη παρεῖναι φαντασίαν, πρὸς ἣν ποιοῦνται τεταγμένην τὴν κίνησιν· σκώλυκες δὲ καὶ μυῖαι καὶ ὅσα ἄλλα ἀτάκτως καὶ ἀορίστως ὀρῶνται κινούμενα καὶ μάλιστα τὰ ἐκ σήψεως ἐπετείως γινόμενα ἢ οὐ δοκοῦσιν ὅλως ἔχειν ἢ ἀμυδρὰν τινα».

⁸⁵ Aristotle, *Historia Animalium*, II, 15, 505 b 28-32: «Ἔστι δὲ ταῦτα (namely ἔναιμα) ἄνθρωπος τε καὶ τὰ ζωοτόκα τῶν τετραπόδων, ἔτι δὲ καὶ τὰ φωτόκα τῶν τετραπόδων καὶ ὄρνις καὶ ἰχθύς καὶ κῆτος, καὶ εἴ τι ἄλλο ἀνώνυμόν ἐστι διὰ τὸ μὴ εἶναι γένος ἄλλ' ἀπλοῦν τὸ εἶδος ἐπὶ τῶν καθ' ἕκαστον, οἷον ὄφις καὶ κροκόδειλος».

⁸⁶ Idem., *De Partibus Animalium*, IV, 5, 678 a 27-31: «Τὰ δὲ καλούμενα μαλάκια καὶ μαλακόστρακα πολλὴν ἔχει πρὸς ταῦτα διαφορὰν· εὐθύς γὰρ τὴν τῶν σπλάγχων ἅπασαν οὐκ ἔχει φύσιν. ὁμοίως δ' οὐδὲ τῶν ἄλλων ἀναίμων οὐδέν. ἔστι δὲ δύο γένη λοιπὰ τῶν ἀναίμων, τὰ τε ὀστρακόδεσμα καὶ τὸ τῶν ἐντόμων γένος».

| (Vertebrates) | (Invertebrates) |
|--|---|
| 1. Man | 1. Hard-Shelled Animals (Clams, Oysters, etc.) |
| 2. Viviparous Quadrupeds | 2. Weak-Shelled Animals (Crabs etc.) |
| 3. Cetacea (Wales, Dolphins, Seals) | 3. Cephalopoda (Squids, Cuttle-Fishes etc.) |
| 4. Birds | 4. Insects |
| 5. Oviparous Quadrupeds and Footless Animals (Reptiles and Amphibians) | 5. Zoophytes (Anemones, Holothuria, Sponges etc.) |
| 6. Fishes | |

Table 4

(c) Calculative or Deliberative *Phantasia* (Λογιστική or Βουλευτική Φαντασία)

The third kind or grade of *phantasia* is that which is calculative (λογιστική) or deliberative (βουλευτική):

«φαντασία δὲ πᾶσα ἢ λογιστικὴ ἢ αἰσθητικὴ»⁸⁷.

«ἢ δὲ βουλευτικὴ [φαντασία] ἐν τοῖς λογιστικοῖς»⁸⁸.

It should be underlined here that the epithets/adjectives «λογιστικὴ» (calculative) and «βουλευτικὴ» (deliberative) are equivalent. The verbs «λογίζομαι» and «βουλεύομαι» are synonymous, since they both mean, «to determine, to consider».

But what kind of *phantasia* is that which is calculative or deliberative? Is there a *phantasma* involved? The Stageirite philosopher notices that:

«ἢ μὲν οὖν αἰσθητικὴ φαντασία, ὥσπερ εἴρηται, καὶ ἐν τοῖς ἄλλοις ζώοις ὑπάρχει, ἢ δὲ βουλευτικὴ ἐν τοῖς λογιστικοῖς (πότερον γὰρ πράξει τότε ἢ τότε, λογισμοῦ ἤδη ἐστὶν ἔργον· καὶ ἀνάγκη ἐνὶ μετρεῖν⁸⁹. τὸ μείζον γὰρ διώκει. ὥστε

⁸⁷ Aristotle, *De Anima*, III, 10, 433 b 29.

⁸⁸ *Ibid.*, III, 11, 434 a 7.

⁸⁹ The Greek translator and commentator of the treatise *De Anima*, Andreas Papatheodorou, notices that pleasure, interest and duty are some of the standards or criteria of measurement that intelligent

δύναται ἔν ἐκ πλειόνων φαντασμάτων ποιεῖν). καὶ αἴτιον τοῦτο τοῦ δόξαν μὴ δοκεῖν ἔχειν, ὅτι τὴν ἐκ συλλογισμοῦ οὐκ ἔχει, αὕτη δὲ ἐκείνην»⁹⁰.

The third kind or grade of *phantasia* is found in those animals, which possess reason, or, as Sir David Ross asserts, «the deliberative imagination, the rational imagination...is monopoly of reasoning beings, i.e. of men»⁹¹. For whether a person will do this or that is the work of calculation, of reasoning. Of course, rational beings do not always act according to a plan (use of calculative or deliberative *phantasia*), but they can also act according to the awareness of the moment (use of sensitive *phantasia*).

What the philosopher meant by saying «καὶ αἴτιον τοῦτο τοῦ δόξαν μὴ δοκεῖν ἔχειν, ὅτι τὴν ἐκ συλλογισμοῦ οὐκ ἔχει, αὕτη δὲ ἐκείνην», was that other animals than man are thought not to have opinion (δόξα), because their desires have no deliberation. Only animals with intellect—and therefore language— have the *phantasia* that comes from inference. This kind of *phantasia* appears as an intermediate between sense perception (αἰσθάνεσθαι) and *nous* or mind (νοῦς). It involves having and combining several mental images (*phantasmata*) into one. This is the difference between human beings and animals. The elaboration, organization and unification of images (*phantasmata*) are typical characteristics of human beings (see table 5).

It should be noticed that the activity of calculative or deliberative *phantasia* involves the use of *phantasmata* with (a) propositional and (b) pictorial or quasi-pictorial content:

(a) propositional content

animals use in order to pursue whichever is superior [see Aristotle, *De Anima*, II-III, text, translation and notes by Andreas Papatheodorou (in Greek) (Athens: «Papyrus» Publications, no date), p. 92].

⁹⁰ *Ibid.*, III, 11, 434 a 5-12: « Sensitive *phantasia*, then, as it has been said, exists also in the other animals, but deliberative *phantasia* in those that are calculative; for the decision whether it will do this or that, is already a work of calculation; and there must be a single standard to measure by; for one pursues what is superior. Hence one has the ability to make one *phantasma* out of many *phantasmata*. And the reason why [these animals] are thought not to have opinion is that they do not have opinion which comes from inference, though this [opinion] involves that [*phantasia*].».

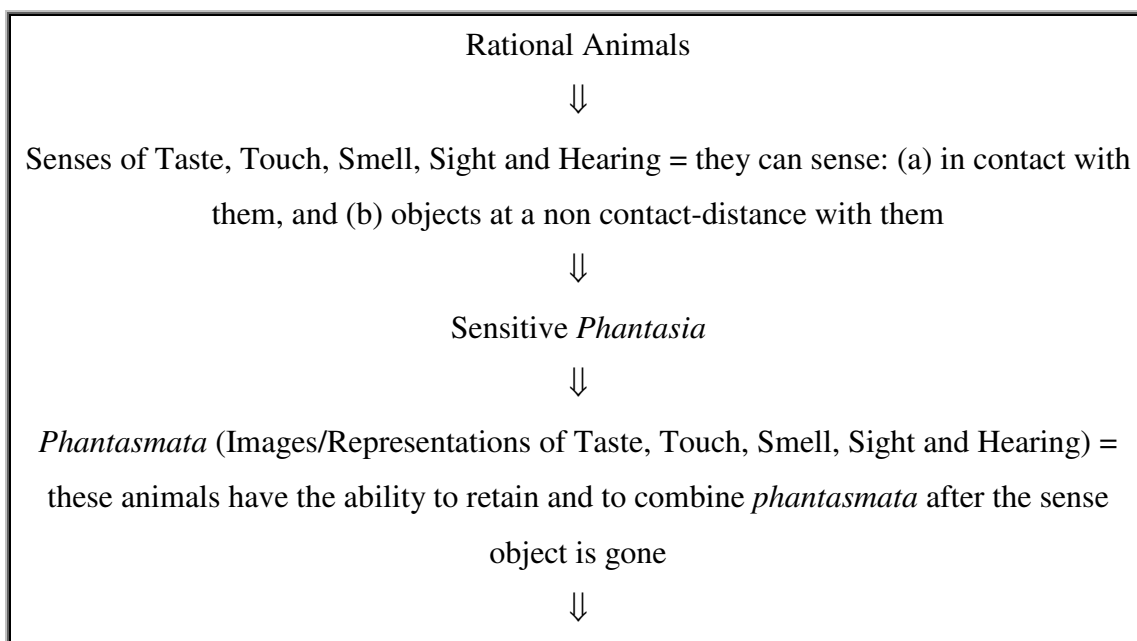
⁹¹ See Aristotle, *De Anima*, edited with introduction and commentary by Sir David Ross (Oxford: Clarendon Press, 1961), p. 319.

«ή δὲ βουλευτική ἐν τοῖς λογιστικοῖς (πότερον γὰρ πράξει τότε ἢ τότε, λογισμοῦ ἤδη ἐστὶν ἔργον»⁹²

(b) pictorial or quasi-pictorial content

«ὅτε δὲ τοῖς ἐν τῇ ψυχῇ φαντάσμασιν ἢ νοήμασιν ὥσπερ ὁρῶν λογίζεται καὶ βουλευέται τὰ μέλλοντα πρὸς τὰ παρόντα»⁹³

The above examples (a) and (b) are excellent Aristotelian remarks with respect to contemporary ideas about mental images⁹⁴.



⁹² Aristotle, *De Anima*, III, 11, 434 a 7-8. See note 88.

⁹³ *Ibid.*, III, 7, 431 b 6-8: «and when by the *phantasmata* or the *noemata* in the soul it calculates, as if seeing them, and deliberates what is going to happen in the future in relation to the present».

⁹⁴ Two of the most important contemporary theories of mental images or mental imagery are the “Analog or Pictorial Representation Account” (Kosslyn, Sheppard etc.) and the “Propositional Representation Account” (Pylyshyn, Fodor etc.). The “Analog or Pictorial Representation Account” says that visual informations are stored in the brain in an analog or a picture-like (quasi-pictorial) code. The “Propositional Representation Account” on the contrary argues that visual informations are stored in the brain in a propositional or a word-like code. Cf. S. M. Kosslyn – T. M. Ball – B. J. Reiser, «Visual Images Preserve Metric Spatial Information: Evidence from Studies of Image Scanning», *Journal of Experimental Psychology: Human Perception and Performance*, Vol. 4 (1978): pp. 47-60. Zenon W. Pylyshyn, «The Imagery Debate: Analogue Media versus Tacit Knowledge», *Psychological Review*, 88 (1981): pp. 16-45. Ned J. Block, *Imagery* (Cambridge, MA: MIT Press, 1981).

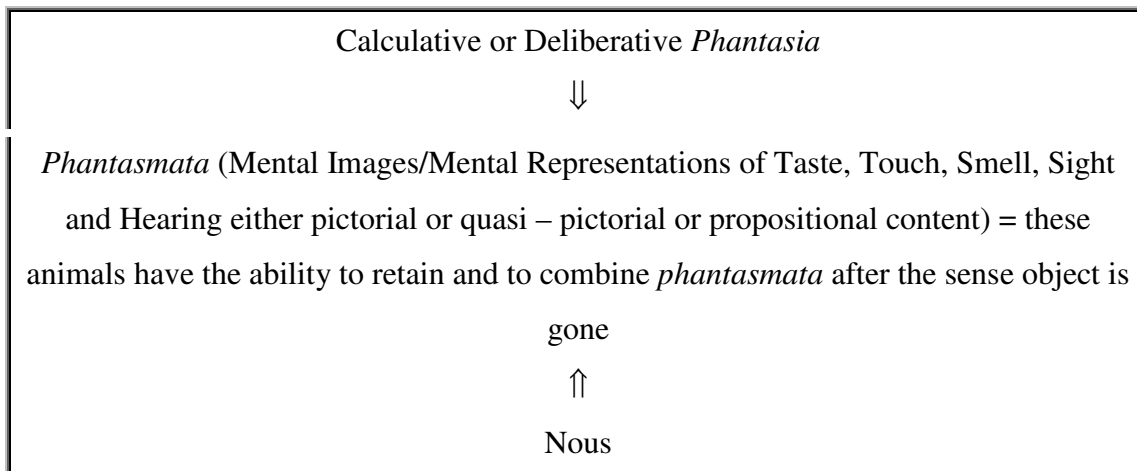


Table 5

IV. Conclusion

On the basis of the analysis undertaken above it appears that Aristotle's treatment of *phantasia*/imagination is a complicated subject. *Phantasia* is a faculty of the soul, the imaginative (φανταστικόν), that is placed between sensation (αἴσθησις) and thought (διάνοια). On the one hand it depends on sensation, is a kind of affection (πάθος), and on the other is a necessary condition for memory, motion, desire, dreaming, thinking etc. In other words it is connected with a wide variety of psychological phenomena.

Furthermore, it has been noted that *phantasmata*, are the products of the function of *phantasia*, resulting from sense perception (αἰσθάνεσθαι). *Phantasmata* are (mental) representations or (mental) images of sense objects. They have several functions, as for example remembering and thinking process.

Thereafter, I have tried to show that a detailed study of the notion of *phantasia* in *De Anima*, Book III, leads us to the conclusion that the Stageirite philosopher discriminates not two —as it is commonly argued— but three kinds or grades of *phantasia*: (a) Indefinite/indeterminate *phantasia* (ἀόριστος φαντασία) which is to be found in the imperfectly developed creatures — they have no sense except that of touch—, as for example zoophytes and molluscs, which have the power of formatting diffuse and indefinite *phantasmata*. (b) Sensitive *phantasia* (αἰσθητική φαντασία)

which is to be found in animals that possess more than one sense (normal animals) and have the power of forming more vivid *phantasmata*. (c) Calculative, or deliberative, *phantasia* (λογιστική or βουλευτική φαντασία) which is the highest development of the faculty of *phantasia*. It appears only in human beings, because they have the power of thinking and the ability to combine several mental images (*phantasmata*) into one.

Thomas J. T. Nigel notes that «the impact on latter thinkers of Aristotle's account of cognition in general, and of imagery and imagination in particular, was enormous, and extended far beyond those who were avowed Aristotelians»⁹⁵. Indeed, Aristotle's treatment of *phantasia* in *De Anima* exerted an important influence on Hellenistic philosophy⁹⁶ and Western thought (Medieval and Modern)⁹⁷.

Beyond this, if we shed further light on Aristotle's theory of *phantasia* and *phantasmata*, we shall find deep conceptual relationship with the current debate over the issue of mental images or mental imagery. But this is another issue that needs further investigation⁹⁸.

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⁹⁵ See Thomas J. T. Nigel, «Aristotle's Influence», *Stanford Encyclopedia of Philosophy* <<http://plato.stanford.edu/entries/mental-imagery/aristotle-influence.html>>.

⁹⁶ Cf. the Stoics' theory of *phantasia*.

⁹⁷ E.g. St. Thomas Aquinas's account on imagination (*imaginatio*), Rene Descartes' views on the function of the faculty of imagination etc.

⁹⁸ Cf. Christina S. Papachristou, «The *Mental Images (Phantasmata)* in Aristotle's *De Anima* and in S. Kosslyn's Contemporary Work» (in Greek), in Demetra Sfendoni-Mentzou (ed.), *The Aristotelian Philosophy and the Contemporary Scientific Thought* (Thessaloniki: Aristotle University of Thessaloniki, 2006), pp.112-134.

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