

Tomasz Tiuryn
Uniwersytet Warszawski

THE NOTION OF *PRAGMA* IN ARISTOTLE'S THEORY OF SIGNIFICATION*

I. INTRODUCTION

In contemporary introductions to philosophy of language we often find a contrast between two types of theories of meaning: the first type claims that meanings are constituted by ideas in the minds of speakers; according to the second type, meanings are constituted by things in the world.¹ These two types are sometimes labeled as, respectively, an ideational theory of meaning and a referential or a denotational theory of meaning.² This terminology is in fact misleading, since it suggests that any theory claiming that things constitute the meanings of linguistic expressions must equate meaning with reference or denotation. As we shall see, this is not true, and certainly not in the case of Aristotle's

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¹This contrast was introduced by J.S. Mill (cf. *A System of Logic*, book I, chapter II.1, Toronto–Buffalo: University of Toronto Press, 1973, p. 24–25, where he says that “names are names of things, not ideas”), but in contemporary literature it is usually connected with William Alston's book *Philosophy of Language*, Englewood Cliffs: Prentice-Hall, 1964, where he makes a distinction between referential, ideational and behavioral theories of meaning (p. 11–31). The first type is usually associated with John Locke, the second originates with Mill, Frege and Russell and today is probably the more popular approach. For other references to this distinction, cf. note 2.

²For these labels cf. W. LYCAN, *Philosophy of Language: a Contemporary Introduction*, New York – Abingdon: Routledge, 2008, p. 1–6, 65–68. For the contrast between things and ideas as a source of distinction between theories of meaning cf. also R.M. MARTIN, *The Meaning of Language*, Cambridge: MIT Press, 1987, p. 19–28, 111–112; M. MORRIS, *An Introduction to the Philosophy of Language*, Cambridge: Cambridge University Press, 2007, p. 1, 5–14. The contrast between denotational and ideational reading of Aristotle is mentioned also by M. Wheeler in “Semantics in Aristotle's Organon,” *Journal of the History of Philosophy*, vol. 37 (1999), p. 191–226.

theory. For this reason, in order to highlight the connection between words and things, it is perhaps better to speak of a *realist* theory of meaning.

Aristotle's semantic theory has sometimes been included in the ideational group.³ This is undoubtedly connected with the schema outlined in the first chapter of *De interpretatione* (16a 3–8), where it is said that spoken sounds are principally signs of the affections of the soul. Many recent interpretations, however, steer away from this picture and attempt to replace it with a reading where meanings are more directly connected with items existing in the world. These items are variously identified: they are essences, particular objects or kinds of objects.⁴ Some scholars have even attributed to Aristotle the conception that meaning amounts to reference or denotation.⁵

What is surprising, however, is that little attention is usually paid to the concept which in Aristotle's own formulations is supposed to describe the class of objects signified or denoted by linguistic expressions — this is the concept of *pragma* (πρᾶγμα), usually translated as “thing” or “object.” In this paper I defend the claim that in Aristotle's view linguistic meaning is constituted by the things which are signified by linguistic expressions. Because things are signified through the mediation of thoughts and other “affections of the soul,” it will be necessary to analyze the relation between thought and *pragmata*. I will argue that a crucial role in Aristotle's theory of signification is played by the concept of form, the causal connection between things and thoughts, and the distinction between simple and complex thoughts.⁶

In the second part of this paper my main interest will be in the ontological status of *pragmata*.⁷ Among scholars there is some disagreement about the na-

³ Cf. J.L. ACKRILL, *Aristotle's Categories and "De Interpretatione,"* Oxford: Clarendon Press, 1963, p. 113–115; R.M. MARTIN, *The Meaning of Language,* p. 20.

⁴ Terence H. Irwin, in his highly influential paper “Aristotle's Concept of Signification,” *Language and Logos: Studies in Ancient Greek Philosophy Presented to G.E.L. Owen,* ed. M. Schofield, M. Nussbaum, Cambridge: Cambridge University Press, 1982, p. 241–266, claims that linguistic expressions signify, on Aristotle's account, essences of things. David Charles has proposed a reading, in part as a reaction to Irwin's paper, that names on Aristotle's account signify either individual objects or kinds of objects (*Aristotle on Meaning and Essence,* Oxford: Oxford University Press, 2000).

⁵ For the references to these authors cf. footnote 26 below.

⁶ In this part my account relies largely on Charles' innovative reading found in *Aristotle on Meaning and Essence* and in his earlier paper “Aristotle on Names and their Signification,” *Language,* ed. S. Everson (Companions to Ancient Thought, 3), Cambridge: Cambridge University Press, 1994, p. 37–73.

⁷ A good overview of different meanings of *pragma* in Greek philosophy is found in P. HADOT, “Sur divers sens du mot ‘pragma’ dans la tradition philosophique grecque,” *Concepts et catégories dans la pensée antique,* ed. P. Aubenque, Paris: Vrin, 1980, p. 309–320. Hadot's presentation is illuminating in many respects, I disagree, however, with some of the interpretations he proposes; in particular I don't think that *pragma* may be understood (at least not in Aristotle) as a sense of

ture of these objects. On the usual interpretation, *pragmata* are “things in the world,” i.e. actually existing entities, like Socrates, this chair, and their actually existing properties and kinds.⁸ This reading is also suggested by the label “actual thing” used in Ackrill’s influential translations. Hence, there is the usual assumption that the division of *pragmata* in *De int.* 7 into individuals and universals is a division of *b e i n g s* (and not a division of e.g. objects that are spoken of in sentences).⁹ But Aristotelian *pragmata* can also be looked at differently. As many examples in Aristotle’s works show, the term *pragma* often denotes items whose ontological status is much more elusive than that of the entities mentioned above. In rhetoric *pragma* can denote the topic of a speech, in science it can be the subject of a given branch of studies, and in a dialectical discussion it can be the subject of the discussion.¹⁰ Based on this usage, some scholars propose to attribute to *pragmata* a looser ontological status, closer to the status of an intentional object. To use a formula introduced by L.M. de Rijk, *pragma* is not an “actual thing,” but a thing “as conceived of by the intellect.”¹¹ De Rijk’s proposal may be seen as introducing a notion that is important from the point of view of semantics: if *pragma* is indeed the thing “as conceived of by the intellect,” this notion could have a similar function in Aristotle’s theory of signification as the modern notion of sense (understood, following Frege, as a mode of presentation of the object) in contemporary theories.

My claim in this paper is that neither of these construals of *pragma* is entirely correct. As is well known, *pragmata* are divided by Aristotle into particulars and universals. Because meaning is a feature that applies to general expressions, e.g.

linguistic expression, a concept or a conceptual content (this third option would be possible, if content was taken in a very broad sense, in which also objects may be seen as contents of thoughts and propositions). These meanings, however, could apply to the usage of the word *pragma* in the texts by the Stoics and by Philo of Alexandria, as Hadot’s analysis shows.

⁸ For a clear exposition of this kind of reading of *pragma* cf. D.K.W. MODRAK, *Aristotle’s Theory of Language and Meaning*, Cambridge: Cambridge University Press, 2001, p. 20–21.

⁹ Cf. *De int.* 7, 17a 38–17b 1. In this paper I make use of the following editions of Aristotle’s texts: *Cat.* — Minio-Paluello, Oxford 1949; *De int.* — Weidemann, Boston/Berlin 2014; *An. pr.* and *An. post.* — Ross, Oxford 1964; *Top.* and *Soph. el.* — Ross, Oxford 1970; *Phys.* — Ross, Oxford 1966; *De cael.* — Moraux, Paris 1965; *De an.* — Ross, Oxford 1961; *Met.* — Ross, Oxford 1953; *Rhet.* — Ross, Oxford 1959; *Poet.* — Kassel, Oxford 1965.

¹⁰ Cf. e.g. *Rhet.* I.1, 1354a 12–31; I.4, 1359b 15; I.7, 1364b 8.

¹¹ Cf. L.M. DE RIJK, “The Anatomy of the Proposition: Logos and Pragma in Plato and Aristotle,” *Logos and Pragma: Essays on the Philosophy of Language in Honour of Gabriel Nuchelmans*, ed. L.M. de Rijk, H. Braakhuis, Nijmegen: Brepols, 1987, p. 32, 36–37 (entire paper p. 27–61). Perhaps in a similar manner one should understand Hermann Weidemann’s suggestion that Aristotle’s notion of a universal *pragma* is similar to Frege’s notion of a concept (*Begriff*), cf. H. WEIDEMANN, “Anmerkungen” in Aristoteles, *Peri hermeneias*, translated by H. Weidemann, Berlin: Akademie Verlag, 1994, p. 209. The linguistic and conceptual interpretation of *pragmata* is also found in P. HADOT, “Sur divers sens du mot ‘pragma’.”

nouns, adjectives and verbs, rather than to proper names, I will concentrate on the first group, and hence the focus of this paper will be on the ontological status of universals and their role in Aristotle's semantic theory. I will defend a reading in which universal *pragmata*, on the one hand, are not identical with any of the actually existing things, but on the other hand, they are neither mind-dependent entities nor do they play the role of Fregean senses. Even though the nature and existence of universal *pragmata* may be revealed only through the activity of the intellect, since those *pragmata* need to be abstracted from matter, nevertheless we cannot say that they are mind-dependent or subjective entities or that they are "modes of presentation." As I will show in the closing sections of this paper, the Aristotelian *pragma* is unable to play the role of sense, although perhaps other options are open for Aristotle, if his semantics is in need of a similar notion.

2. SIGNIFICATION OF THINGS. THE CONSTITUTION OF MEANING

As is well known, the main schema presenting Aristotle's theory of signification is found in *De Interpretatione* (16a 3–8). This schema connects spoken words (φωναί), affections of the soul (παθήματα τῆς ψυχῆς) and things (πράγματα). On the most plausible reading, the expression „affections of the soul” refers both to mental images (φαντάσματα), i.e. acts of imagination, and to thoughts (νοήματα), i.e. acts of the intellect.¹² However, it should be emphasized that it is thoughts that play a central role in Aristotle's theory. First, the fact that thoughts are “the same for all people” (ταὐτὰ πᾶσι) allows us to conclude that meanings of linguistic expressions can also be the same for all speakers of the language (as long as the expression is unambiguous).¹³ Second, because thoughts in Aristotle's theory have an objective and direct relation with things in the world, spoken words and their meanings come to be rooted in reality (as we will see, this relation is based on causality). Third, the abstract nature

¹²In *De anima* Aristotle says it is thoughts that are the basis for the formation of propositions (cf. note 13, below), but also allows imagination to have some part in signification (cf. II.8, 420b 31–33). The usage of πάθημα makes it unlikely that only thoughts are meant here, since the intellect is called ἀπαθής in *De an.* III.4, 429a 15. Consequently it is more likely that Aristotle has in mind both images and thoughts in this passage. I defend this reading in my commentary on *De Int.* 1 in: T. TIURYN, “Komentarz,” in Arystoteles, *Peri hermeneias (Hermeneutika)*, Κετυ: Marek Derewiecki, 2018, p. 197–211 (in Polish). David Sedley thinks that πάθημα is a broad term covering here both thoughts and images, but that at the end of the passage Aristotle suggests that the rest of *De interpretatione* is only concerned with thoughts, cf. D. SEDLEY, “Aristotle's *De interpretatione* and Ancient Semantics,” *Knowledge through Signs: Ancient Semiotic Theories and Practices*, ed. G. Manetti, Turnhout: Brepols, 1996, p. 90–92 (entire paper p. 87–108).

¹³Expression “the same for all people” (ταὐτὰ πᾶσι) is used by Aristotle to describe affections of the soul (cf. *De int.* 1, 16a 6).

of thought allows meanings to be abstract, and, in turn, enables spoken words to express propositions.

The central role of thought in language is best shown by Aristotle's remark in *De An.* III.8 that the formation of statements in language (affirmations and negations) and of the propositions expressed in these statements requires the activity of the intellect, not of imagination; only a "combination of thoughts" (συμπλοκή νοημάτων) can be true or false; in particular, this is not the case with a combination of mental images.¹⁴

Famously, in the schema from *De int.* 1 Aristotle does not indicate any direct relation between words and things. He only says that words are signs of the affections of the soul and affections are likenesses (ὁμοιώματα) of things.¹⁵ It is not clear then, at least at first glance, whether there is any semantic relationship between words and things, and in particular, whether words can be said to denote or signify (σημαίνειν) things. Because of this, some scholars have even claimed there is no semantic relation between words and things in Aristotle.¹⁶

This reading of Aristotle's theory seems incorrect and has been rightly criticized by others.¹⁷ The schema from *De int.* 1 can be supplemented by many other passages, some of them found in the *De int.* itself, which show that for Aristotle spoken words signify not only thoughts, but also things.¹⁸

¹⁴Cf. *De an.* III.8, 432a 10–12: "Imagination differs from assertion and denial, since what is true or false consists in an interweaving of thoughts (ἔστι δ' ἡ φαντασία ἕτερον φάσεως καὶ ἀποφάσεως· συμπλοκή γὰρ νοημάτων ἐστὶ τὸ ἀληθές ἢ ψεῦδος)" (tr. Shields). Some scholars claim that apart from thoughts there are other primary bearers of truth and falsity, namely complex objects (*pragmata*). For this last position cf. P. CRIVELLI, *Aristotle on Truth*, Cambridge 2004. For a critical response to Crivelli's interpretation cf. D. CHARLES, M. PERAMATZIS, "Aristotle on Truth-Bearers," *Oxford Studies in Ancient Philosophy*, vol. 50 (2016), p. 101–141.

¹⁵Cf. *De int.* 1, 16a 3–9.

¹⁶This claim has been famously made in N. KRETZMANN, "Aristotle on Spoken Sound Significant by Convention," *Ancient Logic and its Modern Interpretations*, ed. J. Corcoran, Dordrecht – Boston: D. Reidel Publishing Company, 1974, p. 3–21.

¹⁷Kretzmann's reading is criticized in R. POLANSKY, M. KUCZEWSKI, "Speech and Thought, Symbol and Likeness: Aristotle's *De Interpretatione* 16a 3–9," *Apeiron*, vol. 23/1 (1990), p. 51–63.

¹⁸For example, in *De int.* 3, Aristotle says that verbs are signs of those things which are predicated of something else and which belong to a subject (16b 7–10). In the same chapter in 16b 19–25 Aristotle says that names do not signify "the being of things" (εἶναι τοῦ πράγματος), which suggests that they signify the things themselves (I accept here the correction of 16b 22 made by Weidemann, cf. *De int.*, ed. Weidemann, 2014, p. 4; see also Weidemann's remarks on this correction in his excellent commentary, cf. "Anmerkungen," p. 180–185). In *De int.* 12 Aristotle says that in a regular sentence two things are mentioned (ὑποκείμενα πράγματα, 21b 27–28), for example in the sentence "A man is white" what is mentioned are the objects *man* and *white*.

In fact, the claim that words signify things and that this is their central task is so common in Aristotle, that it must be recognized as his main semantic thesis.¹⁹ One of the key passages supporting this reading can be found in *Soph. el.* 1, where Aristotle states that the main function of linguistic expressions is that we use them as symbols (σύμβολα) that can stand for things (πράγματα) when they are absent.²⁰ An important argument for this interpretation is the central role of names (ὀνόματα) in Aristotle's analysis of the semantic properties of linguistic expressions. This can be seen from Aristotle's terminology (the term ὄνομα, especially in the plural, often denotes words or language in general²¹), but also from the placement of names in the classification of vocal expressions (in *De int.* and *Poetics* names are discussed first²²). But especially telling is Aristotle's remark made in *De int.* 3 about the meaning of verbs, which, according to Aristotle, when spoken outside the context of a sentence "signify something" (σημαίνει τι) and are in fact names (ὀνόματά ἐστι).²³ This suggests that being a meaningful expression amounts on some general level to being a name, and thus, to being an expression that signifies a certain thing or *pragma*.²⁴

Basing on these passages we can draw the conclusion that according to Aristotle what constitutes the meanings of words is the fact that they signify things. This dualist schema, in which words signify things, is Aristotle's primary way of describing linguistic meaning, while the triadic schema found in the *De int.* 1 passage, in which words signify things through the mediation of thoughts, only complements this first schema and provides further theoretical insight into it. The triadic schema shows which cognitive faculties enable humans to use vocal sounds in such a way, that they can signify things and thus have meaning; each of these vocal sounds becomes thus a meaningful vocal sound (φωνή σημαντική). The central place of names in Aristotle's theory, and his remarks about the meaning of other parts of speech, such as verbs, show that the main model used by Aristotle to describe linguistic meaning is the signification relation

¹⁹ As far as I know, only Sedley in his article "Aristotle's *De interpretatione* and Ancient Semantics" has made this point clearly (cf. p. 96). The reading by Charles (in *Aristotle on Meaning and Essence*) is close to the interpretation I am defending here, however he speaks about individual objects and their kinds, and the modern notion of a kind is not necessarily the same as Aristotle's notion of a universal.

²⁰ Cf. *Soph. el.* 1, 165b 6–10.

²¹ Cf. *Poet.* 6, 1450b 13–14; *Top.* II.1, 109a 29–33.

²² Cf. *Poet.* 20, 1456a 20 – 1457a 30.

²³ Cf. *De int.* 16b 19–25.

²⁴ I develop this line of interpretation in my remarks on Aristotle's theory of signification in T. TIURYN, "Dodatek: Teoria semantyczna Arystotelesa," in Arystoteles, *Peri hermeneias*, p. 505–508 (in Polish).

that occurs between names and things. To put it differently, according to Aristotle a word has meaning insofar as it signifies a certain thing, a *pragma*.²⁵

3. ARISTOTLE'S CONCEPT OF MEANING IS NOT DENOTATIONAL

Since on Aristotle's account linguistic meaning can be specified as the signification of things, it might perhaps seem that we are dealing here with a denotational concept of meaning. This has been, in fact, the opinion of some contemporary scholars.²⁶

The label "denotational concept of meaning" can be understood in two ways: either meaning of an expression is identified with the reference of the expression in a given context (e.g. "morning star" and "evening star" as referring to the planet Venus), or, in the case of general names and other general expressions, with its extension (e.g. "human" or "two-footed terrestrial animal" which happen to have the same extension). Does Aristotle understand signification in any of these two ways?

It can be shown that the answer in both cases is negative. Aristotle states that although terms „one" and „being" have the same extension, i.e. they can be predicated about the same individuals, nevertheless „one and being signify the same only in a certain way" (ταὐτὸ σημαίνει πως τὸ ἐν καὶ τὸ ὄν, cf. *Met.* X.2, 1054a 13–19).²⁷ From this claim it follows that "one" and "being" do not signify the same, so they do not have the same signification. If this is Aristotle's opinion about terms so similar in meaning and so closely related to each other as "one" and "being," it is clear that it will apply all the more to other expressions whose extensions are the same only incidentally.

Remarks made by Aristotle in his discussion of the principle of non-contradiction in *Met.* IV.4 show that, although he does not introduce two different terms for reference and meaning (or signification in the proper sense, for

²⁵This semantic principle would explain Aristotle's claim in the *Poetics* that words like articles, conjunctions and adverbs are "meaningless" (ἄσημα, cf. *Poet.* 20, 1456a 20–1457a 30). It is simply because none of them signifies a thing (*pragma*).

²⁶Cf. W. JACOBS, "Aristotle and Nonreferring Subjects," *Phronesis*, vol. 3 (1979), p. 282–300; IDEM, "The Existential Presuppositions of Aristotle's Logic," *Philosophical Studies*, vol. 4 (1980), p. 419–428; D. HAMLYN, "Focal Meaning," *Proceedings of the Aristotelian Society*, vol. 78 (1977–1978), p. 1–18; P. TSELEMANIS, "Theory of Meaning and Signification in Aristotle," *Language and Reality in Greek Philosophy: Proceedings of the Greek Philosophical Society*, Athens: Greek Philosophical Society, 1985, p. 194–203; R. HALLER, "Untersuchungen zum Bedeutungsproblem in der antiken und mittelalterlichen Philosophie," *Archiv für Begriffsgeschichte*, vol. 7 (1962), p. 57–119. Also Charles says that Aristotle's theory is a „realist" one, but he rejects the view that Aristotle identifies meaning with reference, cf. D. CHARLES, "Aristotle on Names and their Signification," p. 70.

²⁷This argument is also used by Irwin, cf. "Aristotle's Concept of Signification," p. 244.

this label see below), he makes a clear distinction between those two concepts. Aristotle's argument begins with the remark that his opponent in the discussion must "signify something (σημαίνειν τι)" for himself and for his interlocutor, i.e. he must utter an expression that has a specified meaning.²⁸ Even if the expression is ambiguous, provided that it has a limited number of meanings it will be possible to assign to each of the signified things (τούτω τῷ πράγματι) a certain formula (λόγος), and then to assign a separate name to each formula (ὄνομα ἕν).²⁹ In effect, each newly assigned name will "signify one thing" (ἕν σημαῖνον).³⁰

Aristotle, in order to clarify what he means when he says that the name is supposed to "signify one thing," adds:

Let it be assumed then, as was said at the beginning, that the name signifies something and signifies one thing (σημαῖνόν τι τὸ ὄνομα καὶ σημαῖνον ἕν); it is impossible, then, that being a man should signify precisely the same as not being a man, if 'man' signifies one thing and not just signifies about one thing (ἄνθρωπος σημαίνει μὴ μόνον καθ' ἑνὸς ἀλλὰ καὶ ἕν). For we do not identify 'signifying one thing' with 'signifying about one thing' (οὐ γὰρ τοῦτο ἀξιούμεν τὸ ἕν σημαίνειν, τὸ καθ' ἑνός), since on that assumption even 'musical' and 'white' and 'man' would signify something one, so that all of those would have been one; for they would all have been synonymous.³¹

The distinction between signification in the proper sense (meaning) and reference appears here in the form of a distinction between two formulas: "to signify one thing" (ἕν σημαίνειν) and "to signify about one thing" (καθ' ἑνός σημαίνειν). It is clear from the context that the latter formula describes a situation where different predicates are applied to one thing or subject. Suppose a person can be said to be a human, educated and white. If it were assumed, Aristotle says, that being applicable to one object is a sufficient criterion for the synonymy of predicates, predicates "human being," "white" and "educated" would have the same meaning in this context, they would be synonymous. So the phrase "to signify one thing," he continues, must mean something else.

Aristotle's earlier remarks show that "to signify one thing" means that one or more names are associated with one and the same formula (λόγος); an additional condition given in an earlier passage specifies that this formula should express the essence of the signified thing (see also below).³² The formulae corre-

²⁸ Cf. *Met.* IV.4, 1006a 18–22.

²⁹ Cf. *Met.* IV.4, 1006b 7–11.

³⁰ Cf. *Met.* IV.4, 1006b 11–13. In the context of this passage, it is clear that "one" (ἕν) means here "one thing" (i.e. one *pragma*) and not just any type of unity.

³¹ *Met.* IV.4, 1006b 11–18. Ross' translation, modified.

³² This is said earlier in *Met.* IV.4, cf. 1006a 32.

sponding to the names “white,” “human” and “educated” are different, so those names signify distinct things and therefore their meanings (or signification in the proper sense) are different.

In consequence this whole passage should be seen as introducing a distinction between two senses of signification: 1) signification in the proper sense, where a predicate is said to signify a certain thing because the predicate is associated with the formula expressing the essence of this thing; 2) signification in a looser sense, where predicates are applied to some object and based on this it may be said that they signify this object. This very distinction may also be seen in the passage from *Top.* I.7 analyzed in Section 4.

The passage discussed here and the whole treatment of signification in *Met.* IV.4 shows that for Aristotle being predicated of one thing, i.e. having the same reference, is not a sufficient condition for having the same signification in the proper sense. The sufficient condition is that two expressions signify one thing, which is equivalent to two expressions being associated with one and the same formula (λόγος) that states the essence of the signified thing. From now on, when I speak of signification in Aristotle or say that an expression signifies a certain thing or *pragma*, I will mean signification in the proper sense and not signification understood as reference (unless otherwise stated).

4. CRITERIA OF IDENTITY FOR *pragmata*

For Aristotle's theory of signification, as for any other semantic theory, it is essential to define the conditions under which we can say that two names or other expressions have the same meaning. Since on Aristotle's position two expressions have the same meaning when they signify one and the same thing (*pragma*), we must establish what are the conditions for determining when two things are identical.

Aristotle's fullest treatment of this topic may be found in *Top.* I.7, where various types of identity are analyzed (in genus, in species, numerical). In particular, Aristotle discusses three types of numerical identity or, in other words, of being the same numerically (τὸ τὰντὸν ἀριθμῶ).

Initially, Aristotle defines numerical sameness or identity as follows:

We say that something is the same numerically when there are more names than one, but the thing itself is one (ὀνόματα πλείω τὸ δὲ πρᾶγμα ἓν), for example “cloak” and “mantle.”³³

However, later in this chapter it turns out there is more than one type of numerical identity and this initial definition is insufficient. In a long passage Aristotle

³³ *Top.* I.7, 103a 9–10, my own translation.

describes three ways in which the same object (*pragma*) may be specified.³⁴ It can be named or signified either by using its definition, by using its distinctive property or by using its accident. Aristotle makes clear that the strictest and most basic sense (κυριώτατα καὶ πρώτως) in which we speak of numerical sameness is when something is specified by two names or by a name and a definition (ὄρος). The passage ends with an example of how Socrates may be referred to or signified by different expressions:

That what I have just said is true may be best seen where one form of appellation is substituted for another. For often when we give the order to call one of the people who are sitting down, indicating him by name (ὀνόματι καλέσαι), we change our description, whenever the person to whom we give the order happens not to understand us; he will, we think, understand better from some accidental feature; so we bid him call to us the man who is sitting or who is conversing — clearly supposing ourselves to be indicating the same object by its name and by its accident (δῆλον ὡς ταῦτὸν ὑπολαμβάνοντες κατὰ τε τοῦνομα καὶ κατὰ τὸ συμβεβηκὸς σημαίνειν).³⁵

If this passage is only about descriptions, how can Aristotle say that we have here three senses of numerical sameness, or, in other words, three types of numerical sameness? His position becomes understandable when we take into account the concept of accidental compounds, or, as some scholars call them, “accidental unities” or “kooky objects.”³⁶ It has long been recognized by modern interpreters that Aristotle makes use of this kind of objects in his analyses of change and in his solution to the paradoxes of identity (such as the masked man paradox in *Soph. el.* 23–24). One *locus classicus* is *Phys.* I.7, where Aristotle presents his view of change by using the example of a man becoming educated (μουσικός).³⁷ Aristotle’s analysis shows that the process of accidental change consists not only in the coming to be or perishing of certain features (such as whiteness, roundness or being educated), but above all in the coming to be and

³⁴ Cf. *Top.* I.7, 103a 23–39.

³⁵ *Top.* I.7, 103a 32–39, Pickard–Cambridge translation.

³⁶ The notion of “kooky objects” has been introduced by Gareth Matthews, cf. “Accidental Unities,” *Language and Logos*, ed. M. Schofield, M. Nussbaum, Cambridge: Cambridge University Press, 1982, p. 223–240. These objects are recognized also in D. MODRAK, *Aristotle’s Theory of Language and Meaning*, p. 40; S.M. COHEN, “Accidental Beings in Aristotle’s Ontology,” *Reason and Analysis in Ancient Greek Philosophy: Essays in Honor of David Keyt*, ed. G. Anagnostopoulos, F.D. Miller, Jr, Dordrecht: Springer 2013, p. 231–242.

³⁷ Cf. *Phys.* I.7, 189b 34–190a 31.

perishing of accidental compounds, such as universals *uneducated man* and *educated man*³⁸, and particulars — educated Coriscus or seated Socrates.³⁹

Aristotle's usage of the concept of accidental compound shows that from his perspective the objects mentioned in *Top.* I.7, i.e. Socrates and *the man who is sitting* or *the man who is conversing*, even if currently only Socrates is sitting or conversing, are by no means the same object (*pragma*). The primary reason is that they have different essences, which is the criterion mentioned both in the *Topics* passage and in the passage from *Physics*.⁴⁰ In this particular case it is even easier to see their distinctness, since we can look at the fact that they have different histories, i.e. they come to be and perish at different times. Socrates exists while he is sitting, he existed before he sat down, and will exist after he gets up; the object *the man who is sitting* will cease to exist the moment Socrates changes his position (provided no one else is sitting in the room at this point). According to Aristotle, the relation between the objects Socrates and Socrates seated is that they are accidentally the same, i.e. it accidentally so happens that at a given moment Socrates and Socrates seated are the same object.⁴¹ Hence, their sameness is not of the kind which Aristotle calls sameness in the most proper and primary sense.

With this conception in mind we can employ Aristotle's classification of types of numerical identity to formulate the following principle regarding the signification of linguistic expressions:

D e f i n i t i o n o f s y n o n y m i t y: two names or compound expressions signify the same thing (in the proper sense), if the things they signify have the same essence, i.e. they are identical in a strict sense.

If the things these expressions signify are the same on the basis of a property or only accidentally, then the things they signify are different (in a strict sense), and therefore the expressions have different meanings. Thus, the universals *man* and *two-footed terrestrial animal* are identical or the same in a strict sense, while the universals *man* and *animal capable of receiving knowledge* (ζῷον ἐπιστήμης

³⁸ In this paper I use italics for expressions (names and phrases) denoting universals. The use of quotation marks would be misleading, as it could suggest that universals are the same as linguistic expressions.

³⁹ Matthews and Cohen do not explicitly recognize these two classes of accidental compounds, but this distinction clearly follows from their analyses (cf. especially Cohen's remarks about the components of accidental compounds, "Accidental Beings in Aristotle's Ontology," p. 232).

⁴⁰ Cf. *Phys.* I.7, 190a 17.

⁴¹ One of the passages confirming this reading of Aristotle is in *Met.* V.6, i.e. the chapter devoted to the concept of unity. Aristotle says there that the Coriscus and educated Coriscus (Κορίσκος μουσικός) are one thing only in an accidental sense (ἐν κατὰ συμβεβηκός), cf. *Met.* V.6, 1015b 16–20.

δεκτικόν) are not.⁴² As a result, we can conclude that the expressions “man” and “two-footed terrestrial animal” have the same meaning (they signify the same in the proper sense), while the expressions “human” and “animal capable of receiving knowledge” do not.

This reading of Aristotle’s criteria of identity for *pragmata* shows again that Aristotle rejects the idea that sameness of meaning rests on the sameness of reference or extension. This is even more clear, if we take into account the notion of necessity associated with the notion of essence used by Aristotle in this context. It should be emphasized that this concept of necessity is stronger than the so-called statistical concept of necessity (something is necessary if it always holds) sometimes attributed to Aristotle.⁴³

This is best seen in Aristotle’s remarks on the distinguishing property (*proprium*) in *Top.* V.9. Aristotle states that one should refrain, while describing this property, from using the highest degree of adjectives or adverbs, because if a thing ceases to exist (φθαρέντος τοῦ πράγματος), this kind of formula (λόγος) will be applicable to something else. His example is the formula „lightest body” as the alleged *proprium* of fire:

Let’s suppose anyone were to render the lightest body as a *proprium* of fire; for, even if fire perishes, there will still be some form of body that is the lightest, so that the lightest body will not be a *proprium* of fire.⁴⁴

The concept of necessity that is in the background of this argument comes close to the modern understanding of necessity based on the concept of possible worlds. The *proprium* belonging to a thing is necessary not only in the sense that it always belongs to this thing, but also in the sense that it belongs in every other possible world (in those in which the thing exists). Also, it does not belong to anything else, neither in this world or in other possible worlds. Fire in our world is the lightest body, but if fire doesn’t exist in some possible world, something else will have the property of being the lightest body. Similarly, in a world in which there is a body lighter than fire, fire will not have this property. Therefore, the feature of being the lightest body cannot be the distinguishing property of fire. This shows once again that having the same extension (in our world) is not sufficient to show that two expressions signify the same thing (*pragma*).

Interestingly, these comments by Aristotle show that even if two expressions have the same extension in every possible world, it is not a suffi-

⁴² Cf. *Top.* I.7, 103a 28.

⁴³ Cf. J. HINTIKKA, *Time and Necessity: Studies in Aristotle’s Theory of Modality*, Oxford: Clarendon Press, 1973, p. 102–103.

⁴⁴ *Top.* V.9, 139a 13–16, Pickard-Cambridge translation, modified.

cient condition for them signifying one and the same thing (in the proper sense). This follows clearly from the fact that Aristotle distinguishes between sameness based on the essence and sameness based on the property. Hence, even though “two-footed terrestrial animal” and “animal capable of receiving knowledge” can be predicated of man and only of man in every possible world (in which man exists), the meanings of these expressions are not the same. These expressions signify different universals (different in the proper sense), because universals corresponding to these expressions are the same only on the basis of a *proprium*.

Initially, one might think that this poses a problem for Aristotle's conception. If the *proprium* is a necessary feature, the question arises as to how we can differentiate between *propria* and essential features. Aristotle's remarks on the role of essence in a definition help to resolve this difficulty. In *Top.* VI.4 Aristotle says that a formula reveals the essence of a thing (τὸ τί ἦν εἶναι) only when it refers to those features of the thing that are more primary (πρότερα) and more familiar (γνωριμώτερα).⁴⁵ Essential features must be primary in the sense that they explain all other features that necessarily belong to the thing.⁴⁶ Thus, the formula describing the essence must point to those features from which it is possible to derive, by applying rules specific to a given field of knowledge, other necessary features of a given thing or object.⁴⁷

The fact that both kinds of features are necessary means that they will always coexist. Any individual that is a rational animal will also be an animal capable of receiving knowledge, and vice versa. However, coexistence, or even necessary coexistence, does not mean there is no difference in priority between coexisting things, and hence, no distinction between them.⁴⁸

These distinctions can be applied to the identity of *pragmata*. If we consider three universals — *man*, *two-footed terrestrial animal* and *animal capable of receiving knowledge* — only the first two are identical in the proper sense, and the third one, even though it is not identical with them, has the same extension as

⁴⁵ Cf. *Top.* VI.4, 141a 23–31.

⁴⁶ Cf. J. KUNG, “Aristotle on Essence and Explanation,” *Philosophical Studies*, vol. 31 (1977), p. 361–383 (cf. especially p. 362–367).

⁴⁷ Such an approach agrees with Aristotle's frequent statement that substance (οὐσία) and essence (τί ἐστίν) are the principles of syllogisms about a given object, and with his thesis that the task of any particular science is to derive from the definitions describing the essences of things other necessary qualities (belonging to the object in their own right, καθ' αὐτά), cf. *Met.* VI.1, 1025b 10–13.

⁴⁸ The example used by Aristotle in *Cat.* 12 shows this well. Aristotle remarks that although the occurrence of an object or a fact (πράγμα) always coexists with the truth of the sentence stating the occurrence of that thing, it can be shown that the occurrence of a thing is something primary, because the object causes (αἴτιον) the sentence to be true, not the other way around, cf. *Cat.* 12, 14b 9–23.

the preceding two and necessarily coexists with them.⁴⁹ The first two universals have the same essence, and the third universal does not, because it is connected with a quality that is not a part of the essence, but is derived from it.

The thesis that two expressions have the same meaning if the things they signify have the same essence has one troublesome consequence. We must concede that the name of a given species (“man”) and the formula expressing the definition of the species (“two-footed terrestrial animal”) have the same meaning. This is an immediate result of Aristotle’s thesis that the name and the formula expressing the definition signify the same in the proper sense (τὸ αὐτὸ σημαίνει).⁵⁰ This consequence is problematic if we assume, in accordance with the modern way of thinking about semantics, that the meaning of a given expression can be fully described in terms of the knowledge that must be had by a competent language speaker about the use of this expression. But it is easy to imagine a situation in which a speaker knows the meaning of the name “man” and of the expression “two-footed terrestrial animal,” but she does not think these expressions have the same meaning (they signify the same thing), because she does not know (or she disagrees) that the essence of man is being a two-footed terrestrial animal.

This difficulty is not a sufficient reason to think that Aristotle’s concept of signification (σημαίνειν) is different in any important way from the modern concept of meaning.⁵¹ One can note here, that similar problems besiege contemporary externalist accounts of meaning and the so-called naive theory which is often treated as a proto-theory that underlies our contemporary thinking about meaning.⁵² Furthermore, Aristotle, contrary to what some scholars claim, does give in his account of signification a prominent place to the description of the actual linguistic practice of language users, and in particular to the specification of their beliefs about the proper usage of linguistic expressions. According to Aristotle, these inquiries, in turn, reveal the extension of the term and the connotation associated with it.⁵³

Nonetheless, the fact remains that for Aristotle these aspects of linguistic meaning play only a supporting role: the analysis of beliefs of speakers, of the

⁴⁹ Consequently, if we want to be precise, we have to say these three expressions signify only two universals, and not three.

⁵⁰ Cf. *Top.* VIII.13, 162b 37.

⁵¹ The claim that Aristotle did not have a concept of meaning in the modern sense of the term, was famously made by Irwin in his “Aristotle’s Concept of Signification.” For my discussion of this problem cf. T. TIURYN, “Z powrotem do Arystotelesowskiej teorii znaczenia,” *Przegląd Tomistyczny*, vol. 22 (2016), p. 347–408 (in Polish).

⁵² Cf. e.g. W. LYCAN, *Philosophy of Language*, p. 1–6; M. DEVITT, K. STERELNY, *Language and Reality: an Introduction to the Philosophy of Language*, Oxford: Blackwell, 1999, p. 22–23.

⁵³ Cf. T. TIURYN, “Z powrotem do Arystotelesowskiej teorii znaczenia,” p. 391–403.

extension of the term and of its connotation leads ultimately to finding out what kind of thing is signified by the term, which as we have seen, is inevitably connected with finding this thing's essence.

5. THEORY OF COGNITION AS A BASIS FOR SEMANTICS

Close connection between language and reality is a fundamental feature of Aristotle's theory: linguistic expressions have meaning only because they signify things or objects. This connection, in turn, is possible only because there is a mediating element between things and spoken words, namely thoughts and mental images ("sensations of the soul"). In consequence, the description of how cognitive faculties operate becomes indispensable. My account of Aristotle's epistemology is here, of necessity, only cursory and is subordinated to the presentation of Aristotle's semantic theory.⁵⁴

Aristotle's conception of cognition is realist in at least two senses: first, he assumes that the object of cognition exists, and second, he assumes that it is faithfully represented in the cognitive act. At the core of Aristotle's realist epistemology is his conviction that when human cognitive powers function properly, cognition is purely receptive. The central role in this account of cognition is played by the notion of form (εἶδος). In the case of both intellectual apprehension and sense perception it can be said that cognition consists in the subject's receiving the form from the object without its matter. The senses receive sensible forms (εἶδη αἰσθητά), the intellect receives intelligible forms (εἶδη νοητά) or, in other words, intelligible objects (τὰ νοητά).⁵⁵ The receptive nature of intellectual cognition is well illustrated by Aristotle's remark that the intellect is "capable of receiving a form" (δεκτικὸν τοῦ εἶδους).⁵⁶ Cognition, on this account, is not a creative process, but a process of undergoing change under the influence of the object, i.e. a passive reception of its form. Active elements in the process of cognition are imagination and the so-called agent intellect, but when all cognitive powers function correctly (including the active ones), not only the process of sensory cognition, but also the process of thinking (intellectual cognition) comes down to the subject's receiving the form of the object.

Aristotle hints at this idea of cognition in his schema in *De int.* 1, when he says that affections of the soul are *l i k e n e s s e s* of things (ὁμοιώματα).⁵⁷

⁵⁴In Sections 5 and 6 of this paper I rely on the interpretation presented by David Charles, cf. "Aristotle on Names and their Signification" and *Aristotle on Meaning and Essence*, chapters 4–5, where a fuller account of Aristotle's causal theory of cognition and of the distinction between simple and complex thoughts may be found.

⁵⁵This is especially clearly said in *De an.* III.8, 431b 28–432a 6.

⁵⁶Cf. *De an.* III.4, 429a 15–16.

⁵⁷Cf. *De int.* 1, 16a 7.

The concept of a likeness is connected with his thesis in *De an.* that both sensory experience and the activity of the intellect consist in the fact that the cognitive power comes to be similar (ὁμοιος) or comes to be assimilated (ὁμοιωται) to the object known.⁵⁸ It needs to be emphasized that a likeness in this context is not to be understood as an image that may be more or less similar to the original. The likeness or similarity between the intellect or the sense on the one hand, and the object of cognition on the other, consists in the intellect's or the sense's assuming the object's form, i.e. in becoming *the same* as the object in some respect. At the moment of cognition, intellect and sense have *the same form* as the object of cognition, not a *similar form*. This is the type of likeness that Aristotle attributes to thoughts (νοήματα), sensory perceptions (αἰσθήματα), and even images produced by imagination (φαντάσματα), provided these images reproduce sensory impressions in an unaltered form.

The realism of Aristotle's conception of cognition has two important consequences. First, cognitive acts — including acts of thought — are related to things in the world through *causation*. Not only sensations, but also images and thoughts are effects caused by some object external to the soul. That object is the form — sensible in the case of sense perceptions and images, intelligible in the case of thoughts. It should be emphasized that for Aristotle form is not something conceptual, but a real principle that exists in an external object and shapes or informs its being. Among sensible forms there are shapes, colors, sounds and smells, while intelligible forms are substantial forms that determine the essence of things. According to this account of cognition, the relationship between form and thought is a special case of the relationship between cause and effect.

Second, Aristotle assumes that in a vast majority of cases the object of cognition actually exists outside the cognizing subject. It is a simple consequence of the causal model of cognition. In the case of sensory experience, the necessity of the object's existence is obvious. We cannot say that a person *sees* something red unless there is a red object before her eyes; if the red object is not there, the person can only *imagine* seeing something red or she can have an *illusion* of seeing red. Since Aristotle claims there is an analogy between sensory cognition and thinking, a similar dependence should occur in the case of thought. Most acts of thinking must be about things that actually exist, or more precisely: about things that did exist at the moment of sensory contact with them. Since thinking is always based on some act of imagination, and imagination is simply a repetition of the movement that took place earlier in the sensory organ, the things which gave rise to these sensations must have

⁵⁸ Cf. *De an.* III.4, 429a 13–18; cf. also Charles' analysis of this passage, *Aristotle on Meaning and Essence*, p. 110–130.

existed when they were being perceived by the subject.⁵⁹ Thought is independent of the actual existence of intelligible objects only in the sense that they do not need to exist at the moment of thinking, because the object of thought is in fact the intelligible form contained in the mental image, i.e. the form existing in the soul (in memory).

Aristotle's conception of thought naturally brings up questions about the nature of error and the nature of thoughts about non-existent objects (such as goat-stags mentioned in *De int.* and *An. post.*).⁶⁰ Vast majority of thoughts must be about things that exist or have existed. Moreover, according to Aristotle our thinking has content only because we have had contact with actually existing things that have provided our cognitive faculties with forms (sensible and intelligible ones). It follows that the existence of things in the world is a necessary condition for the meaningfulness of both our thoughts and of the linguistic expressions that conventionally signify them.⁶¹ The existence of objects or things is also necessary because speakers in order to communicate with each other need to have the same set of forms, and therefore they must experience contact with the same set of things.

Contemporary accounts of Aristotle's theory show that he solves the problem of error by introducing a distinction between the cognition of simple things and the cognition and complex things.⁶² Thinking about simple things (τῶν ἀδιαιρέτων νόησις) is the area from which error and falsehood are excluded.⁶³ When the mind "comes into contact" (θιγγάνειν) with a simple thing, then it is in a state of knowing and truth. One cannot be mistaken about simple things, one can only not know them (ἀγνοεῖν).⁶⁴ As examples of "simple things" Aristotle mentions essences of material things and simple substances, which are probably pure forms, i.e. the Unmoved Movers.⁶⁵ This reading is consistent with Aristotle's thesis that the intellect, when grasping essences of material things, i.e. its proper object of cognition, cannot be wrong.⁶⁶ In consequence, according

⁵⁹Imagination is defined as a movement which imitates previous sensory affections, cf. *De an.* III.3, 428b 10–17; thinking is always accompanied by some image and cannot go on without imagination, cf. *De an.* III.7, 431a 14–17; III.8, 432a 7–9.

⁶⁰Cf. *De int.* 1, 16a 16–17; *An. pr.* I.38, 49a 24; *An. post.* II.7, 92b 7.

⁶¹The concept of "conventional correlation" (words signifying thoughts) and its distinction from causal connection between thoughts and things comes from Charles, cf. *Aristotle on Meaning and Essence*, p. 78–87.

⁶²Cf. D. CHARLES, *Aristotle on Meaning and Essence*, p. 87–95; P. CRIVELLI, *Aristotle on Truth*, p. 4–6, 45–62.

⁶³Cf. *De an.* III.6, 430a 26–28.

⁶⁴Cf. *Met.* IX.10, 1051b 17–25.

⁶⁵Cf. *Met.* IX.10, 1051b 25–27.

⁶⁶Cf. *De an.* III.6, 430b 27–29.

to Aristotle it is impossible for a simple thought to have content that is not derived from reality. In other words, a simple thought cannot be empty, it always has a reference in the real world, or, to be precise, in the sensory material taken from the real world.

On the other hand, error is possible in thoughts and propositions that involve a combination or separation of simple thoughts and relate one thing to another. As Aristotle points out in *De an.*, every declarative sentence (φάσις), i.e. every affirmation and negation, combines something with something (τι κατὰ τινος);⁶⁷ in another formula he states that falsity and error exist only in cases where there is a “combination of thoughts” (συνπλοκή νοημάτων) or a “juxtaposition of thoughts” (σύνθεσις νοημάτων).⁶⁸

It follows that on Aristotle’s account thoughts about non-existent objects must be complex thoughts. Clearly, on this account of cognition no simple thought can be a thought about a non-existent object, because every form apprehended by the intellect needs to be taken from reality.

6. THOUGHTS, NAMES AND *pragmata*

How can we translate talk about complex and simple thoughts and the apprehension of forms into talk about complex and simple objects? Here I propose a preliminary classification of *pragmata* based on Aristotle’s theory of cognition and his theory of names which are divided into simple and compound names. A final classification can be made only after the ontology of *pragmata* and their relation to forms is discussed (cf. below, Sections 7–8).

When Aristotle speaks about simple objects, the most plausible reading is that he has in mind essences of natural substances (such as man or horse), since this type of substance is indicated in the *Metaphysics* as the basic one, and in *De anima* essences are said to be the indivisible objects of thought.⁶⁹ To this we must also add forms that correspond to genera and differences, because forms of this type cannot be reduced to any other, so they also must be simple. Nor is there any reason not to think of accidental forms as simple, e.g. of forms of qualities or relations. In general, it can be said that all specific and generic forms that exist in nature will be simple.

Aristotle’s examples of complex *pragmata*, i.e. of those things which are objects of complex thoughts, are usually states of affairs, i.e. objects which consist of an individual or universal substance and one of its characteristics, such

⁶⁷ Cf. *De an.* III.6, 430b 26–27.

⁶⁸ Cf. *De an.* III.6, 430a 26–28; III.8, 432a 11–12.

⁶⁹ Cf. *Met.* VII.17, 1041b 29–30; *De an.* III.6, 430b 27–29.

as the state *Kleon's being white* or the state *the diagonal's being commensurate*.⁷⁰ Declarative sentences state the occurrence of these states of affairs, or, to put it another way, they state that one thing that constitutes this state of affairs currently belongs to the other. To the category of complex objects clearly belong also accidental compounds such as *white Socrates* or *educated man*. Also in this case we have a composition of simple objects, and consequently, a composition of simple thoughts when these objects are thought of. Also artifacts belong to this category, as they are not substances in the strict sense, but are results of combining an accidental feature with a substance (e.g. a wooden box is wooden planks nailed together in a certain way, and a threshold is a block of wood placed in a certain way).⁷¹

Individual objects such as Socrates or the donkey Brunellus (to use the classic scholastic example) are troublesome cases. As far as their ontological structure is concerned, it is plausible to think of them as simple objects. After all, each is constituted by only one substantial form, and a thought of any of those objects should consist in the intellect's grasping this very form. The difficulty lies in the fact that Aristotle's theory of cognition (as outlined in *De an.*) suggests that the intellect does not recognize the forms of individuals as individual. The intellect recognizes what is general, and the proper objects of the intellect are essences of material particulars insofar as those particulars belong to a certain species.⁷² Consequently, the grasp of Socrates' substantial form would be the same in content as the grasp of Callias' substantial form. Perhaps, then, thoughts about individuals must include some kind of sensory material supplied by the imagination. It is also possible that Aristotle allows demonstrative pronouns as parts of propositions, as is suggested by the examples he uses.⁷³ In such a situation individual names would be abbreviations of descriptions like „this man”, and the thought about a given individual would consist of the thought of man and the thought of a demonstrative pronoun. It is not necessary to decide which of the mentioned options is more appropriate within Aristotle's semantic theory, since the present paper is not about individual *pragmata*. However, the above analysis shows that proper names, whichever option we choose, denote individuals through the mediation of complex thoughts.

The distinction between simple and complex thoughts corresponds in Aristotle's semantic theory to the distinction between simple and complex names.

⁷⁰ Cf. *Met.* V.29, 1024b 17–21 and IX.10, 1051a 34–b 17, cf. also the discussion of these passages in P. CRIVELLI, *Aristotle on Truth*, p. 46–58.

⁷¹ Cf. *Met.* VIII.2, 1042b 15–21.

⁷² Universals as objects of knowledge are mentioned in *De an.* II.5 (417b 21–23), essences as the proper objects of the intellect in *De an.* III.4 (429b 10–18) and III.6 (430b 27–29).

⁷³ He speaks e.g. about “this A” (*De an.* II.5,) and about “you sitting” (*Met.* V.29, 1024b 17–20).

It can be shown that, just as among thoughts only complex thoughts may be empty or false, among names only complex names may refer to non-existent objects. The best way to interpret the distinction between complex and simple names is to make it secondary to the distinction between thoughts. A name is semantically complex if it immediately (i.e. directly) signifies a complex thought, namely a thought which consists in grasping two or more forms combined in some way.⁷⁴

These semantically complex names, according to Aristotle, come in two varieties: their semantic complexity is either reflected in their morphological structure, or not. This distinction is mentioned in *De int.* 2⁷⁵ and should be interpreted as follows: in morphologically simple names none of the parts has any signification; in morphologically complex names parts have some signification, but none of them signifies any one thing on its own, it does not have a signification in its own right (καθ' αὐτό);⁷⁶ when parts of the name are combined, they signify together one thing that has the combined features that are signified by each part separately.

The best example of this type of complex name is the expression “goat-stag” (τραγέλαφος) found in several of Aristotle’s texts.⁷⁷ This name signifies an animal that has the features of a goat and a stag. The parts “goat-“ and “-stag” retain, to some extent, their original signification, however, they do not have signification in their own right. If they did, the complex name would be a name for two simple things, namely a goat and a stag, and not a name for one complex thing. Because goat-stags do not exist, this is an example of an expression that has signification, but is a name of a non-being. Thus, we can see that Aristotle’s semantic theory allows for names that are both empty and significant.⁷⁸

An example of the second variety of semantically complex names, i.e. of names whose semantic complexity is not visible in their morphological structure, is the term “void” (τὸ κενόν) discussed in *Phys.* IV.7. In order to describe the signification of this name, Aristotle uses a hypothetical formula: “The void, if it exists, must be a place deprived of any body (τὸ κενὸν ἀνάγκη τόπον εἶναι, εἰ ἔστιν, ἔστερημένον σώματος).”⁷⁹ It turns out, then, that the thought asso-

⁷⁴The relation between simple and complex names of the one hand, and simple and complex thoughts on the other, is thoroughly described by Charles, cf. *Aristotle on Meaning and Essence*, p. 80–95.

⁷⁵Cf. *De int.* 2, 16a 24–26.

⁷⁶Cf. *De int.* 2, 16a 21–22; 4, 16b 32–33.

⁷⁷Cf. *De int.* 1, 16a 16–17; *An post.* II.7, 92b 7.

⁷⁸Cf. *De int.* 1, 16a 16–18, where “goat-stag” is said to signify something.

⁷⁹*Phys.* IV.7, 214a 16–17. Earlier Aristotle says that we need to specify what is signified by the name “void” (τί σημαίνει τοῦνομα), cf. 213b 30–31.

ciated with the name consists in grasping several forms: the form of place, the form of body, the relation of being deprived of something; later Aristotle adds to the analysis of the void the relation of being in.

The use of the hypothetical formula (“if it exists”) shows that Aristotle is cautious when describing an object about which it is unclear whether it exists or not. This is consistent with his remarks in *An. post.* II.7–10 that one can define only existent objects and only about them one can say what they are. About goat-stags it is impossible to say what they are (τι ἔστιν), but still it is possible to specify what the name or the formula connected with the name signifies (εἰδέναι τί σημαίνει ὁ λόγος ἢ τὸ ὄνομα).⁸⁰ Consequently, Aristotle concludes that “it is possible to signify also non-beings (σημαίνειν γὰρ ἔστι καὶ τὰ μὴ ὄντα),”⁸¹ i.e. to signify them with linguistic expressions.

These formulations show that on Aristotle’s account it is possible to speak and think about non-beings. In this context it is natural to ask about the ontological status of *pragmata* and whether non-beings may be included in the category of *pragmata* and called objects that are signified.

7. THE ONTOLOGY OF UNIVERSAL *pragmata*

Aristotle is usually credited with a position that says that universals exist in particulars; this is the standard formula of so-called moderate realism⁸². Undoubtedly, there is some truth in this reading, since Aristotle counts universals among beings and he also claims that their existence is dependent on the existence of particulars. The *locus classicus* for the formulation of this dependence is *Cat.* 11, where Aristotle says that if everyone were healthy, sickness would not exist.⁸³ What is missing from the traditional account is a further analysis of the way in which universals exist in particulars. In this section I will argue that Aristotle mostly sees universals as objects that can be spoken of or thought about, or as objects of cognition, and that their ontological status is quite low, since they are causally inert entities (having no causal connection with other beings). Because of this feature they are best characterized as abstract objects.⁸⁴

⁸⁰ Cf. *An. post.* II.7, 92b 4–11.

⁸¹ *An. post.* II.7, 92b 29–30.

⁸² Cf. e.g. D.M. ARMSTRONG, *Universals: an Opinionated Introduction*, Boulder: Routledge, 1989, p. 77; James Moreland calls this type of realism „traditional realism,” cf. J.P. MORELAND, *Universals*, (Central Problems of Philosophy), Montreal – Ithaca: McGill-Queens University Press, 2001, p. 9.

⁸³ Cf. *Cat.* 11, 14a 6–10.

⁸⁴ Causal inefficacy is a feature typically attributed to abstract objects, cf. e.g. R. GIDEON, “Abstract Objects,” *Stanford Encyclopedia of Philosophy*, online version 2017.

Additionally, as we will see in the next section, universals are said to exist in particulars only potentially.

When we take a closer look at Aristotle's conception of universal *pragmata*, we find that their description is mostly connected with the functions they fulfill in language and in cognition, and not with their ontological properties. Their main function is that they are grasped by the human mind in the process of creating and using general concepts, and that they are *significata* for general names. In effect, their role in the ontological constitution of particular objects is very limited (if not altogether non-existent).

As is well known, the main definition of universal in Aristotle, is that it is an object that by nature can be predicated of many things (ὁ ἐπὶ πλειόνων πέφυκε κατηγορεῖσθαι).⁸⁵ This definition is formulated in a context where Aristotle introduces the division of sentences in accordance with the items that are spoken of in these sentences. Thus we have a connection between universals on the one hand, and language and the contents of linguistic expressions on the other.

The element of potentiality contained in this definition is worth being emphasized: the universal is "by nature" predicated of many, i.e. even if it happens that there is only one man or one horse, still the universals *man* and *horse* will retain their universal nature, as they will be, also in this situation, potentially predicated of many.⁸⁶ As we can see, from Aristotle's perspective their status as universals has more to do with their predicability, than with the fact that they are in many particulars or that they are common to many. In *Met.* VII.15 Aristotle adds that even a unique substance can be characterized in a general way, for example we can say about the sun that it is the celestial body that goes around the Earth and is visible during the day.⁸⁷ There is only one such substance, nevertheless Aristotle suggests that the complex universal *celestial body orbiting the Earth, visible in the daytime* could be predicated of many things, if it so happened that the structure of the universe was different.

Other important texts about universals stress their role as objects of thought and cognition. In the first book of *An. post.* (I.11) Aristotle mentions the existence of universals as a necessary condition for deduction and scientific reasoning: without predicates that can be truly predicated of many particulars (ἐν κατὰ πολλῶν ἀληθὲς εἰπεῖν) it would be impossible to formulate a scientific

⁸⁵ Cf. *De int.* 7, 17a 39–40.

⁸⁶ P. Crivelli discusses two different readings of this phrase and presents some problems for the "potential" reading, cf. P. CRIVELLI, "Aristotle's Definitions of Universals and Individuals in *De interpretatione* 7," *Nominalism about Properties: New Essays*, ed. G. Guigon, G. Rodriguez-Pereyra, New York – Abingdon: Routledge, 2015, p. 19–35. I think these problems are not that difficult to overcome and they do not outweigh the philosophical reasons for this reading and other evidence found in Aristotle (like the passage from *Met.* VII.15 quoted below).

⁸⁷ Cf. *Met.* VII.15, 1040a 27–1040b 4.

demonstration (ἀπόδειξις), and presumably any syllogism, because there would be no middle term.⁸⁸ In fact, this remark can be applied to any kind of sentence or statement, since it suggests that without universals it is impossible to use predicates.

In the last chapter of *An. post.* (II.19) universals appear as part of an empiricist account of the origins of knowledge. Aristotle describes the way in which the human mind, by using sensory perception and memory, is able to progress from the experience of particulars to the possession of scientific knowledge. A crucial part of this process is the moment where from experience “the universal comes to rest in the soul” (ἐκ παντὸς ἡρεμήσαντος τοῦ καθόλου ἐν τῇ ψυχῇ).⁸⁹ Universals may be understood here either as concepts, as definitions, or as their contents, but it is clear, that in this description they are connected with the process of acquiring knowledge and with the changes that occur in the soul as a result of this process. They are not described by Aristotle as principles or ontological components that are present in the objects; rather, they come to exist in the soul as a result of experiencing those objects.

Finally, in *De an.*, where universals are only mentioned a few times, they appear in a context where Aristotle compares sense perception and the activity of the intellect. Universals are mentioned there as objects of knowledge (ἐπιστήμη), which is equivalent in this context to being objects of thought.⁹⁰

Aristotle's main attempt to describe the ontological status of universals and the way they exist in particulars is found in the *Metaphysics*. The problem is formulated in *Met.* III, the book of *aporiai*, as the question whether universals, i.e. genera and species, are elements and principles (στοιχεῖα καὶ ἀρχαί) of particulars.⁹¹ It is taken up later, in *Met.* VII.3, in the form of the inquiry whether universal is a substance (οὐσία).⁹² In the context of this book this is tantamount to asking whether a universal is the principle that determines the being of a particular.⁹³

Aristotle answers both of these questions in the negative: a universal is neither a substance, nor any other kind of principle. In *Met.* VII.13 it turns out that a universal cannot be a substance, because a substance cannot be predicated of many individuals, it must be proper to each being (ἴδιον), and hence, cannot be common. Moreover, Aristotle says that a universal cannot be an actual part of the particular either, because, if the universal is a substance, there

⁸⁸ Cf. *An. post.* I.11, 77a 5–8.

⁸⁹ Cf. *An. post.* II.19, 100a 6–7.

⁹⁰ Cf. *De an.* II.5, 417b 21–23.

⁹¹ Cf. *Met.* III.3, 998a 20–25 (aporia 6) and 998b 13–15 (aporia 7).

⁹² Cf. *Met.* VII.3, 1028b 33–36.

⁹³ Cf. *Met.* VII.17, 1041b 27–28, where *ousia* is glossed as the “first cause of being.”

would be two actual substances instead of one, and if it is a quality, then quality would be an ontological principle of the particular substance and it would precede this substance in being.⁹⁴ Since the universal is neither a substance, nor a quality, it is not a principle at all, it does not have any real influence on the being of particulars. It should be noted that this chapter brings a suggestion that universals exist in particulars only potentially, since no universal is an actual part (i.e. a part in actuality) of the particular.

The analysis found in the closing chapter of *Met.* VII (VII.17) shows that in Aristotle's conception of the ontological structure of sensible substances the role of the main ontological principle (i.e. of substance) in any given particular is played by the substantial form of that particular — it is form that shapes the matter and gives substantiality, identity and definable nature to any particular being.⁹⁵ Thus, Aristotle completes the distinction between two meanings of the term εἶδος: on the one hand, there is the substantial form that is an ontological principle, on the other hand, there is the species that is predicated of individuals, but does not have any part in the particular's ontological structure.⁹⁶

This account makes clear that universals are entities which are causally inert, they are neither causes of particulars' being, nor causes of any of their features. Consistent with this picture of universals are Aristotle's remarks about the ontological status of universals and their relation to form made earlier in the book, i.e. in *Met.* VII.10–12.

In *Met.* VII.10, where Aristotle considers the relation between parts of a thing and parts of the definition, he states that a definition must include reference to the substantial formula (λόγος) of the thing and to the form (εἶδος).⁹⁷ But universals are not substances and are not forms:

As for man and horse and other items which are in this way applied to individuals, i.e. universally (ὁ δ' ἄνθρωπος καὶ ὁ ἵππος καὶ τὰ οὕτως ἐπὶ τῶν καθ' ἕκαστα, καθόλου δέ), they are not substances but something composed of this formula

⁹⁴Cf. *Met.* VII.13, 1038b 8–29.

⁹⁵Cf. *Met.* VII.17, 1041b 7–9.

⁹⁶The distinction between two meanings of *eidōs* is recognized by many scholars (e.g. J. Driscoll, A. Code, M.J. Loux, F. Lewis, M.L. Gill), cf. M. Woods' paper for references and criticism ("Form, Species and Predication in Aristotle," *Synthese*, vol. 96 (1993), p. 399, entire paper p. 399–415) and M.L. Gill's paper for a brief summary of this discussion ("Aristotle's Metaphysics Reconsidered," *Journal of the History of Philosophy*, vol. 43 (2005), p. 232, entire paper p. 223–241). Lewis shows that this distinction is possible even if someone believes that form is universal, cf. F. LEWIS, *Substance and Predication in Aristotle*, Cambridge: Cambridge University Press, 1991, p. 145 (n. 3), p. 153 (n. 8), and p. 308–330.

⁹⁷Cf. *Met.* VII.10, 1035b 31–1036a 2.

and this matter taken as universal (σύνολόν τι ἐκ τουδι τοῦ λόγου καὶ τησδι τῆς ὕλης ὡς καθόλου).⁹⁸

This conception of the universal is confirmed in the next chapter (*Met.* VII.11):

It is clear that the soul is the primary substance and the body is matter, and man or animal is the compound of both taken universally (ὁ δ' ἄνθρωπος ἢ τὸ ζῷον τὸ ἐξ ἀμφοῖν ὡς καθόλου); (...) if [Socrates] is simply this soul and this body, then the individual is analogous to the universal (εἰ δ' ἀπλῶς ἡ ψυχὴ ἢδε καὶ <τὸ> σῶμα τόδε, ὥσπερ τὸ καθόλου [τε] καὶ τὸ καθ' ἕκαστον).⁹⁹

We find here two important elements of Aristotle's account of universals. First, it is clear that the universal is sharply distinguished from the substantial form of the thing, and this also applies to the species (not only to the genus), as Aristotle's examples clearly show ("man and horse"). For example, the human soul is a form, while the universal *man* is not a form, but a compound of form and matter taken universally, i.e. it is an entity whose structure corresponds to the structure of the particular constituted by both principles.

Second, Aristotle's remark that matter and form are combined together and taken universally, suggests that what is described here is an operation of the intellect.¹⁰⁰ The universals, if we take this suggestion seriously, are products of the mind's combining "this form" and "this matter" and taking their compound as universal. The mental element in the constitution of universals will be discussed in the next section.

The treatment of universals in the *Metaphysics* is concluded in *Met.* XII, where Aristotle stresses the fact that causes involved in the production of any individual being are individual themselves. If we want to describe a particular case of causation, we have no need for universal causes such as the universal *man*. Rather, "Peles is the cause of Achilles, and your father of you."¹⁰¹ Several lines later, Aristotle elaborates on this topic, clearly stating that the only causes needed are matter, form and the moving agent, and adds that all these causes are individual:

Among things in the same species the causes are different, not in species, but in the sense that the causes of different individuals are different, your matter

⁹⁸ *Met.* VII.10, 1035b 27–31, Ross' translation, modified.

⁹⁹ *Met.* VII.11, 1037a 5–10, Ross' translation, modified.

¹⁰⁰ Literally Aristotle only says here that he speaks about the compound "as universal" (ὡς καθόλου), but most translations assume that he means "taken as universal" (Ross, C.D.C. Reeve, D. Bostock).

¹⁰¹ *Met.* XII.5, 1071a 21–22, Ross' translation.

and form and moving cause being different from mine, while in their universal formula they are the same.¹⁰²

This general remark confirms our conclusion from the analysis of *Met.* VII that on Aristotle's account universals are not causes and are causally inert. Hence, they can be said to have the status of abstract objects.

8. UNIVERSALS AND ABSTRACTION

The treatment of universals in the *Metaphysics* shows that they are complex entities, i.e. compounds of matter and form taken universally, and it suggests (especially the passages in *Met.* VII.10 and VII.11) that their complexity is due to some operation of the intellect. Two questions need to be asked: are all universals, according to Aristotle, complex entities? What operation of the intellect is the source of their ontological structure, i.e. of their complexity?

From Aristotle's remarks it is clear that all substantial universals, such as *man* and *animal*, i.e. universals representing species and genera of substances, are complex entities. The same is clearly true about accidental compounds ("kooky objects") and states of affairs: it is obvious that universals such as *educated man* or *the diagonal's being commensurate* are composed of two or more forms combined by the intellect.

More difficult is the case of universals such as *white* or *courageous*, i.e. universals representing other categories than substance, but not identical to the properties themselves (like *whiteness* or *courage*).¹⁰³ I propose calling this type of universals concrete accidental universals. Initially, one might think that they are simple entities, since they are constituted by only one form, i.e. the form of whiteness or the form of courage respectively. However, these universals share this feature with substantial universals, and just like them they are predicated of particulars. Therefore, by analogy, they should have a similar structure, a structure that mirrors the structure of the individual. Consequently, it is plausible to think that also concrete accidental universals are complex entities, products of the intellect's combining two aspects of the particular.

The situation is different with only one class of universals, namely with universals that are properties, i.e. universals such as *whiteness*, *justice* or *courage* (I propose to call them, by analogy, abstract accidental universals). Since they are

¹⁰² *Met.* XII.5, 1071a 27–29, Ross' translation, modified.

¹⁰³ For a recognition of objects such as *white* or *courageous* as a distinct class of universals cf. S.M. COHEN, "Accidental Beings in Aristotle's Ontology," p. 231–234; D. MODRAK, *Aristotle's Theory of Language and Meaning*, p. 40. Ackrill disagrees with this and claims that labels "courage" and "courageous" denote the same object, cf. J. ACKRILL, *Aristotle's Categories and De Interpretatione*, p. 73.

properties, i.e. forms, we may speculate that they are not compounds of matter and form, and consequently, they are simple entities.

One should note that this analysis has one interesting result: universals typically involved in predication and other uses of language are complex entities. As Aristotle's remarks on the structure of propositions show, in a standard proposition the things signified are not properties, but complex universals described above. In a sentence like "A man is white" (ἔστι λευκὸς ἄνθρωπος) the objects set together by the intellect (τὰ ὑποκείμενα πράγματα) are *man* (τὸ ἄνθρωπος) and *white* (τὸ λευκόν), and not *man* and *whiteness*.¹⁰⁴ Hence, only in sentences such as "Socrates has courage," where the property is explicitly mentioned, a simple universal is signified and becomes part of the proposition. In other cases it is complex universals that are signified or referred to.

When speaking about operations of the intellect involved in the formation of propositions, Aristotle usually points to some kind of composition (συμπλοκή) or juxtaposition (σύνθεσις) of thoughts (cf. Section 5, above). It is clear that, as a counterpart to this kind of composition, a composition of things (*pragmata*) carried out by the intellect must also take place. This is suggested by Aristotle's expression "underlying things" (ὑποκείμενα πράγματα), in a context where he clearly speaks about combining things in the proposition, and also by his claim that states of affairs are complex *pragmata*. If this is true, we can assume that the same sort of intellectual operation as in the formation of complex thoughts, i.e. some sort of combination or composition, is involved in the constitution of complex universals.

Yet, since the forms that are grasped by the mind when it is thinking about some universal exist in matter, also some process of abstraction or separation of those forms from matter must be carried out by the intellect.

Abstraction (ἀφαίρεσις) is not a notion typically used by Aristotle to describe operations on universals. The term is applied several times to mathematical objects, which are described by Aristotle as "objects grasped by abstraction" (τὰ ἐξ ἀφαίρεσεως). In their case this label is meant to convey the fact that mathematical objects are considered by the intellect without physical matter. Mathematical objects are considered as having only the kind of matter which is responsible for quantity, while physical objects are considered together with the kind of matter that can serve as a subject for sensible qualities and change.¹⁰⁵

There is, however, one passage which allows for making a connection between abstraction and thinking about universals.¹⁰⁶ In *Met.* XIII.2 Aristotle describes

¹⁰⁴ Cf. *De int.* 12, 21b 26–27.

¹⁰⁵ Cf. for example *De cael.* III.1, 299a 16; *Met.* XI.3, 1061a 29.

¹⁰⁶ This connection has been made by Cohen (cf. "Accidental Beings in Aristotle's Ontology," p. 237).

the difference between being prior in substance and being prior in formula, and as part of that distinction he introduces a distinction between properties existing in substances and properties considered by themselves:

If attributes, such as moving or white, do not exist apart from their substances, the white (τὸ λευκὸν) is prior to the white man (τοῦ λευκοῦ ἀνθρώπου) in formula, but not in substance. For it cannot exist separately, but is always along with the compound thing; and by the compound thing I mean the white man. Therefore it is plain that neither is the result of abstraction (τὸ ἐξ ἀφαιρέσεως) prior nor that which is produced by adding (τὸ ἐκ προσθέσεως) posterior; for it is by adding to the white that we speak of the white man (ἐκ προσθέσεως γὰρ τῷ λευκῷ ὁ λευκὸς ἄνθρωπος λέγεται).¹⁰⁷

The passage clearly says that objects like *white* are arrived at by abstraction. This means that at least in the case of some universals it can be said that they are grasped by the intellect as a result of the abstraction of the form.

What Aristotle wants to say is probably this: in our everyday experience we do not encounter white objects as such or round objects as such; rather, we encounter this white piece of paper or this white car and this round bowl or this round plate. It is only from such encounters of particular and compound objects that we can get to know such objects as *round* or *white*. Thus, Aristotle concludes, it is by abstraction from this white piece of paper or this round plate that we get to know *white* and *round*.

But what about other universals? At first glance it may seem that in this picture it is the universal *white man* that is prior in substance and therefore not arrived at by abstraction. However, this cannot be true, because in our experience we do not encounter universals, but only particular objects. What is prior in substance is *this* white man and *this* white sheet of paper. The universal *white man* may be arrived at by composition, once its elements — the universals *white* and *man* — are abstracted from the particulars. On this reading we can make sense of Aristotle's last claim in the cited passage: the universal *white man*, to which we refer when we speak (λέγεται), is arrived at by addition, namely by adding together *white* and *man*.

If Aristotle makes these claims about universal compounds and concrete accidental universals, it is plausible to think, based on Aristotle's remarks about the composition of substantial universals, that it is his position also in this case. This would mean that also substantial universals are arrived at by means of a composition carried out by the intellect (composition of form with matter), and also in this case the form has to be abstracted from the actual matter in which it

¹⁰⁷ *Met.* XIII.2, 1077b 4–11, Ross' translation.

exists. In consequence, it appears that also universals of this type are produced by means of abstraction.

But there are other universal *pragmata* which do not seem to be compounds, such as *virtue*, *whiteness* or *knowledge*. Are they also products of abstraction? As has been said above, they are not compounds, because they seem to be forms. So it could be argued that whenever this kind of universals is signified or referred to in a proposition, it is real forms existing in actual matter that are signified, and not abstracted forms. This, however, does not seem to be true. As has been shown in the previous section, universals are causally inert. Aristotle claims, quite generally, that causes of individuals are individual, not universal. And we also can confirm this in particular cases: what makes Socrates healthy is not health in general, but Socrates' health; what makes Callias virtuous is his virtue and not virtue in general. On the other hand, when we form the sentence "Socrates has health," we refer to the universal *health*, because we expect that there is one and the same object predicated of all healthy persons. In light of this evidence, it is plausible to think that also universal properties (or abstract accidental universals) are abstracted forms, and not real forms existing in individuals.

The view of universals I have argued for here, that they are either abstracted forms, compounds of abstracted forms or compounds of abstracted forms with some kind of matter, is corroborated by the conclusions from Section 7 above, i.e. that universals are not causes and are causally inert.

This view also fits well with what is said about universals as objects of cognition, especially in *De an.* Famously, Aristotle says that sense perception and theoretical knowledge (*ἐπιστήμη*) differ because the first is of particulars while the second is of universals, and the objects of the second type of cognition "are in some sense in the soul itself" (*ἐν αὐτῇ πῶς ἔστι τῆ ψυχῆ*).¹⁰⁸ If universals are abstracted forms, it makes sense to say that they are in the soul in some way: it is only in the intellect that universals can be grasped as they are in themselves, and not in particulars. Consequently, only in the intellect and only by the intellect they can be considered as universals.

Additionally, Aristotle claims that intelligible and abstract objects are in the sensible forms (*ἐν τοῖς εἶδεσι τοῖς αἰσθητοῖς τὰ νοητὰ ἔστι, τὰ τε ἐν ἀφαιρέσει λεγόμενα*).¹⁰⁹ So, it would follow that whenever sensible forms are stored in the soul (e.g. in memory), also universals and abstract objects find their place in the soul. It is interesting that Aristotle mentions in the same sentence the dispositions and properties of sensible objects (*τῶν αἰσθητῶν ἕξεις καὶ πάθη*), as this would be another confirmation that universal properties (i.e. abstract

¹⁰⁸ *De an.* II.5, 417b 21–25.

¹⁰⁹ Cf. *De an.* III.8, 432a 3–6.

accidental universals) are not real forms existing in actual matter, but rather abstracted forms that can be stored in the sensible forms present in the soul. Of course, all of these kinds of universals exist also in particulars, not only in the soul, but they exist in them in a different manner, only through the mediation of their individual instantiations.

Finally, the idea that universals are either abstracted forms or consist of abstracted forms, agrees with Aristotle's remark that "in enmattered things each intelligible object exists only in potentiality" (*ἐν δὲ τοῖς ἔχουσιν ὕλην δυνάμει ἕκαστον ἔστι τῶν νοητῶν*).¹¹⁰ It is clear that universals are grasped by the intellect, not by the senses, and, consequently, that they are intelligible objects. If universals are also abstract objects, it is easy to see why they exist in material particulars only in potentiality: they need the abstracting activity of the intellect in order to be actualized and to be grasped as they are in themselves, namely as universals. This abstracting activity amounts to, among other things, separating the form from matter and from the individualizing conditions in which it exists in the particular.

If universals are forms abstracted by the intellect, does it mean there is some subjective element in their nature? As I have mentioned in Section 1, it is a possible reading of de Rijk's formula that *pragmata* are "things as conceived of by the intellect."

In the light of what has been said in Section 5 about Aristotle's realist theory of cognition, and especially if we take into account Aristotle's idea that any kind of cognition, whether sensory or intellectual, consists in the reception of form by the knowing subject, it is clear that the answer to this question is negative. Universals, as Aristotle describes them, do not allow any subjective or personal elements in their nature. They are abstracted forms or combinations of abstracted forms, but forms are the same for all subjects that grasp them. Of course, it could be said that the combination of forms may lead to error, as the distinction between simple and complex thoughts described above shows (Section 5). But this points only to the possibility that we can think of universals that are "empty," i.e. do not have any instantiations. It is possible to think about red elephants or mountains of gold, but the fact that these universals are compounds or are produced by abstraction does not make them subjective. On Aristotle's account the universal *red elephant* that is the object of my thought is the same (in the strict sense, i.e. it has the same essence) as the universal *red elephant* that is the object of thought of some other person. The reason is that in these two particular acts of thinking what is being thought about are the same

¹¹⁰ Cf. *De an.* III.4, 430a 6–7.

forms compounded in the same way by the mind, and these forms are abstracted from the same types of things in the world.

A good illustration of the epistemological status of universals is provided by mathematics, since mathematical objects are also produced or grasped by abstraction. Aristotle never claims or suggests that mathematical objects are somehow subjective or that because of their abstract status the objectivity of mathematics is questionable. Rather, he thinks that mathematics is a branch of scientific knowledge on equal terms with physics and other sciences.

9. CONCLUSION: *pragmata*, SENSE AND NON-EXISTENT OBJECTS

Our analysis in the last two sections has shown that Aristotle understands universal *pragmata* as abstract objects. This amounts to three things: (i) they are not parts of individual things, (ii) they are causally inert, and (iii) they are grasped by the intellect by means of a process of abstraction (and, in some cases, composition) carried out by the intellect. Their main function in Aristotle's ontology is to be objects of cognition and to be signified in acts of predication. In the previous section it has been said already that from the fact that universals have this kind of nature it does not follow that they are subjective in any way.

If this is so, universals cannot play the role of senses (in Frege's understanding of the term) in Aristotle's theory of signification. They are not modes of presentation of objects, rather, they are the objects themselves, although not real objects (existing in matter), but abstract ones. The consequence that universals are not modes of presentation, could already be seen when the criteria for identity of universals were specified in Section 4: universals that have the same essence are one and the same *pragma* in the strict sense of sameness, regardless of how these universals are conceived of by different speakers.

The question remains, however, as to whether Aristotle has some other means of supplementing his semantic theory with a notion similar to Frege's concept of sense. Perhaps some kind of solution may be offered by the way the Stagirite describes different ways in which a universal may be known.

In *Met.* I.1 we find an account of different ways in which a person may have medical knowledge.¹¹¹ In this passage Aristotle makes a comparison between art and science (ἐπιστήμη καὶ τέχνη) on the one hand, and experience (ἐμπειρία) on the other. Art and science are specified by person's ability to make general judgments (ὕποληψις) and by knowledge of what is universal (τῶν καθόλου), while experience is specified as acquaintance with particular cases. However, in the case of arts connected with practice (πράξεις) and the generation of things

¹¹¹ Cf. *Met.* I.1, 981a 5–24.

(γενέσεις) experience may play as important a role as knowledge of the universal. A person who only has knowledge of the general formula (λόγος) will be a worse doctor than the person having only experience. The best doctor will not only know the universal, but also will have experience and knowledge of the particular cases. Thus, we can conclude it is possible to either have only knowledge of the universal without having knowledge based on experience, or to know both the universal and have knowledge based on experience. Consequently, we can say Aristotle points here to two ways of knowing the universal.

A doctor who knows a given universal only by knowing universal formulae and without being acquainted with particular cases, has a different grasp of this universal than the doctor who both knows the universal and the particular cases. Moreover, this difference in grasping the universal is displayed in the medical practice of each person, and especially in the level of their understanding of the relation between the universal and the particular instances of this universal.

Aristotle's treatment of the knowledge of universals allows us to attribute the following position to him. Whenever we find that different persons use different expressions to signify the same universal, i.e. a universal *pragma* with a specified essence, we have to assume that these two expressions have the same meaning (the same signification in the proper sense). However, it is possible to point to a difference in the grasp of this universal by those two persons, especially if this difference has to do with the relation between the universal and the particulars. Let us suppose a person knows the signification of the expression "two-footed terrestrial animal," but she thinks this formula does not apply to particular human beings. We may say that this person knows the universal which is signified by the expression, since she knows its essence, but she does not know that this essence is found in human beings. Therefore, this person knows the signification of the formula, but knows it in a different way than the person who thinks that this formula is applicable to human beings. This kind of difference in semantic knowledge of both speakers may explain the fact that these persons associate different truth values with beliefs involving the use of this formula.

In the closing paragraphs of this paper I wish to discuss the question of whether on Aristotle's account it can be said that every name, regardless of whether it is an empty name or a name that actually can be predicated of some particulars, signifies a certain *pragma*. This question can be answered affirmatively if Aristotle allows for non-existent *pragmata*.

Of course, it is true that Aristotle never uses the term *pragma* when he is speaking about non-beings such as goat-stags or void. However, as has been mentioned before, Aristotle claims that there are false *pragmata*, i.e. states of affairs that do not exist or do not occur (e.g. the state of affairs *the diagonal's being commensurate*). If these kinds of objects may be called *pragmata*, there is

no real reason to think that this term is not applicable to non-beings (apart from Aristotle's silence, which is not a compelling argument).

In fact, to think that also non-existent objects may be called *pragmata* is quite consistent with the way Aristotle uses this term and with its general meaning in Greek. As mentioned in Section 1, the term *pragma* is frequently employed in situations where the ontological status of the object is unclear, for example in a speech or in a discussion where it has not yet been settled whether the thing spoken of exists or not. This should not be surprising given the connection between the word *pragma* and the area of doing, acting and planning. The original meaning of *pragma* is either "activity, action" or, more precisely, "the thing which needs to be taken care of," and often "a difficulty, a problem."¹¹² Hence, if one has a plan of doing or putting into action a certain *pragma*, this *pragma* does not yet exist. It is only planned by the person thinking about the *pragma*. Consequently, since the term *pragma* is used in this way, it is understandable that it may denote an object which is spoken of or thought about without specifying the ontological status of this object, i.e. without specifying whether it exists (in external reality) or not.

Earlier in this paper we have seen that we can define the meaning of *pragma* in Aristotle's technical language as that which is a *significatum* of a name, an object of thought, or an object of cognition. If this is true, calling non-beings *pragmata* would be perfectly consistent with Aristotle's way of speaking. After all, he often points to the fact that even though certain objects do not exist, i.e. are non-beings (τὰ μὴ ὄντα), they can be objects of beliefs (δοξαστά), objects of thought (διανοητά), or objects of desire (ἐπιθυμητά).¹¹³

Therefore, we can assume that according to Aristotle's theory of signification every significant name or name-like linguistic expression, whether it is an empty name or a name that actually applies to some beings, is the name of some object, some *pragma*. It is from the connection with this *pragma* that the meaning of the expression is derived.

¹¹²A general review of the philosophical usage of the term *pragma* is found in P. HADOT, "Sur divers sens du mot 'pragma'." Cf. also my summary of the meanings of *pragma* in T. TIURYN, "Wstęp. Wprowadzenie do Arystotelesowskiej filozofii języka," in Arystoteles, *Peri hermeneias*, p. 73–86 (in Polish).

¹¹³Cf. *De int.* 11, 21a 32–33; *Met.* IX.4, 1047a 32–1047b 1.

BIBLIOGRAFIA

Teksty źródłowe

- ARISTOTE, *Du ciel*, ed. P. Moraux (Collection Budé), Paris: Les Belles Lettres, 1965.
- [ARISTOTELES], *ARISTOTELIS Analytica priora et posteriora*, ed. W.D. Ross, L. Minio-Paluello, (Oxford Classical Texts), Oxford: Clarendon Press, 1964.
- [ARISTOTELES], *ARISTOTELIS Ars Rhetorica*, ed. W.D. Ross, (Oxford Classical Texts), Oxford: Clarendon Press, 1959.
- [ARISTOTELES], *ARISTOTELIS Categoriae et Liber de Interpretatione*, ed. L. Minio-Paluello, (Oxford Classical Texts), Oxford: Clarendon Press, 1949.
- [ARISTOTELES], *ARISTOTELIS De anima*, ed. W.D. Ross, (Oxford Classical Texts), Oxford: Clarendon Press, 1961.
- [ARISTOTELES], *ARISTOTELIS De arte poetica liber*, ed. R. Kassel, (Oxford Classical Texts), Oxford: Clarendon Press, 1965.
- [ARISTOTELES], *ARISTOTLE'S Metaphysics*, vol. 1–2, ed. W.D. Ross, (Oxford Classical Texts), Oxford: Clarendon Press, 1953.
- [ARISTOTELES], *ARISTOTELIS Physica*, ed. W.D. Ross, (Oxford Classical Texts), Oxford: Clarendon Press, 1966.
- [ARISTOTELES], *ARISTOTELIS Topica et Sophistici elenchi*, ed. W.D. Ross, (Oxford Classical Texts), Oxford: Clarendon Press, 1970.
- ARISTOTELES, *Peri hermeneias*, translated by H. Weidemann, Berlin: Akademie Verlag, 1994.
- ARISTOTELES, *De interpretatione*, ed. H. Weidmann, (Bibliotheca Scriptorum Graecorum et Romanorum Teubneriana), Boston – Berlin: De Gruyter, 2014.
- ARISTOTLE, *Topics*, translated by W.A. Pickard-Cambridge, in *Complete Works of Aristotle*, vol. 1: *The Revised Oxford Translation*, Princeton: Princeton University Press, 1984, p. 1a–183b.
- ARISTOTLE, *De anima*, edited and translated by Ch. Shields, (Clarendon Aristotle Series), Oxford: Oxford University Press, 2016.
- ARYSTOTELES, *Peri hermeneias (Hermeneutyka)*, Kęty: Marek Derewiecki, 2018

Opracowania

- ACKRILL, J.L., *Aristotle's Categories and De Interpretatione*, Oxford: Clarendon Press, 1963.
- ALSTON, W., *Philosophy of Language*, Englewood Cliffs: Prentice-Hall, 1964.
- ARMSTRONG, D.M., *Universals: an Opinionated Introduction*, Boulder: Routledge, 1989.
- CHARLES, D., *Aristotle on Meaning and Essence*, Oxford: Oxford University Press, 2000.

- CHARLES, D., "Aristotle on Names and their Signification," *Language*, ed. S. Everson (Companions to Ancient Thought, 3), Cambridge: Cambridge University Press, 1994, pp. 37–73.
- CHARLES, D., PERAMATZIS, M., "Aristotle on Truth-Bearers," *Oxford Studies in Ancient Philosophy*, vol. 50 (2016), p. 101–141.
- COHEN, S.M., "Accidental Beings in Aristotle's Ontology," *Reason and Analysis in Ancient Greek Philosophy: Essays in Honor of David Keyt*, ed. G. Anagnostopoulos, F.D. Miller, Jr, Dordrecht: Springer 2013, p. 231–242.
- CRIVELLI, P., *Aristotle on Truth*, Cambridge: Cambridge University Press, 2004.
- CRIVELLI, P., "Aristotle's Definitions of Universals and Individuals in *De interpretatione* 7," *Nominalism about Properties: New Essays*, ed. G. Guigon, G. Rodriguez-Pereyra, New York – Abingdon: Routledge, 2015, p. 19–35.
- DEVITT, M., STERELNY, K., *Language and Reality: an Introduction to the Philosophy of Language*, Oxford: Blackwell, 1999.
- GIDEON, R., "Abstract Objects," *Stanford Encyclopedia of Philosophy*, <https://plato.stanford.edu/>.
- GILL, M.L., "Aristotle's Metaphysics Reconsidered," *Journal of the History of Philosophy*, vol. 43 (2005), p. 223–241.
- HADOT, P., "Sur divers sens du mot 'pragma' dans la tradition philosophique grecque," *Concepts et catégories dans la pensée antique*, ed. P. Aubenque, Paris: Vrin, 1980, p. 309–320.
- HALLER, R., "Untersuchungen zum Bedeutungsproblem in der antiken und mittelalterlichen Philosophie," *Archiv für Begriffsgeschichte*, vol. 7 (1962), p. 57–119.
- HAMLIN, D., "Focal Meaning," *Proceedings of the Aristotelian Society*, vol. 78 (1977–1978), p. 1–18.
- HINTIKKA, J., *Time and Necessity: Studies in Aristotle's Theory of Modality*, Oxford: Clarendon Press, 1973.
- IRWIN, T., "Aristotle's Concept of Signification," *Language and Logos: Studies in Ancient Greek Philosophy Presented to G.E.L. Owen*, ed. M. Schofield, M. Nussbaum, Cambridge: Cambridge University Press, 1982, p. 241–266.
- JACOBS, W., "Aristotle and Nonreferring Subjects," *Phronesis*, vol. 3 (1979), p. 282–300.
- JACOBS, W., "The Existential Presuppositions of Aristotle's Logic," *Philosophical Studies*, vol. 4 (1980), p. 419–428.
- KRETZMANN, N., "Aristotle on Spoken Sound Significant by Convention," *Ancient Logic and its Modern Interpretations*, ed. J. Corcoran, Dordrecht – Boston: D. Reidel Publishing Company, 1974, p. 3–21.
- KUNG, J., "Aristotle on Essence and Explanation," *Philosophical Studies*, vol. 31 (1977), p. 361–383.
- LEWIS, F., *Substance and Predication in Aristotle*, Cambridge: Cambridge University Press, 1991.

- LYCAN, W., *Philosophy of Language: a Contemporary Introduction*, New York – Abingdon: Routledge, 2008.
- MARTIN, R.M., *The Meaning of Language*, Cambridge: MIT Press, 1987.
- MATTHEWS, G., “Accidental Unities,” *Language and Logos*, ed. M. Schofield, M. Nussbaum, Cambridge: Cambridge University Press, 1982, p. 223–240.
- MILL, J.S., *A System of Logic Ratiocinative and Deductive*, Toronto – Buffalo: University of Toronto Press, 1973.
- MODRAK, D.K.W., *Aristotle’s Theory of Language and Meaning*, Cambridge: Cambridge University Press, 2001.
- MORELAND, J.P., *Universals*, (Central Problems of Philosophy), Montreal – Ithaca: McGill – Queens University Press, 2001.
- MORRIS, M., *An Introduction to the Philosophy of Language*, Cambridge: Cambridge University Press, 2007.
- POLANSKY, R., KUCZEWSKI, M., “Speech and Thought, Symbol and Likeness: Aristotle’s *De Interpretatione* 16a 3–9,” *Apeiron*, vol. 23/1 (1990), p. 51–63.
- RIJK DE, L.M., “The Anatomy of the Proposition: Logos and Pragma in Plato and Aristotle,” *Logos and Pragma: Essays on the Philosophy of Language in Honour of Gabriel Nuchelmans*, ed. L.M. de Rijk, H. Braakhuis, Nijmegen: Brepols, 1987, p. 27–61.
- SEDDLEY, D., “Aristotle’s *De interpretatione* and Ancient Semantics,” *Knowledge through Signs: Ancient Semiotic Theories and Practices*, ed. G. Manetti, Turnhout: Brepols, 1996, p. 87–108.
- TIURYN, T., “Dodatek: Teoria semantyczna Arystotelesowa,” in ARYSTOTELES, *Peri hermeneias (Hermeneutyka)*, Kęty: Marek Derewiecki, 2018, p. 505–564.
- TIURYN, T., “Komentarz,” in ARYSTOTELES, *Peri hermeneias (Hermeneutyka)*, Kęty: Marek Derewiecki, 2018, p. 178–504.
- TIURYN, T., “Wstęp. Wprowadzenie do Arystotelesowskiej filozofii języka,” in ARYSTOTELES, *Peri hermeneias (Hermeneutyka)*, Kęty: Marek Derewiecki, 2018, p. 9–118.
- TIURYN, T., “Z powrotem do Arystotelesowskiej teorii znaczenia,” *Przegląd Tomistyczny*, vol. 22 (2016), p. 347–408.
- TSELEMANIS, T., “Theory of Meaning and Signification in Aristotle,” *Language and Reality in Greek Philosophy: Proceedings of the Greek Philosophical Society*, Athens: Greek Philosophical Society, 1985, p. 194–203.
- WEIDEMANN, H., “Anmerkungen” in ARYSTOTELES, *Peri hermeneias*, translated by H. Weidemann, Berlin: Akademie Verlag, 1994, p. 133–473.
- WHEELER, M., “Semantics in Aristotle’s *Organon*,” *Journal of the History of Philosophy*, vol. 37 (1999), p. 191–226.
- WOODS, M., “Form, Species and Predication in Aristotle,” *Synthese*, vol. 96 (1993), p. 399–415.

THE NOTION OF *PRAGMA* IN ARISTOTLE'S THEORY OF SIGNIFICATION

S U M M A R Y

The concept of *pragma* is one of the fundamental concepts of Aristotle's theory of language. It is the object signified by linguistic expressions, grasped by thoughts and predicated in statements. Yet, its ontological status in Aristotle is rather elusive. On some readings, *pragma* is "a thing in the world," on some it is "a thing as conceived of by the intellect," on others it is linguistic sense. In this paper I analyze the concept of *pragma* in various segments of Aristotle's thought, in particular in his semantic theory, and I also try to ascertain the ontological status of *pragmata*. I focus here on universal *pragmata*, i.e. things which are signified by general expressions (nouns, verbs, adjectives etc.).

In the paper I argue for the following claims: 1) on Aristotle's account the meaning of linguistic expressions is constituted by the things (i.e. *pragmata*) signified by those expressions; 2) the claim that things constitute meanings is not equivalent to saying that meaning amounts to reference or denotation; 3) synonymy of linguistic expressions may be defined in terms of identity of things signified by those expressions; 4) linguistic expressions are connected with things *via* causal relations that occur between thoughts and the forms of material objects; 5) universal *pragmata* in Aristotle, at least when they exist in the mind, are abstracted forms; 6) universal *pragmata* are abstract objects in the sense that they are causally inert and they do not play the role of ontological components of particulars.

In the closing sections of my paper I discuss the question whether Aristotle's concept of *pragma* is able to play a similar role as the one played by the concept of sense in modern post-Fregean semantic theories. I answer this question in the negative and try to suggest other ways in which Aristotle might deal with Fregean paradoxes.

KEYWORDS: Aristotle, theory of meaning, ontology, universals

SŁOWA KLUCZE: Arystoteles, teoria znaczenia, ontologia, powszechniki