

Form, Terminology, and Clarity in Aristotle

Abstract: Aristotle's terminology presents a paradox: on the one hand, he creates large nomenclatures which settle the terms of the respective fields of knowledge for the first time, and he always makes sure to (re)define the terms he is about to use. On the other hand, it is not the least because of this constant redefinition that many of Aristotle's terms, amongst them his most famous and successful ones, appear strangely non-standardized, underdetermined, and often hardly terminological. While the non-standardized form of Aristotle's writings is often ascribed to the circumstances of their transmission, one should assume that the terminology remains unaffected by whether Aristotle has copy-edited the text or not. This chapter analyzes Aristotle's terminology precisely as a part of the literary form. The first main part is concerned with Aristotle's explicit reflections on the form of terms, and it inquires after their relevance for Aristotle's own writings. Since Aristotle has not written specifically on terminology, I examine the remarks which he makes on *onomata* ('words', 'terms') as part of his theory of 'stylistic form' (*lexis*) in the *Poetics* and *Rhetoric* and as part of his theory of definition in the *Organon*. I argue that the whole discourse on *onomata* posits clarity as a central aim of stylistic form and that this discourse, because of its cognitive-communicative perspective, may pertain to scientific and philosophical writings in addition to poetry and rhetoric and, thus, also to Aristotle's own works, although it does not do so explicitly. At the same time, the passages on the form of *onomata* reveal that Aristotle does not really follow his own recommendations regarding the form and use of terms. In the second main part of the chapter, I use the example of the term *aitia* and its classifications in different writings to show more systematically what characterizes the form of Aristotle's terms and how it deviates from Aristotle's theoretical reflections. I argue that Aristotle, although he uses largely ordinary terms, as he himself recommends for the sake of clarity, often uses them in a non-ordinary and, contrary to his own advice, homonymous and synonymous way. The function of the form of Aristotle's terminology seems to be, rather than clarity, a kind of flexibility and reusability which allows for ever-new differentiation, adjustment, and hierarchization in different contexts. Besides, there seems to be an unexpected aesthetic dimension to the constant reuse of simple and ordinary words, which is only *prima facie* non-rhetorical.

Note: I would like to thank Brett Thompson for his help with this chapter.

1 Problems with Aristotle's Terms

Aristotle's terminology presents us with a well-known paradox: While terms and their definitions play an important role both in Aristotle's scientific practice and in his theory of science, his work continues to raise questions about the number, form, meaning, and application of his technical terms.

On the one hand, Aristotle is preoccupied with terms all the time. This is partly because he must be, since he is often faced with a lack of existing technical terminology.¹ In works such as the *Historia animalium*, he creates large nomenclatures which settle the terms of art of the respective fields of knowledge for the first time;² and even in his less descriptive works, he introduces a great number of terms of art, many of which are still current today. But his somehow obsessive occupation with terms does not only have to do with the lack of technical terms in the earlier scientific literature. Rather, terms are at the core of his thinking; accordingly, technical terms also quantitatively account for much of his extant works. Typically, Aristotle develops an argument or explores a field by differentiating terms: he explains a term by relating it to other terms, that is, by distinguishing its subcategories or by opposing it to another term. As a result, large parts of his texts mostly consist of taxonomic constructions, that is, hierarchical classifications of concepts or terms, and display a high frequency of terms. Aristotle's focus on terms is matched by his theory of science in which he extensively reflects upon the necessity and method of defining terms; and his work even contains a lexicon which disambiguates 30 of Aristotle's most central terms (*Metaphysics* Δ (book V)).

On the other hand, despite the importance of terms in his philosophy, Aristotle appears to use many of them – amongst them his most famous and successful ones – in a strangely underdetermined, non-standardized, and sometimes even inconsistent way, both regarding their form and their meaning.³ Although the theory of definition, as it emerges from Aristotle's *Organon*, aims at disambiguating terms, it is designed specifically for the methods of proof or dialectic argument; it is mainly about a consistent *definition* of a term in the sense of 'concept', not about unambiguously using technical terms themselves as part of the scientific language in a non-apodeictic and non-dialectic context. Thus, it should seem unsurprising that Aristotle's use of terms does not live up to his own supposed standards. Rather than defining his terms mathematically, he makes ever-new differentiations of his terms, which often overlap only partly and sometimes even seem to contradict each other. While Aristotle often differentiates the meanings of terms that are 'said in many ways' (πολλαχῶς λέγεται/*pollakhōs legetai*), his lexicon of such homonymous terms *Metaphysics* Δ seems to have

¹ On this problem and Aristotle's strategies of dealing with it, see Sabine Föllinger in the present volume.

² On this part of Aristotle's terminology, cf. the contribution by Marcel Humar to this volume.

³ Cf., e.g., Köhnken 1990, 135.

become necessary precisely because of his various re-classifications of these terms.⁴ A related problem (and one of the causes of homonymy in Aristotle) is that Aristotle recycles ordinary words or preexisting terms and supplies them with new technical meanings. Mostly he continues to use them in the original sense alongside using them in their technical senses without, however, indicating each time to which sense he is referring. Since, in this way, ordinary and technical discourse intertwines and is hard to tell apart, it is difficult to recognize technical terms to begin with.

In the past, there have been various ways of coming to terms with these difficulties posed by Aristotle's terminology. One popular line of argument has been to ascribe the non-standardized form and use of Aristotle's terms (just as other features of the cumbersome style) to the circumstances of the transmission of his writings. For a long time, scholars have perpetuated the claim that Aristotle's extant writings were just 'lecture notes', as they supposedly lacked the kind of elaboration which Aristotle is believed to have bestowed on his so-called exoteric works, that is, his published dialogues. With regard to terminological problems, the assumption has been that Aristotle would have made clear the meaning of the respective term or the relation of different (uses of) terms on revising the text for publication. Over the past 30 years, the 'lecture notes hypothesis' has rightly been questioned and replaced by more nuanced speculations about the audience of the writings which take account of the heterogenous, but often far from crude state of their form.⁵ Nonetheless, the underdetermination of Aristotle's terms is still being explained with reference to the superior knowledge of his primary audience ('they would have known which sense of the term Aristotle meant') and the state of transmission ('Aristotle has explained the term in another work which is now lost but was still available to the primary audience').⁶ Another line of interpretation justifies the non-standardization of the terms by recalling that Aristotle is not a systematic philosopher who can be expected to display a consistent terminology. Rather, he proceeds problem by problem, indeed, paragraph by paragraph,⁷ so that the use of the same terms can vary from treatise to treatise and even within treatises. According to still another, more recent line of thought, the non-standardization and underdetermination of Aristotle's terms is not a deficiency which can be explained by how his writings have come down to us; instead, it is viewed as a corollary of the terminological form which Aristotle chose precisely for its argumentative and cognitive functions.⁸ In any case, the view prevails that except for a few remaining inconsistencies, an informed, attentive, as well as committed

4 On the identity of homonymy and what is called in German "Aussagevielfalt" ('things said in many ways') see below.

5 For example, van der Eijk 1997; Lengen 2002.

6 See Marsh in the present volume, following Halliwell.

7 Netz 2001, 225.

8 For example, Wieland 1992, 173–186, especially 181 f. See also the present contributions by Sabine Föllinger for cognitive benefits of the form and Marsh for the 'conceptual networks theory'.

reader will be able to determine the meaning of almost every Aristotelian term wherever it occurs.

In this chapter, I shall take a closer look at Aristotle's terminology from the point of view of literary form. That is, I look at the textual, linguistic, and stylistic features of the terms and their application. Such an approach is still somehow in need of explanation, even though more recently, a few studies have taken the literary form of Aristotle's writings into view.⁹ The general reluctance to deal with Aristotle's style has to do mainly with the above-mentioned state of Aristotle's transmitted writings and with Aristotle's own explicit reservations toward 'style' in the *Rhetoric* and in the comments on poetical authors of science.¹⁰ While I think that it is in any case rewarding to analyze Aristotle's form as it is before thinking about functions or causes of this form, it suggests itself to start from the form when thinking about why Aristotle's terms are so underdetermined: for terms are a part of the linguistic form, whatever Aristotle's stance toward the latter. Moreover, Aristotle's terminology is the part of his literary form, if any, which would have remained comparatively unaffected whether or not Aristotle had copy-edited the text, and therefore can be studied rather straightforwardly. In view of the above-mentioned difficulty of recognizing technical terms in Aristotle, I will start by looking at Aristotle's terminology more generally in the sense of his word usage. For if we approached Aristotle's terminology by looking for terms that meet traditional criteria of technicality such as exactness, formal standardization, and semantic stability, we might end up with few to no terms – and without learning much new about terms in Aristotle.

In the second part of the chapter, I explore what Aristotle's explicit reflections about form can tell us about his conception of scientific word usage. In the absence of an Aristotelian rhetoric of scientific texts or meta-terminology in the manner of Galen's *On medical names* (Περὶ τῶν ἱατρικῶν ὀνομάτων/*Peri tōn iatrikōn onomatōn*),¹¹ I shall revert to his theory of style and form (λέξις/*lexis*) in the *Rhetoric* and *Poetics*, and to his theory of definition in the logical treatises for Aristotle's recommendations for the form and use of ὀνόματα/*onomata* (itself a multi-faceted term, which can mean 'words', 'nouns', 'names', 'phrases', and 'technical terms' amongst other things). Aristotle reviews all aspects of the stylistic form from the perspective of the overall aim of clarity (σαφήνεια/*saphēneia*),¹² which is particularly interesting in view of the notorious non-standardization and underdetermination of Aristotle's terms. The theory of *lexis* is a theory of clarity (*saphēneia*) at the same time. As if providing a case in point for his use of technical terms, Aristotle does not define *saphēneia*; one can only

⁹ For example, Schütrumpf 1989; Natali 2007.

¹⁰ Cf. Rapp 2013, 284; the third reason which he mentions is the dominance of analytical philosophy in research on Aristotle which traditionally is concerned with argument *behind* a text rather than with the text as it is, let alone its form.

¹¹ The treatise only survives in Arabic translation.

¹² Rapp 2013, 286.

grasp its meaning from the very linguistic and stylistic means which he recommends for achieving *saphêneia* itself, according to which it has a logical dimension (in the sense of “unambiguousness”) and a cognitive-communicative one (in the sense of “intelligibility”). In this way, it seems to be directly opposed to the impression conveyed by the form and use of Aristotle’s terms. Therefore, I will focus specifically on the relation between terms and clarity when reviewing Aristotle’s explicit remarks on ‘names’ or ‘terms’. While analyzing Aristotle’s theoretical reflections, I will already note a number of terminological characteristics.

Against the backdrop of my reading of Aristotle’s theoretical reflections, the third part of my chapter consists in a close analysis of a sample term, that is, of the classification of *aitia* in different writings. This section will more systematically take up our observations about Aristotle’s terms, as we encountered them in the theoretical passages. In the final fourth part, I think about the functions of the form of Aristotle’s terms and consider the possibility of a ‘poetics of terminology’ in Aristotle.¹³

2 Reflections on Form and Clarity in Aristotle

What does Aristotle himself have to say on the form of ‘names’ or ‘terms’? When going through the explicit evidence on literary form, I will first outline the two places where Aristotle talks about ‘form’, that is, in the *Rhetoric* and *Poetics*, and the scope of each account; second, I will consider the relevance of clarity (*saphêneia*) for the literary form, focusing especially on the relation between word usage and clarity.

2.1 The Places and Scope of lexis

First, Aristotle has not reflected about terms as part of the literary form, nor has he written a coherent account about the literary or stylistic form of scientific texts at all (at least nothing thereof survives or is known to have existed). He does make scattered remarks about the form of *onomata* in the *Topics* and the *Posterior Analytics*, but the general perspective on language there is a logical rather than a stylistic one. Moreover, his theory of science does not refer to scientific texts in general, including his own works, but to an ideal which he himself has not realized. This means that Aristotle has not directly nor comprehensively written about what is a major aspect even of his own texts, a fact which, in turn, could indicate that this aspect of the literary form (and literary form itself) is only marginal for him when it comes to (his own) scientific texts.

13 For the term see the Introduction by Markus Asper.

The places where Aristotle deals systematically with *onomata* as part of the linguistic and stylistic form – both times under the heading of *lexis* – are the third book of the *Rhetoric* (Chapters 1–12), which is the most comprehensive account, and Chapters 19–22 of the *Poetics*.¹⁴ In the logical treatises, the term *lexis* occurs only rarely. This word is another example of how Aristotle applies his terms: he uses it in different senses and does not explicitly define it in each case. I will, first, briefly explain which meanings it can have before exploring its role for Aristotle's scientific texts.

In the accounts of the *Poetics* and the *Rhetoric*, it can, for instance, be equivalent to διάλεκτος/*dialektos* ('everyday speech')¹⁵ or mean "a single word or phrase,"¹⁶ but its main sense is the one which we have to infer from Aristotle's indirect definition at the beginning of the *lexis* account in the *Rhetoric*: "Our next subject will be language and style. For (γάρ/*gar*) it is not enough to know what (ἅ/*ha*) we have to say; we also must know how (ὥς/*hōs*) we have to say it."¹⁷ From the causal connective γάρ (*gar*, "for"), which indicates that the sentence is going to explain the necessity of dealing with *lexis*, we can conclude that Aristotle explains this term by the phrase ὥς δεῖ εἰπεῖν (*hōs dei eipein*, "how we have to say it"). In so doing, he easily and effectively juxtaposes the "what" (ἅ/*ha*) and the "how" (ὥς/*hōs*) of speech, that is, the content and its form.¹⁸ This division suggests that the "how," the form, refers to the different 'ways' in which the same thing can be expressed, and the phrase "how we have to say it" to the recommended 'way of saying' it. The sense of *lexis* which emerges from this passage – 'way of saying' – is indeed the most general one to accommodate all the Aristotelian usages in the accounts of the *Poetics* and the *Rhetoric*. Starting from this overall sense, one could distinguish – in the most general way – two main closely related meanings: on the one hand, a sense which simply refers to the "form" of a linguistic unit in a neutral way and, on the other hand, a meaning which – in the sense of "style" – "evaluatively" refers to the form as the "result" of a "choice between different possibilities of wording."¹⁹

¹⁴ The account of the *Rhetoric* seems to presuppose the one of the *Poetics* (see Rapp 2013, 287).

¹⁵ Cf. Janko 1987, 137 on *Poet.* 22, 1459a12.

¹⁶ *Rhet.* III 3, 1406b1, see also LSJ s.v. A II.

¹⁷ περὶ δὲ τῆς λέξεως ἐχόμενόν ἐστιν εἰπεῖν· οὐ γὰρ ἀπόχρη τὸ ἔχειν ἅ δεῖ λέγειν, ἀλλ' ἀνάγκη καὶ ταῦτα ὥς δεῖ εἰπεῖν (. . .), *Rhet.* III 1, 1403b15–18; unless otherwise indicated, translations are my own.

¹⁸ Halliwell 1993, 59–67 shows that Aristotle in his account of *lexis* does not separate style and sense as strictly as the present passage insinuates; rather, he often shows how the *lexis* itself produces a certain sense or that even the *lexis* is necessary for producing it.

¹⁹ For the threefold distinction of the senses of *lexis* – (a) "everyday speech," (b) "form of words"/"wording," (c) "style" – and the overall meaning "way of saying" cf. Halliwell 1993, 53 f. The mere reference to "a single word or phrase," which we also find in the *Rhetoric* (see above), can be accommodated under the non-evaluative sense "form of words," as the passage, by mentioning a "compound word" refers to the "compound form of a word." As for the third meaning "style," Halliwell points out that Aristotle is "taking effective *lexis* (in rhetoric or poetry) to involve an element of the 'strange' or

Since the *lexis* account of the *Poetics* is mainly focused on describing the grammatical side of language in morphological, phonological, syntactical, and semantic terms, to use modern grammatical categories, the non-evaluative sense ('form of words' or simply 'language') often fits here. By contrast, the complementary contribution of the *Rhetoric* mainly contains reflections and recommendations on 'style' (in the evaluating sense of *lexis*) which nevertheless rest on the grammatical (i.e., non-evaluative) account of the *Poetics*.²⁰ However, both two main senses as well as shades and aspects of these are always present in *lexis*;²¹ Aristotle may talk about 'style' and at the same time indicate that this style is produced with the help of certain linguistic devices; conversely, references to *lexis* as 'language' always suggest linguistic 'options' having different effects. In this way, *lexis* is a typically Aristotelian technical term which oscillates between different meanings and can be used with different emphases, and it seems apt to imitate in translation at least its two main facets. Thus, I have translated *lexis* in the present quotation by means of the hendiadys "language and style"; alternatively, both dimensions seem to be present in "linguistic style,"²² in 'diction', that is, the choice of words or expressions,²³ and in 'literary' or 'stylistic form', which aptly recalls the definition of *lexis* as the counterpart of the content.

In the *Rhetoric*, Aristotle's attitude toward *lexis* in the overall sense of 'stylistic form' is at least ambivalent.²⁴ He explicitly subordinates it to the content, that is, to "the facts themselves" (αὐτὰ τὰ πράγματα/*auta ta pragmata*),²⁵ which "naturally come first, whereas "the arrangement (of the facts) by means of the stylistic form (λέξει/*lexei*)" comes second.²⁶ While this suggests a subordinate but still decisive role of *lexis* in speeches, Aristotle further on in the text seems to question the role of "diction" in speeches altogether: "It would be fair to fight our case with the mere facts (*autois tois pragmasin*) so that everything apart from proof (τοῦ ἀποδείξαι/*tou apodeixai*) is unnecessary."²⁷ However, Aristotle says, "since the whole business of rhetoric is geared

'foreign' (*xenikon*), that is, divergence from the norm of ordinary speech (. . .)" (ibid. 54); I will elaborate on this aspect in greater detail below.

²⁰ The last chapter of the *Poetics* account (22) is also a normative one.

²¹ Halliwell 1993, 53 f.

²² For this translation cf. Halliwell 1993, 52, who also uses the term "language" alone to refer to the subject of *Rhet.* III 1–12 (ibid. 50 f.).

²³ This is the translation used by Janko 1987 *passim*.

²⁴ This ambivalence is mirrored by Aristotle's remarks in other works on the statements of earlier philosophers who wrote poetry and/or made use of more conventionally literary means to which he objects (Rapp 2013, 285), which shows that he hesitates to accept stylistic or rhetorical means in philosophical or scientific texts (on these remarks see further below), but in the *Rhetoric*, the ambivalence concerns even the 'import' of questions of style from poetry in to rhetoric itself (ibid. 288).

²⁵ Cf. Halliwell 1993, 52 on the meaning of *pragmata* here: "'things', 'facts', or 'states of affairs'."

²⁶ *Rhet.* III 1, 1403b18–20.

²⁷ *Rhet.* III 1, 1404a5–7. This passage recalls the beginning of the first book of the work, where Aristotle has already emphasized the necessity of showing (δείξαι/*deixai*) the facts. In the present passage, Aristotle uses *apodeixai*, which means 'to demonstrate' in his logical treatises; while it has a looser

to opinion (*pros doxan*), we must pay attention to [*lexis*], not as being right, but necessary.”²⁸ The reason why he thinks that *lexis* to some extent indispensable, is “because of the incapacity of the audience” (διὰ τὴν τοῦ ἀκροατοῦ μοχθηρίαν/*dia tēn tou akroa-tou mokhtērian*):²⁹ The term *mokhtēria* refers to the cognitive incapacity of the audience of speeches of forming the right opinion on the basis of the facts alone.³⁰ For this reason, they must be influenced toward the right understanding by means of *lexis*. Subsequently, Aristotle widens the focus from speeches to “instruction” (*didaskalia*) more generally.³¹

τὸ μὲν οὖν τῆς λέξεως ὅμως ἔχει τι μικρὸν ἀναγκαῖον ἐν πάσῃ διδασκαλίᾳ· διαφέρει γάρ τι πρὸς τὸ δηλῶσαι ὥδι ἢ ὥδι εἰπεῖν, οὐ μέντοι τοσοῦτον, ἀλλ’ ἅπαντα φαντασία ταυτ’ ἐστί, καὶ πρὸς τὸν ἀκροατὴν· διὸ οὐδεὶς οὕτω γεωμετερεῖν διδάσκει.

Nevertheless, the art of style is necessary to a small degree in every instruction; for it makes some difference with respect to clarification whether one speaks in this or that way – though not such a big difference, but all of this is mere appearance and has to do with the recipient. This is why no one teaches geometry in this way.

Since this passage deals with the role of *lexis* in the context of instruction (*didaskalia*), it immediately pertains to our question of the scope of Aristotle’s account of *lexis* in the *Rhetoric* and of its relevance for (his own) scientific texts. Let us look at the passage more closely. At first, Aristotle seems to state that *lexis* is universally important in instructional contexts (though not very much so); for he contends that “clarification” depends on it to some extent.³² But then he immediately qualifies this statement, saying that its justification depends on the kind of recipient. As we have just heard, the recipients of speeches are incapable, so one must conclude from the present passage that the writers of speeches must use *lexis* for their listeners to form the intended opinion. By contrast, Aristotle states that the writers of geometrical texts do not make

sense in the *Rhetoric*, it is nevertheless remarkable regarding the applicability of the account of rhetorical *lexis* to philosophical and scientific texts that he expresses the exclusive dominance of the facts in speeches in mathematical terms (see below).

28 ἀλλ’ ὅλης οὐσης πρὸς δόξαν τῆς πραγματείας τῆς περὶ τὴν ῥητορικὴν, οὐχ ὡς ὀρθῶς ἔχοντος ἀλλ’ ὡς ἀναγκαίου τὴν ἐπιμέλειαν ποιητέον (*Rhet.* III 1, 1404a1–3).

29 *Rhet.* III 1, 1404a7 f.; cf. also *Rhet.* III 1, 1403b34 f. on the “incapacity of the citizens” (i.e., working as judges in political contests).

30 Freese translates *mokhtēria* as “corruption,” but the moral state of the listeners is not the point here.

31 *Rhet.* III 1, 1404a8–12.

32 Aristotle here uses the verb δηλῶσαι (*dēlōsai*) in the sense ‘to clarify’, ‘to make clear’. The adjective δηλός (*dēlos*), from which it is derived, is commonly used to express that something is ‘evident’, but in the rhetorical and logical context, Aristotle often uses it synonymously with *saphēs* (‘clear’, ‘distinct’), from which the terminus technicus for the rhetorical virtue of style (*saphēneia*) is derived (see below). – On the relation of form and clarity see below.

use of *lexis* because they do not have to – presumably because their readers are not incapable.

The relationship between rhetoric/speeches, “instruction,” and geometry is not quite clear here. Aristotle has widened the focus from speeches to “every kind of instruction,” only to state again that the necessity of *lexis* depends on the listener. This refers back to the necessity of influencing the opinion of the defective listeners of speeches by means of *lexis*. Aristotle, thus, seems to regard rhetorical speeches as a form of “instruction.” However, he started by saying that he would be talking about “instruction” more generally, that is, about contexts in which knowledge is transmitted and which traditionally are not about “opinion” or persuasion but rather about truth and its cognition.³³ Indeed, he states at first that the *lexis* makes a difference “with respect to clarification” (*pros to dēlōsai*), which suggests that *lexis* has to do with the aim of transmitting knowledge. But then he again says that *lexis* is “appearance” and “for the sake of the reader,” which is the reason why teachers of geometry, “his example of *didaskalia*,”³⁴ do not use *lexis* – presumably because they do not aim at influencing their readers’ opinion. In this way, Aristotle suddenly contrasts teaching geometry with *didaskalia* as regards the use of *lexis* rather than providing an example for the general term. This is quite surprising because teaching geometry is a kind of instruction, and Aristotle said at the beginning of the passage that *lexis* is “necessary in every instruction.”

Metonymically, geometry stands for mathematical texts in general, that is, for Euclid’s (now lost) predecessors. It is their logical form which is paradigmatic in Aristotle’s theory of science. Thus, the reference to geometry first of all implies that the *lexis* used by writers of speeches would not be a part of Aristotle’s own *ideal* of a scientific text. This is in accordance with the comparative absence of the term from the logical treatises in which Aristotle unfolds his ideal of a scientific text.

But what about Aristotle’s own texts? While the logical form of the mathematical texts provides a positive model for Aristotle, he does not conform to it in his extant texts (and presumably even less so in his so-called ‘exoteric’ writings). This evidence is paralleled by the linguistic form of his extant texts: it is different from that of geometrical texts. Take, for instance, conditional clauses: Of course, Aristotle uses conditional clauses in his own texts, but he does not use them in the way Greek mathematicians

33 As quoted above, Aristotle states at *Rhet.* III 1, 1404a1 f. that “the whole business of rhetoric is geared to opinion” (πρὸς δόξαν/*pros doxan*), recalling the opposition of things “aimed at opinion” and things “aimed at truth” (πρὸς ἀλήθειαν/*pros alētheian*) at *Rhet.* I 7, 1365b1; at the beginning of the work, he explains the connection of knowledge and persuasion similarly to our present passage: “before some people not even if we possessed the most accurate knowledge, it would not be easy to persuade them if we spoke on the basis of this knowledge. For argument based on knowledge implies instruction, but with regard to such people, it is impossible” (*Rhet.* I 1, 1355a24–27). The proximity of science and rhetoric is emphasized, for example, in the same chapter at 1355a4 f. (“persuasion [πίστις/*pistis*] is a kind of demonstration [ἀπόδειξις/*apodeixis*]”).

34 Halliwell 1993, 55.

do.³⁵ In the Euclidean proposition, three types of conditional clauses are employed in an extremely standardized way to accomplish the main steps of the proof. While this shows that conditional clauses are a central feature of the language of mathematical texts, Aristotle does not reflect on conditional clauses anywhere in his work.³⁶ This shows that Aristotle does not make consistent use of the mathematical language in the way in which the mathematicians use it. Therefore, it is possible for (rhetorical) *lexis* to have some importance in Aristotle's own scientific writings as he claims it does "in every instruction" outside geometry. However, since Aristotle emphasizes that *lexis* is only used because of the incapability of the recipients, it is hard to believe that his audience should identify with those incapable readers who require *lexis* for understanding a text.³⁷

In order to understand what the reference to geometrical instruction means for what role Aristotle envisages for *lexis* in instructional contexts, let us examine the reference more closely. It comes rather out of the blue. Aristotle does not explain *how* one teaches geometry, if not "in this way," nor does he specify who the recipients of geometrical texts are, although he insinuates that it is because of them ("for this reason") that geometry is taught differently. This means that he presupposes a certain attitude toward geometrical texts among his readership and suggests that the geometrical texts are somehow notorious: Apparently, Aristotle knows that his (non-mathematical) readers considered these mathematical writings as the epitome of wholly non-rhetorical, unusual, unattractive, and unclear texts because they were different from the style in which all of them were trained.³⁸

Similarly, he appears to presuppose such a perception of the form of mathematical texts among his readers in a passage from *Metaphysics* α (book II). Aristotle claims that the success of "lectures" depends on the habits of the audience and that "we expect a lecturer to speak the way we are used to (ὥς εἰώθαμεν / *hōs eiōthamen*)." This is because hearers find language to which they are unaccustomed "somewhat unintelligible and foreign" (ἀγνώστοτερα καὶ ξενικώτερα / *agnōstotera kai xenikōtera*), whereas they find customary language "intelligible" (γνώριμον / *gnōrimon*), and he explains this assumption by using the example of mathematical language:³⁹

Some people do not understand those who speak, unless someone speaks mathematically, others unless someone provides examples, still others expect him to adduce a poet as testimony. And some want to have everything done accurately (ἀκριβῶς / *akribōs*), while others are annoyed by accuracy (τὸ ἀκριβές / *to akribes*), either because they cannot understand or because of the petti-

³⁵ Acerbi 2021, n. 225.

³⁶ Acerbi 2021, n. 225.

³⁷ Cf. Rapp 2013, 299, pointedly on the orientation of the *Rhetoric* toward a 'somehow insufficient audience' ('irgendwie insuffizientes Publikum') who seem in need of (stylistic) measures that readers of philosophical or scientific texts do not require to the same extent.

³⁸ Cf. Asper 2007, 116 with n. 159.

³⁹ *Metaph.* α 3, 995a8–16.

ness (τὴν μικρολογίαν/*tēn mikrologian*). For accuracy (τὸ ἀκριβές/*to akribes*) has something about it so that as in trade so in argument some people deem it mean.⁴⁰ Hence one must have been already trained how to understand everything, because it is impossible to seek simultaneously for knowledge (ἐπιστήμην/*epistēmēn*) and for the way it is done (τρόπον ἐπιστήμης/*tropōn epistēmēs*); it is not even easy to understand one of them. The extreme accuracy (τὴν δ' ἀκριβολογίαν/*tēn d' akribologian*) of mathematics is not to be demanded in all cases, but only in the case of things which do not have matter. Therefore, it is not done in the way (τρόπος/*tropos*) of natural philosophy; for presumably all nature has matter.

Here, Aristotle presents *to akribes* ('accuracy, precision, exactness') as the main feature of the mathematical way of speaking. However, it is not clear whether this passage refers primarily to the mode of inquiry or to the style (the *lexis*) of mathematical texts. The term *tropos*, which is used here to refer to the "way of knowledge" as opposed to knowledge itself, may refer to either aspect of the form,⁴¹ while the context of the passage suggests that it talks about the scientific method,⁴² the key term *to akribes* points to the *Rhetoric* where it is closely associated with the main virtue of style, that is, *saphēneia* (clarity).⁴³ It seems, therefore, that Aristotle is talking about a form of argument associated with a particular style and that the passage at least partly has implications for Aristotle's views on *lexis*.

Aristotle *en passant* distances himself from the mathematical style by the use of his language. For apart from the neutral term *akribeia*, he uses *akribologia* which suggests that accuracy is taken to the extreme or even overdone in mathematical texts, which also has negative ethical and social connotations.⁴⁴ These are even stronger and more explicit in the term *mikrologia* which emphasizes the 'pettiness' and 'pedantry' of those who speak over-accurately.⁴⁵ The pejorative manner in which Aristotle talks about the form of mathematical texts seems to count on the consent of this readership. For as in the previous passage from the *Rhetoric* ('no one teaches geometry in this way'), Aristotle makes recourse to the form of mathematical texts in order to demonstrate something else. In doing so, the mathematical form serves as an example: in the previous passage, he argues that using *lexis* in the context of *didaskalia* has to do with the reader; in the present passage, he claims that one has to be familiar with the form of a field of knowledge in order to understand what is being said. Each

⁴⁰ Cf. Asper 2007, 116 for the social connotations of *akribeia*.

⁴¹ In classical Greek, it is otherwise attested only in the sense ('manner, style') in the context of speaking and writing (LSJ s.v. V), but already shortly after in Stoic and Epicurean philosophy and in Philodemus, it is used in the sense 'mode or mood of a syllogism' and, more generally, 'method of instruction or explanation' (LSJ s.v. VI).

⁴² Aristotle goes on to explain in which order nature should be studied (*Metaph.* α 3, 995a17–20).

⁴³ Vatri 2016, 102–104. On the implications of this passage regarding the relation of the stylistic form and clarity in Aristotle cf. the subsequent section below.

⁴⁴ Cf. also Arist. *Rhet.* I 5, 1361b34; in the ethical context, Aristotle also uses the term dismissively in the sense 'stinginess' (Arist. *Eth. Nic.* IV 2, 1122b8).

⁴⁵ Cf. Pl. *Resp.* VI 2, 486a5 and Theophr. *Char.* 10 where it means 'stinginess'.

time, Aristotle's argument would be ineffective if his readers did not agree with him about the peculiarity of the mathematical text form. One must conclude that his readers are not identical with or part of the group of mathematicians and should find a text strange and unclear which does not make any use of (rhetorical) *lexis* at all. Conversely, as we speculated above, it is difficult to imagine that Aristotle aligns his own readers with the audience of speeches who need the effects of *lexis* for understanding a text and to whose insufficiency Aristotle keeps alluding.⁴⁶

Both passages highlight the weirdness of mathematical texts, but they have different implications as to the origin of this weirdness and the role of *lexis* in producing it. The passage from the *Metaphysics* suggests that the peculiarity of mathematical writings is due to extreme accuracy; provided that, as I have argued, *akribeia* refers (also) to the style, the passage implies that the mathematicians pay great attention to the stylistic form. By contrast, the passage from the *Rhetoric* seems to deny geometry of any share in *lexis* whatsoever, and to claim that *lexis* bears only very little relevance to *didaskalia* in general. For the gist of the argument suggests that in the cryptic remark "This is why no one teaches geometry in this way (*houtōs*)," the adverb refers to the aforementioned *relevant degree* of *lexis*: Geometry is not being taught in the way that geometers find *lexis* somewhat necessary but not too much; they find it necessary to a different extent. Since it is unlikely that this passage says that geometers find *lexis* *more* relevant than do teachers of other kinds of *didaskalia*, he seems to say that they find it less relevant or even not relevant at all. This, however, is in sharp contrast not only with the passage from the *Metaphysics* but also with the impression conveyed by the extant texts of Euclidean geometry: in their own peculiar way, they pay rather great attention to language and style.

In order to take account of this, one would have to understand the *houtōs* ("in this way") of the sentence "This is why no one teaches geometry in this way" as referring to the quality or kind of *lexis*: in the sense 'using the kind of *lexis* which is mere appearance and for the sake of the reader', that is, 'using the *lexis* of speeches or similar *didaskaliai*.' However, at the beginning of the short passage ("Nevertheless, the art of style is necessary to a small degree in every instruction."), it cannot have this meaning already; for 'the *lexis* of *didaskalia* is necessary to a small degree in every *didaskalia*' does not make sense. On first reading it, the term must have a more general gist here because Aristotle has only just introduced it; this is underlined by the variation of the simple noun *lexis* by means of the phrase τὸ τῆς λέξεως (*to tēs lexeōs*, "the art/matter of style"), which is again a variation of the phrase τὸ περὶ τὴν λέξιν (*to peri tēn lexin*, "the matter of style"), used in the preceding paragraph.⁴⁷ This means that the passage seems to begin by talking about how much style in general is used in every instruction and ends up by insinuating an emphatic sense of *lexis*, that is, 'rhetorical

⁴⁶ Rapp 2013, 299.

⁴⁷ *Rhet.* III 1, 1403b36.

style'. However, knowing this, one feels the need to adjust the meaning of τὸ τῆς λέξεως at the beginning of the passage: "the art of style (that is, of the kind of style which uses elements of the language that do not occur in mathematical texts)."

The implied change of the focus of the term *lexis* indicates that Aristotle envisages different genre-related kinds of stylistic form. Accordingly, he distinguishes a "poetic language" (ποιητική λέξις/*poiētikē lexis*)⁴⁸ or "language of poetry" (ποιήσεως λέξις/*poiēseōs lexis*) from a "language of prose" (λόγου λέξις/*logou lexis*).⁴⁹ Similarly, he insinuates a rhetorical *lexis* besides the poetic one when he sets out to deal with *lexis* in *Rhetoric* III 1: "Therefore we should not treat everything which concerns *lexis* in detail, but only that which concerns the kind of *lexis* which we are talking about [sc. the rhetorical *lexis*]. The other one [sc. the poetical *lexis*] has been discussed in the *Poetics*."⁵⁰ Moreover, as we have seen, Aristotle is concerned with the *lexis* of *didaskalia*, from which he distinguishes (without explicitly calling it thus) a geometrical *lexis*.

The respective genres differ according to the two related criteria of the "proportion[]" of common, ordinary words (κύρια/*kuria*) and uncommon, strange words (ξενικά/*xenika*)⁵¹ and of the proportion of (the importance of) sense (διάνοια/*dianoia*) and style (*lexis*). In Aristotle's view, a predominance of sense over style, of content over form, seems to correlate with a predominance of ordinary words; conversely, the use of strange words is due to and at the same time results in a lesser importance of the content. For example, on the one hand, Aristotle claims that poetry, in its beginnings, used words "beyond everyday language" (παρὰ τὴν διάλεκτον/*para tēn dialekton*) and owed its success to its "style" while the contents of what it said were "simple enough."⁵² On the other hand, we have seen that Aristotle grants only a small role to "style" in *didaskalia*; this is matched by his recommendations for the "language of prose" (τῶν ψιλῶν λόγων λέξιν/*tōn psilōn logōn lexin*) as opposed to that of poetry: its terms should be taken mainly out of the realm of "the common" (τὸ κύριον/*to kurion*) or "regular" (τὸ οἰκεῖον/*to oikeion*) and of "metaphor" (μεταφορά/*metaphora*),⁵³ while uncommon and complicated terms should be used sparingly.⁵⁴

48 διὰ τοῦτο ποιητική πρώτη ἐγένετο λέξις, οἷον ἡ Γοργίου ("because of this, language first became poetic, like that of Gorgias," *Rhet.* III 1, 1404a25 f.). Ποιητική (*poiētikē*) is a predicate noun here, that is, Aristotle is not talking about the "style of poetry" but about "style" in general, including that of prose (see below).

49 ἀλλ' ἑτέρα λόγου καὶ ποιήσεως λέξις ἐστίν ("the language of prose is different from that of poetry," *Rhet.* III 1, 1404a28 f.).

50 ὥστε φανερόν ὅτι οὐχ ἅπαντα ὅσα περὶ λέξεως ἔστιν εἰπεῖν ἀκριβολογητέον ἡμῖν, ἀλλ' ὅσα περὶ τοιαύτης οἴας λέγομεν. περὶ δ' ἐκείνης εἴρηται ἐν τοῖς περὶ ποιητικῆς (*Rhet.* III 1, 1404a37–39).

51 Halliwell 1993, 55.

52 *Rhet.* III 1, 1404a33–35 and 24 f.

53 *Rhet.* III 2, 1404b31–33.

54 *Rhet.* III 2, 1404b28–30. More specifically, Aristotle mentions γλῶτται ("strange words"), διπλᾶ ὀνόματα ("compound words") πεποιημένα ("neologisms/invented words"). Interestingly, he describes the effect of good prose which uses mainly common and metaphorical terms as *xenikon*, which here

Even within these main categories and diachronically regarding the development of (sub)genres, Aristotle differentiates types of *lexis* or, synonymously, *tropoi* (sc. *lexeōs*, ‘ways of speaking’)⁵⁵ according to the role of style and the preferred types of words. For example, Aristotle describes how tragic authors have come to adopt iambs instead of tetrameters as well as ordinary instead of uncommon words in order to be more prose-like, whereas epic authors still use words beyond everyday language;⁵⁶ equally, one may distinguish rhetorical genres based on their style-sense relation: “for those who *write* speeches [sc. of the epideictic genre]⁵⁷ owe a greater part of their strength to style (*lexis*) than to thought (*dianoia*).”⁵⁸ Although, in this way, the *lexis* of prose may sometimes be more poetical than that of poetry itself (and vice versa), *lexis*, on the whole, seems to be more relevant in poetry than in rhetorical prose on Aristotle’s view.⁵⁹ It is only implied which genres are next on the “scale,”⁶⁰ which relates sorts of texts according to the kind of their *lexis* and meaning of *lexis* in them: first, other forms of (the prose of) *didaskalia* which are even less influenced by poetry than rhetoric, that is, genres concerned with the instruction of knowledge (rather than opinions); second, and diametrically opposed to poetry on this “scale,” scientific texts like mathematics.

From these genre-related reflections on *lexis*, two conclusions emerge: First, different kinds of texts seem to have different kinds of *lexis*, which means that different genres use different words or use the same words differently. Aristotle often uses adjectives or genitives to designate the genre of the *lexis* about which he is talking. This involves the term *lexis* itself being used in the general sense of ‘style’ that we have recognized above, for otherwise it could not be concretized by means of attributes. Second, *lexis* seems to be of different importance in different genres. This means that the term does not always refer to all aspects of the literary form of a text but sometimes describes only a certain part or aspect of it. In this way, *lexis* often seems to be used emphatically in the sense of ‘poetical *lexis*’ or even ‘the side of *lexis* which is typical only for (certain types of) poetical *lexis*, that is, uncommon expressions (*xenika*).’⁶¹

means something like “distinguished,” while it otherwise serves as umbrella term for ‘strange’, ‘foreign’, or ‘exotic’ terms such as the aforementioned types. I will come back to this when talking about the role of clarity for the stylistic form.

55 For this term see above.

56 *Rhet.* III 1, 1404a29–35.

57 *Rhet.* III 1, 1404a24–26.

58 *Rhet.* III 1, 1404a18 f.

59 Halliwell 1993, 56 and see Aristotle’s above-quoted referring to the *Poetics* for the poetical *lexis* and restriction of the *Rhetoric*, thus, to non-poetic genres.

60 Halliwell 1993, 55.

61 Halliwell 1993, 54 who states that Aristotle “is taking effective *lexis* (in rhetoric or poetry) to involve an element of the ‘strange’ or ‘foreign’ (*xenikon*)” (see above); the point, however, is that *lexis* means ‘poetical *lexis*’ or ‘strange words’ precisely outside reflections about poetry or the most poetical genres of poetry, for example in our passage about *didaskalia* (see below).

This emphatic use, thus, presents a subform that we have to add under the main sense ‘style’. The association of *lexis* with poetical elements of style seems to be both due to the origin and success of the use of strange words in poetry as well as due to the view that *lexis* in general, that is, even that of prose (for instance in Gorgias), was at first “poetic.”⁶²

It is between these two senses that *lexis* seems to oscillate in our *didaskalia* passage: “the art of *lexis* – here used in a general sense but including the reference to the traditional poetical side of it – is of small but limited importance in *didaskalia*,” but “nobody teaches geometry in this way, that is, using poetical *lexis*.” This oscillation helps explain some of the difficulties of the passage. As for geometry, it means that Aristotle does not deny that it has or pays attention to *lexis* at all, only that it makes use of poetical *lexis*.⁶³ In this way, its *lexis* can even be described by the categories of the *lexis* account of the *Rhetoric*: it only uses ordinary words. However, the recommendations of the *Rhetoric*, for example, regarding the use of *onomata*, do not pertain to it: Aristotle explicitly excludes it from the cosmos of *didaskalia* about which he is talking (just as he excludes poetry as a target). As for Aristotle’s own philosophical and scientific writings, they fall under *didaskalia*; since he distances himself from the style of mathematics, his writings should be imagined somewhere between rhetoric and mathematics on the scale regarding the kind and meaning of *lexis*. Because of the flexibility of the term, it is possible for Aristotle to say seemingly contradictory things in the same paragraph: He states the necessity of *lexis* (sc. in general, including poeti-

62 *Rhet.* III 1, 1404a24–26 (see above); cf., differently, the translation by Rapp 2002, 130, who takes the whole sentence to concern the origin of the poetic style rather than, in its second part, the influence of poetry on the development of (prose) style: “Da nun die Dichter, auch wenn sie Einfältiges reden, durch die Beherrschung der sprachlichen Form zu ihrem Ansehen gelangt zu sein scheinen, entstand als erstes die sprachliche Form der Dichtung, wie zum Beispiel die des Gorgias.” Cf. my translation of διὰ τοῦτο ποιητική πρώτη ἐγένετο λέξις, οἷον ἡ Γοργίου: “because of this, language first became poetic, like that of Gorgias”.

63 Although Halliwell acknowledges the emphatic understanding of *lexis* as ‘(poetical) *lexis* containing *xenika*’ (see above), he does not seem to think that this sense helps to explain the problematic statement that *didaskalia* “has only the minimum use for verbal style,” which seems to imply (but does not) “that such discourse is careless of the way it uses words,” for “clearly this could not be at all true of geometry” (ibid. 55). Instead, Halliwell argues that “*didaskalia* is assumed to be interested overridingly in its subject-matter; its choices of words will be determined solely by reference to clarity and precision of presentation: *lexis* will function here (. . .) as a transparent medium which calls no attention to its own nature” (ibid.). Accordingly, Halliwell’s more abstract criterion of how Aristotle distinguishes the role of *lexis* in different discourses – besides the proportion of *kuria* and *xenika* – is “the extent of their conscious concern with *lexis*” (ibid.). However, this interpretation, on the one hand, does not seem to find support in Aristotle’s text, and on the other hand, is still problematic regarding Aristotle’s supposed take on the reality of the form of Greek geometry and other scientific texts: If Greek mathematics used its form unconsciously, then only because its form had become extremely standardized at a certain point, while the fact of standardization itself implies a very conscious handling of the form (on the role of the form in Greek mathematics cf. my study of Euclid’s *Elements* Gasser forthcoming).

cal elements) for *didaskalia*, calls (sc. poetical) *lexis* “mere appearance” for the sake of incapable readers, and insinuates that his own writings do have some share in *lexis* (sc. in general, including poetical elements) as he distances himself from the *lexis*-free style of mathematical *didaskalia*. However, the term does not only accommodate various genre-related aspects but also Aristotle’s ambivalence toward the concept which he varyingly presents as vulgar and as effective.

So far, we have traced the use of *lexis* in the *Rhetoric* and *Poetics* starting from a central passage on the role of *lexis* in *didaskalia* to estimate the relevance of the treatment of *onomata* for Aristotle’s own use of terms. We have found that Aristotle sharply distinguishes between poetical and rhetorical discourse, although the *lexis* accounts of the respective two works are closely connected and partly overlap. Aristotle’s theory of poetical *lexis* should not be relevant for his own scientific terminology (as it is not even relevant for rhetorical texts according to Aristotle); the account of the *Rhetoric*, however, can be considered relevant. For, as we have seen, Aristotle explicitly widens the focus to include not only speeches, but all texts concerned with *didaskalia*, which he has defined as “discourse based on knowledge”⁶⁴ at the outset of the work. He does not draw any sharp distinctions between types of such discourses apart from the one between *didaskalia* in general and the extreme genre of mathematics.⁶⁵ This broader perspective is confirmed by the wide range of examples from which Aristotle chooses in the *Rhetoric*. They come from various, even non-rhetorical, prose authors, many of whom are writers of knowledge texts in the broadest sense.⁶⁶

2.2 The Relevance of Clarity for the Literary Form

A further but related aspect regarding the scope and relevance of Aristotle’s theory of *lexis* is the relation of the literary form to clarity, to which we will turn now.

It is already in the crucial passage which we have just scrutinized extensively that Aristotle relates literary form to the aim of clarity: it is used “with respect to clarification” (*pros to dēlōsai*). The supreme relevance of clarity for the whole subject of *lexis* can be seen at the ‘core’ of the *lexis* account, in the definition of the ἀρετὴ τῆς λέξεως (*aretē tēs lexeōs*), of the ‘virtue’ or ‘excellence of style’, that is, the definition of

64 ὁ κατὰ τὴν ἐπιστήμην λόγος/*ho kata tēn epistēmēn logos* (*Rhet.* I 1, 1355a26, cf. Halliwell 1993, 56).

65 For Rapp 2013, 286 (and 299), it is already the generality of the *lexis* (and *taxis*) account of the *Rhetoric* which allows applying its ‘basics’ (‘Grundzüge’) to other genres, although he states that Aristotle does not have in mind the form of philosophical texts in the *Rhetoric* (which the central *didaskalia* passage calls into doubt). More cautiously *ibid.*, 286: “Was ich an dieser Stelle behaupte, ist nur, dass Aristoteles mit seiner speziellen Zugangsweise zu *lexis* und *taxis* die Grundlage für die Rechtfertigung einer bestimmten sprachlich-literarischen Gestaltung auch von philosophischen Texten liefert (. . .).”

66 Halliwell 1993, 50 f.

‘the good prose style’:⁶⁷ “(. . .) the excellence of the stylistic form should be defined as being clear (for since a speech is a sign, it will not fulfill its proper work if it is not clear), and neither banal nor exceedingly sublime, but appropriate.”⁶⁸ Christof Rapp has shown the neglected importance of clarity in this definition. Influenced by the later rhetorical tradition, most interpreters have discovered at least two, if not four virtues of style in it, that is, apart from the virtue ‘clarity’ at least that of ‘appropriateness’.⁶⁹ However, Aristotle – not only in this passage – always uses *aretē tēs lexeōs* in the singular and accordingly recognizes only one ‘virtue of style’. This leaves the possibility that the criterion of ‘appropriateness’ which is mentioned at the end of definition (*prepousan*) is part of the one overall virtue. However, the special status of ‘clarity’ is unequivocally indicated by the “*ergon*-argument” provided in parenthesis which is used to explain why “being clear” (*saphē einai*) is the *aretē tēs lexeōs*.⁷⁰ Nonetheless, the definition adds another requirement, namely, to be “neither banal nor exceedingly sublime, but appropriate.” The syntactical structure indicates that the ‘appropriateness’ which at first seems to be the second criterion actually refers to the previously mentioned opposition “banal” and “exceedingly sublime,” as Aristotle goes on to explain: the good (prose) style should find the right balance between banality and sublimity,⁷¹ that is, the right balance in relation to the subject of the speech.⁷² This means that Aristotle has in mind one single *aretē tēs lexeōs* according to which the stylistic form must be clear and appropriately sublime.

The two criteria clarity and sublimity are related insofar as they are achieved by opposite means: sublimity arises from the use of uncommon words (*xenika*) and counterbalances the use of common words (*kuria*); for these bring about clarity but they also, if employed exclusively, lead to banality. But what is the exact relation of the two qualities as part of the *aretē tēs lexeōs*? Let us read how Aristotle repeats its definition a little further on in the text: “Therefore, if someone does it well, it (sc. the speech) will be unfamiliar (*ξενικόν/xenikon*) and able to conceal it and clear (*σαφηνειῖ/saphēniei*). This

67 Rapp 2013, 286.

68 (. . .) ὥρισθω λέξεως ἀρετὴ σαφὴ εἶναι (σημεῖον γάρ τι ὁ λόγος ὦν, ἐὰν μὴ δηλοῖ οὐ ποιήσει τὸ ἑαυτοῦ ἔργον), καὶ μήτε ταπεινὴν μήτε ὑπὲρ τὸ ἀξίωμα, ἀλλὰ πρέπουσαν (*Rhet.* III 2, 1404b1–4). My translation follows the German translation by Rapp 2013, 290.

69 The other two virtues recognized by the later tradition, ‘ornateness’ and ‘correctness’ do not even implicitly feature in this definition.

70 Cf. Rapp 2013, 290 for the whole argument so far.

71 *Rhet.* III 2, 1404b4–12.

72 As Rapp 2013, 291 f. explains, the reference point of the requirement of the appropriate balance between banality and sublimity becomes clear a little further on in the text: “In verse (. . .) the persons and things there spoken of are comparatively remote from life; for even in poetry, it is not quite appropriate that fine language should be used by a slave or a very young man, or about very trivial subjects: even in poetry, the style, to be appropriate, must sometimes be toned down, though at other times heightened. All the more so in prose, where the subject-matter is less exalted” (*Rhet.* III 2, 1404b12–18, trans. Rhys Roberts). By contrast, appropriateness in relation to the character of the orator is a post-Aristotelian Quintilianian notion (Rapp 2013, 291).

was the excellence of the rhetorical speech (ἡ τοῦ ῥητορικοῦ λόγου ἀρετή/*hē tou rhētorikou logou aretē*).⁷³ Although the aspect of the “unfamiliar” or “strange” which is responsible for sublimity is named first here (unlike in the first version of the definition), the dominant quality of the *aretē* is ‘clarity’: it is necessary, as we have seen, in order for the speech to fulfill its *ergon*, whereas, as follows from the second definition, *xenika* should only be used to such an extent so as to not even be perceived. This means that sublimity, achieved by using common words, must not be used at the expense of clarity. Too much of ‘the uncommon’ would not only produce obscurity – for clarity is mainly due to common words – but also appears to be artificial and for this reason causes resentment on the part of the audience so that it turns them away.⁷⁴

The reason why ‘the unfamiliar’ should be part of the rhetorical *lexis* is to avoid banality. But why should it be avoided? The argument is a cognitive one: As Aristotle says about why language must be made “unfamiliar” (*xenikēn*), “people are admirers of what is out of the way (τῶν ἀπόντων/*tōn apontōn*), and what is admirable is pleasant (ἡδύ/*hēdu*).”⁷⁵ The pleasure which is the effect of the use of unfamiliar language helps the cognitive processes of understanding and learning because it makes sure that the audience becomes interested in a subject and in this way keeps them fascinated with it, which at the end of day is an important precondition of learning. In this way, sublimity – as direct effect of unfamiliar words – is not opposed to the aim of clarity but rather adds to clarity in its cognitive dimension, that is, to comprehensibility.⁷⁶ Cognitive-communicative clarity is the main aim; the efforts of it are enhanced by the element of ‘the unfamiliar’.

As these passages about the *aretē tēs lexeōs* show that the *Rhetoric* presents *lexis* as having a specific purpose. The whole *lexis* account of the *Rhetoric* has a cognitive-communicative perspective: the stylistic form of the *rhētorikos logos* above all serves its comprehensibility, and it is to help the audience to understand the speech in the

73 ὥστε δῆλον ὡς ἂν εὖ ποιῇ τις, ἔσται τε ξενικὸν καὶ λανθάνειν ἐνδέξεται καὶ σαφηνιεῖ· αὕτη δ’ ἦν ἡ τοῦ ῥητορικοῦ λόγου ἀρετή (*Rhet.* III 2, 1404b35–7). Here, the aspect of ‘appropriateness’ is not even mentioned; this shows that it is not *per se* part of the *aretē* (Rapp 2013, 294). In another repetition of the definition (*Rhet.* III 12, 1414a24 f.), ‘the appropriate’ features again: “for why does it have to be clear and not banal, but appropriate?” (τίνος γὰρ ἔνεκα δεῖ σαφῆ καὶ μὴ ταπεινὴν εἶναι ἀλλὰ πρέπουσαν;); here, πρέπουσαν is used again in the sense in which it is employed in the first definition of the *aretē tēs lexeōs*, that is, with respect to ‘not banal,’ expressing the opposite of it: ‘appropriately sublime’.

74 *Rhet.* III 2, 1404b18–21 (see Rapp 2013, 293).

75 *Rhet.* III 2, 1404b10–12.

76 Rapp 2013, 294. At the end of the *lexis* account, Aristotle calls ‘pleasant’ the effect of the combination of clarity and non-meanness/appropriateness (*Rhet.* III 12, 1414a22–25; for this passage see also above). The point is that ‘the unfamiliar’ is the factor by which a text is not only clear but also pleasant and therefore all the clearer.

intended way.⁷⁷ Aristotle does not exclude poetical elements from the rhetorical style although he does not have them dominate it, but he does not grant them any aesthetic or non-cognitive functions; the aesthetics of unfamiliar language are employed for cognitive purposes.⁷⁸ Even more generally, he does not consider aesthetically motivated form in the *Rhetoric*.

In accordance with the recommendation of the *Rhetoric* to mainly aim for clarity and for sublimity only to an extent which is appropriate, Aristotle says that one should choose words from ordinary language (ἐκ τῆς εἰωθυίας διαλέκτου/*ek tēs eiōthuias dialektou*).⁷⁹ From the “words which have been spoken of in the *Poetics*”⁸⁰ we should use strange, compound, or coined words only rarely and in few places.⁸¹ Shortly afterward, however, he says that “ordinary and proper words and metaphors” (τὸ δὲ κύριον καὶ τὸ οἰκεῖον καὶ μεταφορὰ/*to de kurion kai to oikeion kai metaphora*) alone are useful for the style of prose since these are commonly used in conversation.⁸² Although all three terms are coordinated by *kai* (“and”), *to kurion* and *to oikeion* seem to refer to the same thing (namely ordinary words), while “metaphor” refers to a special use of ordinary words. The statement seems to contradict the fact that Aristotle also allows for a certain amount of strange words in prose; however, he seems to focus here on what prose has in common with ordinary speech, and his point is that metaphor is also a part of the latter, although it leads to both clarity (*to saphes*) and strangeness (*to xenikon*) (and pleasure)⁸³ – while ordinary words used in their ordinary senses only lead to clarity. In another passage, inappropriate metaphors are ruled out along with compound words, strange words, and “epithets that are either long or unseasonable or too crowded” for causing “frigidity of style” (τὰ δὲ ψυχρὰ (. . .) κατὰ τὴν λέξιν/*ta de psukhra (. . .) kata tēn lexin*). Metaphors are called inappropriate for different reasons: either because they are “ridiculous” or because they are “too dignified and somewhat tragic” or because they are “far-fetched” which makes them “obscure.”⁸⁴ Here, “strange words” appear as a category among such categories that are otherwise subsumed under it. Other passages positively advise to use only certain kinds of metaphor, that is, “appropriate” or “not far-fetched” ones or “not

77 As Rapp 2013, 296 points out, not all aspects of the long *lexis* account of the *Rhetoric* can easily be related to the cognitive aims of *lexis* as mentioned in the *aretē tēs lexeōs*, but in all cases, it is possible to find a connection to the overall perspective on closer examination.

78 Cf. *Rhet.* III 2, 1405b4–8: “Metaphors should also be derived from things that are beautiful, the beauty of a word consisting, as Licymnius says, in its sound or sense (. . .).” This reveals an aesthetic appreciation of terms; however, the beauty of the terms is not appreciated by itself, but to be exploited with regard to the cognitive value of metaphor.

79 *Rhet.* III 2, 1404b24 f.

80 *Rhet.* III 2, 1404b7 f.

81 *Rhet.* III 2, 1404b26–30.

82 *Rhet.* III 2, 1404b31–35.

83 *Rhet.* III 2, 1405a8 f.

84 *Rhet.* III 3, 1405b35–1406b36.

poetical” ones, or to derive metaphors from certain kinds of words.⁸⁵ Metaphor is also mentioned as a means for achieving “loftiness/dignity” (*ogkos*) of style, besides using “the description instead of the name of a thing,” epithets, and plural for singular.⁸⁶ Finally, metaphor most prominently appears in Aristotle’s treatment of “expressions that are witty (*asteia*) and likeable (*eudokimounta*)” in Chapters 10 and 11 of *Rhetoric* III. These are distinguished from ordinary words which we already know and only convey what is obvious anyway, and from foreign words (*glōttai*) which are obscure: *ta asteia* are pleasant because they enable quick understanding.⁸⁷ This takes up Chapter III 2, in which Aristotle says that foreign expressions add to the cognitive aim of clarity since they are pleasant and, in this way, motivate for learning and understanding (see above). Of the three means by which, according to Aristotle, the witty effect is achieved – antithesis, metaphor, and *energeia* – metaphor specifically concerns the kind or form of *onomata*.⁸⁸ Accordingly, metaphor is where the stylistic ideal of clarity and an appropriate measure of strangeness crystallizes in the realm of terminology. Otherwise, the ideal is thought to be achieved by a mixture of obvious and strange words. Metaphors must be neither far-fetched nor obvious; they must be taken from what is related, but not obviously so.⁸⁹ Aristotle emphasizes that “metaphors by analogy” (*hai kat’ analogian*) are the best type;⁹⁰ he repeatedly points out that they are *pro ommatōn*, that is, they are ‘graphic’ or ‘vivid’ as they manage to put something before our eyes.⁹¹ The notion of “putting something before one’s eyes” (*pro ommatōn poiein*), which, notably, is itself a metaphor,⁹² corresponds with that of *energeia* (‘vividness’, ‘activity’) which Aristotle has mentioned as one of three means by which *to asteion* can be produced. While Aristotle mentions it as a separate means, he chiefly describes it as a quality of metaphors. The effect of the *asteion*, Aristotle says, is also achieved by what surprises or deviates from expectations, for example, by a surprising use of homonyms.⁹³ However, in another passage he states that ambiguous terms (ἀμφίβολα/*amphibola*) should be avoided in rhetorical prose⁹⁴ and insinuates that neither homonyms nor synonyms should be used, as the former are “most useful to the sophist” and the latter “most useful to the poet.”⁹⁵

In the *Poetics*, to which we now turn briefly, the *aretē tēs lexeōs* – here: *lexeōs aretē* – is defined in a similar way: “The excellence of the form is to be clear (*saphē*)

85 *Rhet.* III 2, 1405a10 f., 14–6, 34–6, b5–8; III 6, 1407b31 f.

86 *Rhet.* III 6, 1407b26–37.

87 *Rhet.* III 10, 1410b6–15.

88 *Rhet.* III 10, 1410b35 f.

89 *Rhet.* III 10, 1410b31–33; 11, 1412a11 f.

90 *Rhet.* III 10, 1411a1 f.

91 *Rhet.* III 10, 1411a26–28, b2–9.

92 Rapp 2002, 909.

93 *Rhet.* III 11, 1412b7–16.

94 *Rhet.* III 5, 1407a30–32.

95 *Rhet.* III 2, 1404b37–39.

and not banal (*mē tapeinēn*).⁹⁶ That is, the good poetic style must be clear and sublime, and it must use, as Aristotle goes on to explain, both common and uncommon expressions. The reason which he gives for why the *lexis* should not be entirely clear is again the same: banality. By contrast with the first definition of the *aretē tēs lexeōs* of the *Rhetoric*, the criterion of appropriateness is not mentioned. One wonders how ‘clarity’ and ‘non-banality’, that is, sublimity-through-uncommon-words, are supposed to be quantitatively related. From the definition of the good poetic style, it appears that ‘non-banality’ is as important as clarity; “however, if someone makes all words like that, (his work) will be either a riddle or the Greek of someone who does not really know the language.”⁹⁷ That is, the *lexis* just should not be *completely* strange or foreign. “Therefore,” Aristotle concludes, “one has to mix these in some way,” that is, the two kinds, namely common and uncommon names.⁹⁸ Eventually, Aristotle also introduces “the fitting” (τὸ ἀρμόττον/*to harmotton*) as a criterion and demands that foreign terms should not be used inappropriately (ἀπρεπῶς/*aprepōs*).⁹⁹ Apparently, he relates it, like in the *Rhetoric*, to the subject of the work which is, above all, dependent on the (respective part of the) poetic genre.¹⁰⁰

Thus, the definition of the good style of the *Poetics* closely resembles that of the *Rhetoric*, but it seems, as we have suspected earlier in this chapter, that Aristotle overall allows a greater amount or share of ‘uncommon language’ in poetry. Here, it only should not be used exclusively, whereas in rhetoric, it should have so little room as not even to be visible. This fits the statement in our initial *didaskalia* passage that the art of poetry is necessary to a small degree in every instruction; as we have argued above, *to tēs lexeōs* is used emphatically to mean “the art of *lexis* as we know it from poetry.” This poetical *lexis* which may contain a great deal of uncommon terms only plays a small role in *didaskalia*. To be sure, the styles of the different poetic genres differ considerably regarding the number of uncommon terms in them. For instance, “[i]n iambic verses, since they imitate everyday language (*lexis*) as far as possible, those names are appropriate which one could use in speeches (*en logois*) too.”¹⁰¹ The argument here is that iambics roughly use the *lexis* of (rhetorical) speeches since the latter is close to the language of standard speech¹⁰² (although it uses “metaphor” and

⁹⁶ *Poet.* 22, 1458a17.

⁹⁷ ἀλλ’ ἂν τις ἅπαντα τοιαῦτα ποιήσῃ, ἢ αἰνίγμα ἔσται ἢ βαρβαρισμός (*Poet.* 22, 1458a23–25). The translation of βαρβαρισμός/*barbarismos* is based on Fuhrmann’s comment (1982, 130): “Die Redeweise eines Nicht-Griechen, der nur mangelhaft griechisch spricht und hierbei beliebige Dialektalausdrücke verwendet.”

⁹⁸ δεῖ ἄρα κεκρᾶσθαι πως τούτοις (*Poet.* 22, 1458a31).

⁹⁹ *Poet.* 22, 1458b13–15 and 1459a4–6.

¹⁰⁰ *Poet.* 22, 1459a8–14.

¹⁰¹ ἐν δὲ τοῖς ἱαμβείοις διὰ τὸ ὅτι μάλιστα λέξιν μιμεῖσθαι ταῦτα ἀρμόττει τῶν ὀνομάτων ὅσοις κἂν ἐν λόγοις τις χρῆσαιτο (*Poet.* 22, 1459a11–13).

¹⁰² *Lexis* is synonymous here with *dialektos* (‘everyday speech’), for this meaning of the term see above.

“ornament” besides ordinary names)¹⁰³ or at least much closer than what is traditionally understood as poetical *lexis*. This implies a general difference of poetical and rhetorical discourse in terms of the use of ‘the strange’.

Despite the relatively high proportion of unusual expressions in the various poetical styles addressed in the *Poetics*, it presents ‘style’ – like the *Rhetoric* – as something which is used for a specific purpose. Aristotle explicitly names its function: “By linguistic style (*lexis*), I mean, as we said earlier, communication (*hermēneian*) by means of language (*onomasias*), which has the same potential in both verses (*epi tōn emmetrōn*) and prose speeches (*epi tōn logōn*).”¹⁰⁴ That is, he ascribes to *lexis* the same cognitive function which it has in the *Rhetoric*. This is confirmed by the fact that he explicitly adds that the *dunamis* (i.e., what it can do and what it does) is the same in both poetry and prose. Nonetheless, the importance of clarity is toned down considerably compared with the rhetorical account, and the aspect of ‘pleasantness’, which in the *Rhetoric* explains why foreign expressions are relevant for cognitive aims, is never used in the *Poetics* in the context of *lexis*.¹⁰⁵ Of course, tragedy is defined as a *mimēsis* “in speech which has been made pleasant” (ἡδυμένῳ λόγῳ/*hēdusmenōi logōi*) but, as Aristotle himself explains, “by speech which has been made pleasant I mean that which has rhythm and melody.”¹⁰⁶

Although the *lexis* account of the *Poetics* is not focused solely on the genre of tragedy, it is introduced as one of the six qualitative parts of tragedy¹⁰⁷ and one of the two media of *mimesis*;¹⁰⁸ accordingly, its function should be related to the aim of tragedy as it is named in the famous definition of tragedy: that is, “accomplishing by means of pity (*eleou*) and terror (*phobou*) the catharsis of such emotion.”¹⁰⁹ Whatever the exact meaning of this much-discussed formulation, eliciting certain emotions seems to be at the center of the function of tragedy. Notably, Aristotle, immediately before he starts talking about *lexis* in Chapter 19, parallels tragedy with rhetorical speeches as regards the production of certain effects by means of the form:

¹⁰³ *Poet.* 22, 1459a14. It is not quite clear what κόσμος/*kosmos* means, which I translated as “ornament” following Janko 1987, 32. In one passage of the *Rhetoric*, it means “epithet” (*Rhet.* III 7, 1408a14).

¹⁰⁴ τέταρτον δὲ τῶν μὲν λόγων ἢ λέξις· λέγω δέ, ὥσπερ πρότερον εἴρηται, λέξιν εἶναι τὴν διὰ τῆς ὀνομασίας ἐρμηνείαν, ὃ καὶ ἐπὶ τῶν ἐμμέτρων καὶ ἐπὶ τῶν λόγων ἔχει τὴν αὐτὴν δύναμιν. (*Poet.* 6, 1450b13–15). It is not clear to what the parenthesis “as we said earlier” refers, because Aristotle has not said anything of the like earlier in the work.

¹⁰⁵ In *Poet.* 24, 1460a17, the formulation of the *Rhetoric* τὸ δὲ θαυμαστὸν ἡδύ (“the admirable is pleasant”) recurs, but only with regard to marvelous elements of the plot in epic poetry; in *Poet.* 4, 1448b13 it characterizes the effect of “learning” through imitations (not as that which enhances it).

¹⁰⁶ *Poet.* 6, 1449b25.

¹⁰⁷ *Poet.* 6, 1450a7–10.

¹⁰⁸ ἐν τούτοις γὰρ ποιοῦνται τὴν μίμησιν (*Poet.* 6, 1449b33 f.).

¹⁰⁹ *Poet.* 6, 1449b24–28.

It is clear that in the events (*en tois pragmasin*) too, that one should make use of the same forms (*apo tôn autôn ideôn*) when one has to make them pitiable, dreadful, important or probable, except that there is a difference insofar as these (sc. effects) should appear without instruction (*aneu didaskalias*), while those in speech (*en logois*) should be produced by the speaker and arise from speech.¹¹⁰

This paragraph is part of a small section on *dianoia* (“thought, reasoning”) which precedes that on *lexis*. Aristotle refers the reader to the *Rhetoric* for details on *dianoia*¹¹¹ and goes on to say, in our present passage, that the *ideai* (forms) used for achieving certain effects are the same in (the representation of tragical) events (*en tois pragmasin*) as in speeches (*en logois*) – with the exception that the presentation in speeches is mediated (it is a kind of instruction) but that it is direct in (tragic) poetry.¹¹² Although Aristotle still seems to be talking about *dianoia*, the statement is so general that it could also apply to the following *lexis* account or serve as a bridge between the accounts on the two aspects of the form. The term *ideai*, which denotes the “forms” that are the same in rhetoric and tragedy, is notoriously vague and multi-faceted; here, with respect to *dianoia*, it seems to refer to forms of action and argument, respectively, but it may equally be referred to different kinds of literary form.¹¹³ With regard to *lexis*, the passage could imply that it relates the poetic action directly, whereas in speeches, it accompanies what the speaker says *about* an action. In any case, the passage explicitly establishes that the form of tragedy is no less functional than that of rhetorical speeches, mentioning *eleos* and *phobos* among the desirable effects of the tragic form.¹¹⁴ That is to say, the function of the mix of clarity and sublimity in the good style is to produce emotions rather than to produce (primarily) comprehensibility; this explains the higher proportion of unusual, potentially obscure terms; a certain degree of clarity is nevertheless needed insofar as comprehension is necessary for developing emotions toward something. Notably, even with regard to poetry Aristotle does not seem to have in mind any aesthetic functions of the form.

110 δῆλον δὲ ὅτι καὶ ἐν τοῖς πράγμασιν ἀπὸ τῶν αὐτῶν ἰδεῶν δεῖ χρησθαι ὅταν ἡ ἐλεεινὰ ἢ δεινὰ ἢ μεγάλα ἢ εἰκότα δέῃ παρασκευάζειν· πλὴν τοσοῦτον διαφέρει, ὅτι τὰ μὲν δεῖ φαίνεσθαι ἄνευ διδασκαλίας, τὰ δὲ ἐν τῷ λόγῳ ὑπὸ τοῦ λέγοντος παρασκευάζεσθαι καὶ παρὰ τὸν λόγον γίνεσθαι (*Poet.* 19, 1456b2–7). For parts of this translation, cf. Janko 1987, 25.

111 For the relative dating of the two works cf. Rapp 2013, 287.

112 Something similar seems to be suggested by Janko 1987, 125: “Many of the effects the reasoning produces can also be produced by the incidents: there is a rhetoric of action as well as of words”; differently, Fuhrmann 1982, 127: “Der Redner findet den Stoff vor, mit dem er sich befaßt; er kann ihm nur mit Hilfe der Darstellungsweise die erstrebten Wirkungen abzugewinnen suchen. Der Dichter schafft sich seinen Stoff (und sei es nur durch seine Wahl); er hat daher die Möglichkeiten, die erstrebten Wirkungen schon in den Geschehnissen selbst zur Geltung zu bringen.” However, Aristotle does not talk about the choice of the subject here.

113 Cf. *Poet.* 5, 1449b8 on ‘the iambic form’ (*tēs iambikēs ideas*).

114 Aristotle also mentions ‘importance’ and ‘probability’ apart from pity and terror as effects to be evoked by tragedy, but the former two seem to be subordinate to the latter.

In accordance with his definition of the good style in the *Poetics* ('clear and not banal'), Aristotle recommends a mixture of common and unfamiliar *onomata* in Chapter 22 of the work. He classifies as "unfamiliar" (*xenikon*) "everything that is contrary to what is common" (πᾶν τὸ παρὰ τὸ κύριον/*pān to para to kurion*), in particular, "exotic name" (γλῶττα/*glōtta*), "metaphor" (μεταφορά/*metaphora*), ornament (ὁ κόσμος/*ho kosmos*), and "lengthening" (that is, of a word; actually "extension"; ἐπέκτασις/*epektasis*); but "lengthenings" (αἱ ἐπεκτάσεις/*hai epektaseis*) are also, along with "curtailments" (ἀποκοπαί/*apokopai*) καὶ "alterations of words" (ἐξαλλαγαὶ τῶν ὀνομάτων/*exallagai tōn onomatōn*), mentioned as means which produce clarity and non-banalities at the same time.¹¹⁵ In a later passage, also "double names" (διπλοῖς ὀνόμασι/*diplois onomasi*, τῶν δ' ὀνομάτων τὰ μὲν διπλᾶ/*tōn onomatōn ta men diplā*) are mentioned together with exotic and metaphorical names, which suggests that they too belong to unfamiliar language,¹¹⁶ although they are merely introduced as one kind of composite *onoma* in Chapter 21.¹¹⁷ Too much of the unfamiliar will lead either to αἰνίγμα (*ainigma*, "riddle"), that is, in the case of too many metaphors, or to βαρβαρισμός (*barbarismos*, "gibberish") in the case of using only exotic names.¹¹⁸ Some kinds of terms which are classified as *xenikon* in Chapter 22 are mentioned as categories of their own alongside the category of *kurion* in the previous Chapter 21: "Every word (*onoma*) is either common (*kurion*), exotic, a metaphor, an ornament, made-up, lengthened, reduced (ὑφηρημένον/*huphēirēmenon*) or altered."¹¹⁹ The term *huphēirēmenon* (later replaced by the synonymous term ἀφηρημένον/*aphēirēmenon*)¹²⁰ corresponds to what Aristotle calls *apokopai* ("curtailments") in Chapter 22 and refers to words from which something, that is, a syllable or letters, is taken away.¹²¹ A means mentioned here but left out in the classification of "the unfamiliar" in Chapter 22 is that of "neologism/made-up" (πεποιημένον/*pepoiēmenon*). In Chapter 21, it appears at first as if *glōtta* was the opposite category of *to kurion*, since: "By common, I mean a name which a particular people uses, by exotic, I mean one which other people use."¹²² But the subsequent categories also are all defined with respect to how they deviate from what one is used to. Aristotle himself draws the conclusion that the categories are relative rather than absolute ones: "Consequently it is obvious that it is possible for the same name to be both exotic and standard, but not for the same people."¹²³ At the end of this section, I will go through the remarks which Aristotle makes on the form of

115 *Poet.* 22, 1458a22 f., a31–b5. The addition "of words" (*tōn onomatōn*) is to be taken *apo koinou* with all three nouns *epektaseis*, *apokopai*, and *exallagai*.

116 *Poet.* 22, 1459a4–6.

117 *Poet.* 21, 1457a31 f.

118 *Poet.* 22, 1458a23–26.

119 ἅπαν δὲ ὀνόμα ἐστὶν ἢ κύριον ἢ γλῶττα ἢ μεταφορὰ ἢ κόσμος ἢ πεποιημένον ἢ ἐπεκτεταμένον ἢ ὑφηρημένον ἢ ἐξαλλαγμένον (*Poet.* 21, 1457b1–3).

120 *Poet.* 21, 1458a1–7.

121 *Poet.* 21, 1458a2 f.

122 *Poet.* 21, 1457b3 f.

123 *Poet.* 21, 1457b4 f.

terms and their relation to clarity in his theoretical works on science. It is in different context of the *Organon* that Aristotle unsystematically refers to issues of the linguistic form, mostly within discussions of definitions. Because of this focus, Aristotle's remarks specifically concern the terminological form. In this way, they seem to be highly relevant for our question. However, the focus of the discussion is rather narrow each time so that Aristotle's remarks on the terminological form do not automatically reveal Aristotle's take on (his own) philosophical or scientific terminology.

The subject of the *Topics*, for instance, is, as Aristotle mentions it at the outset of the work, the “dialectic deduction” (ὁ διαλεκτικός συλλογισμός/*ho dialektikos sullogismos*),¹²⁴ that is, the deduction from ‘approved opinions’ (ἔνδοξα/*endoxa*) rather than from the first principles. These syllogisms are developed as part of an exercise of argumentation which consists of the questions and answers of two interlocutors, and the *Topics* provides an argumentative method for either opponent: the questioner, who tries to refute the position of answerer, and the answerer, who wants to defend the position taken.¹²⁵ Although Aristotle describes the subject of the work in such a way as for it to appear universally relevant¹²⁶ and promises that the method will be useful beyond this communicative situation, amongst other things for “the philosophical sciences” (*pros tas kata philosophian epistēmas*), it is not clear how exactly the dialectic method is part of Aristotle's writings and accordingly, how it is relevant for interpreting them.¹²⁷ In Book 8 (Θ), he explicitly states that the preceding books, all concerned with the discovery of *topoi*, that is, instructions for the construction of certain types of dialectical arguments,¹²⁸ is relevant for the dialectician and philosopher alike, whereas the present book Θ about the arrangement of the questions (of the

¹²⁴ *Top.* A 1, 100a22 f.

¹²⁵ Malink 2021, 82.

¹²⁶ *Top.* A 1, 100a18–23; cf. Wagner & Rapp 2004, 268 with reference to the beginning of the *Rhetoric* (I 1, 1354a1–11) in which Aristotle describes rhetoric as the “counterpart” of dialectic.

¹²⁷ To be sure, Aristotle, on the one hand, goes through the difficulties on both sides of a subject at the beginning of his works, which is one of the two ways in which he says that dialectic is useful for the philosophical sciences; this, however, only concerns the preliminary process of each inquiry. On the other hand, Aristotle claims that dialectic is useful for the first principles (*ta prōta, hai archai*) of each science, but it is not clear how he envisages its contribution in finding them (see Wagner & Rapp 2004, 273; Malink 2021, 82). See also more generally on the relationship between Aristotle's philosophical writings and the dialectical method Wagner & Rapp 2004, 35–38.

¹²⁸ Wagner & Rapp 2004, 29 (“Anleitung zur Konstruktion dialektischer Argumente eines bestimmten Typs”). This is at least what can implicitly be concluded about the term *topos* from what Aristotle provides when he announces one; it is again telling regarding the subject of our chapter that Aristotle does not define the term *topos* once in his work *τοπικά* (*topika*), although six of its eight books list *topoi*. This is at least what can implicitly be concluded from what Aristotle provides when he announces a *topos*; it is again telling regarding the subject of our chapter that Aristotle does not define the term *topos* once in his work *τοπικά* (*topika*), although six of its eight books list *topoi* (Wagner & Rapp 2004, 29).

questioner) only concerns the dialectician.¹²⁹ We will see, however, that the discussion of terminological features is similar in book Θ as in the preceding books.

In the context of providing tools for refuting and defending arguments, Aristotle mentions features of the terminological form mostly insofar as they make definitions or statements unclear and therefore refutable. At the beginning of book Z , which deals with definitions, Aristotle mentions “the use of unclear language” as one of two branches of incorrectness.¹³⁰ The term which I have translated as ‘language’ here ($\epsilon\rho\mu\eta\upsilon\epsilon\iota\alpha$ /*hermēneia*) is almost equivalent to *lexis*: it can refer to a single (kind of) ‘expression’ or more generally to ‘style’.¹³¹ In Z 2, Aristotle goes through different “*topoi* of the unclear” in definitions, that is, different argumentative rules or methods which the questioner can employ to find out whether their opponent in a dialectical exercise is being unclear and whether they can be refuted on these grounds. For example, “one *topos* of the unclear is (sc. to consider) whether what is being said is homonymous with something.”¹³² While in this context, Aristotle claims that incorrect (including unclear) definitions are easy to refute because of the mistakes which they contain,¹³³ he says in Θ 3, which is devoted specifically to the question of refutability, that it is precisely unclear definitions that are the most difficult to refute ($\delta\upsilon\sigma\epsilon\pi\iota\chi\epsilon\iota\rho\acute{\iota}\tau\omicron\tau\alpha\iota$ /*dusepikheirētōtatoi*). Here, such definitions are called unclear (*asaphē*) which contain *onomata* which are unclear (*adēla*) regarding whether they are used in ways which have been classified as unclear in book Z , such as in a metaphorical way, or in a clear way.¹³⁴ Reference to unclear statements is made again in Θ 7, which gives advice on what to do when one encounters what is said “in an unclear way” or “in many ways,” and on how to dissolve

¹²⁹ *Top.* Θ 1, 155b3–16, see Wagner & Rapp 2004, 346.

¹³⁰ *Top.* Z 2, 139b12 f.

¹³¹ Cf. Demetrius, *On style* (*Peri hermēneias*); by contrast, in Aristotle’s treatise of the same title on the relationship between language and logic, *hermēneia* means “interpretation” (cf. the Latin title *De interpretatione*, whereas Demetrius’ title has been handed down as *De elocutione*, which refers to one of the five *officia oratoris* in classical rhetoric, i.e., the stylization of the speech).

¹³² *Top.* Z 2, 139b19 f.

¹³³ The argument here is somewhat obscure: “It remains, then, to say how to pursue the matter if the object has been either not defined at all, or if it has been defined incorrectly. First, then, we must examine whether it has been defined incorrectly; for it is easier to do it in some way than to do it correctly – it is clear, then, that there are more mistakes in the latter case because it is more difficult, so that the attack [i.e., the refutation] becomes easier in the latter case than in the former” (*Top.* Z 1, 139b6–10). The first distinction here is between not defining at all and defining incorrectly, the second one is between defining “in some way” and “defining correctly,” so the two distinctions do not exactly overlap. What Aristotle seems to say is that the attempt to define correctly often ends up in an incorrect definition which contains numerous mistakes and is therefore easy to attack, whereas defining “in some way” seems to end up in no definition at all (which can hardly be refuted) rather than, as one might think, in a definition which is even more likely to be incorrect than a definition that was meant to be done correctly to begin with.

¹³⁴ *Top.* Θ 3, 158b8–13.

the obscurity.¹³⁵ Thus, the *Topics* considers features of the terminological form only from the point of view of ‘unclear’, that is, obscurity. While obscurity comes in useful when one tries to refute somebody, it emerges *ex negativo* that one must be clear in order not to be refuted.

Only once – in the above-mentioned passage in which Aristotle defines obscurity as a form of incorrectness – he positively names clarity as an aim of the form of definition: “for the one who defines must use the clearest possible language (*saphestatē tē hermēneia*), since the definition is provided for the sake of gaining knowledge (τοῦ γινώσκειν/*tou gnōrisai*).”¹³⁶ As in the *Rhetoric*, the use of clear language – here *hermēneia*, there *lexis* – is recommended for cognitive reasons, with *gnōrisai* referring both to the communicative activity of the one who defines (‘to make something known’) and to the cognitive act of the recipient of the definition (‘to gain knowledge/understand’). The superlative “clearest” shows that – unlike the rhetorical and poetical *lexis* – the *hermēneia* of definitions does not allow for any obscurity, and nowhere in the *Topics* is obscurity granted any advantage.

As features of the form and use of terms which account for obscurity in definitions, Aristotle lists, in *Topics* Z 2, homonymy (ὁμωνυμία/*homōnumia*, (τὸ) ὁμώνυμον/*(to) homōnumon* or τὸ πλεοναχῶς λεγόμενον/*to pleonakhōs legomenon*, ‘what is said in many ways’);¹³⁷ lack of distinction of the different ways of ‘what is said in many ways’, especially if the homonymy escapes notice; metaphor (*metaphora*, τὸ κατὰ μεταφορὰν λεγόμενον/‘what is said metaphorically’); metaphors which do not fit so that must be understood in a literal way; uncommon expressions (οὐ κεϊμένα ὀνόματα/*ou keimena onomata*, ‘non-established terms’; τὸ μὴ εἰωθός/*to mē eiōthos*, ‘what is uncommon’; what “is used neither homonymously nor metaphorically nor literally (οὔτε καθ’ ὁμωνυμίαν οὔτε κατὰ μεταφορὰν οὔτε κυρίως εἴρηται/*oute kath’ homōnumian oute kata metaphoran oute kuriōs eirētai*); obscurity of the definition of the opposite; obscurity of the *definiendum*.”¹³⁸ In *Topics* Θ 3, Aristotle adds *onomata* which are unclear regarding whether they are said “simply” (ἀπλῶς/*haplōs*) or “in many ways” (here, πολλαχῶς/*pollakhōs*) and whether “literally” (*kuriōs*) or “metaphorically” (*kata metaphoran*).¹³⁹ *Topics* Z 2 and Θ 3 are narrowly focused on the question whether the definition clearly defines the *definiendum* and whether the *definiens* is clearly stated. In this way, the passage from the eighth book Θ is closely related to

¹³⁵ *Top.* Θ 7, 160a17–34. Here, Aristotle distinguishes obscurity from that which is said in many ways whereas in Z 2, the latter falls under the former (see below).

¹³⁶ *Top.* Z 1, 139b13–15.

¹³⁷ Homonymy and ‘what is said in many ways’ here appear synonymously and indeed seem to be identical in Aristotle’s thought (cf. Hübner 2021, 382 with reference to Shields 1999, 22–28, quoted below in n. 162).

¹³⁸ *Top.* Z 2, 139b19–140a22.

¹³⁹ *Top.* Θ 3, 158b8–12.

that of the sixth book Z despite Aristotle's remark that the eighth book, by contrast with the preceding ones, is no more relevant for the philosopher.

In the context of talking about definitions in *Topics* Z 2 and Θ 3, 'what is said in many ways' appears as a form of obscurity. However, in Θ 7, which gives advice on how to answer to "what is said obscurely" and what is "said in many ways" in a dialectic debate, Aristotle precisely distinguishes obscurity and homonymy (i.e., 'what is said in many ways'), since "what is said in many ways" can also be "intelligible" (γνώριμον/*gnōrimon*), that is, clear.¹⁴⁰ In this passage, Aristotle does not consider the possibility that 'what is said in many ways' (here, but not in the former passage, used synonymously with τὸ ἀμφίβολον/*to amphibolon*, 'ambiguity') could be unclear, whereas in the former passage, homonymy automatically seems to lead to obscurity. Maybe 'what is said in many ways' is more likely to be clear if the different ways are explicitly distinguished (as Z 2 mentions the lack of such distinction as another form of obscurity); maybe a term which is said in many ways can be clear from its context; or maybe the differing evaluation of 'what is said in many ways' in Θ 7 has to do with the fact that this chapter, unlike the other two, is not focused on definitions in which homonymy would count as unclear in any case. But, either way, one can see that the border between those terminological features that, according to Aristotle, produce clarity and those that lead to obscurity is not always clear-cut.

Similar remarks on clarity and terminological form can be found in the second book of the *Posterior Analytics*, the work in which Aristotle unfolds his theory of *epistēmē*, that is, the science of demonstration, which he conceptualizes as an axiomatic science.¹⁴¹ The relation of this theory to Aristotle's own philosophical and scientific writings is not quite clear, as he does not apply it himself, at least not consistently (except in parts of the *Prior Analytics*). For this reason, there has been much debate about whether the *Posterior Analytics* really provides a theory of knowledge or rather instructions for effectively presenting knowledge from a didactic stance.¹⁴² In any case, Aristotle's brief reflections about the necessity of clarity in definitions here are quite similar to his statements in the context of dialectics. In *Posterior Analytics* II 3, Aristotle does not explicitly refer to the terminological form by using the term *onoma* but the formal features which he says one should avoid for the sake of clarity are those mentioned in the above passages from the *Topics*. At the end of the chapter, which is devoted to "how to hunt out (θηρεῦειν/*thēreuein*) the things predicated in 'the what it is' (ἐν τῷ τί ἐστι/*en tō ti esti*),"¹⁴³ that is, in definitions, Aristotle emphasizes the usefulness of the inductive method of defining a general term by starting from its particulars (that is, from the subterms of the *definiendum*).¹⁴⁴ For in this way,

¹⁴⁰ *Top.* Θ 7, 160a17–29. For the (partial) synonymy of *gnōrimos* and *saphēs* cf. *Gen. anim.* II 8, 747a27.

¹⁴¹ Malink 2021, 80.

¹⁴² Malink 2021, 81.

¹⁴³ *An. post.* II 13, 96a22 f.

¹⁴⁴ Detel 1993, 780.

the requirement of the clarity of the definition¹⁴⁵ could be ensured, as the two main sources of obscurity, homonymies (*homōnumiai*), and metaphors (*metaphorai*) are avoided.¹⁴⁶ While it is evident why “homonymy more often escapes notice among general things than among undifferentiated ones,”¹⁴⁷ the method also avoids obscurity through metaphor since it ensures that a term is attributed to the correct class.¹⁴⁸ That is, Aristotle here mentions those two main features of the terminological form (homonymy and metaphor) which he – apart from uncommon words – also in the *Topics* classifies as those that induce obscurity. Note that he himself uses a metaphor in doing so: *thēreuein*/“to hunt out.”

In the context of the treatments of the correctness of definitions, some of the terminology is ontological rather than rhetorical: for example, synonymy is defined in the *Categories* in the following way: x and y are synonyms if they have the same name F, and insofar as they are F, have the same definition D.¹⁴⁹ Aristotle’s example is surprising from a rhetorical point of view: humans and cows are synonyms since they are both living beings with the same definition of living being.¹⁵⁰ In the *Rhetoric*, by contrast, Aristotle provides a more common, rhetorical definition of synonymy: “I call both proper and synonymous the terms ‘going’ and ‘walking’: for these two are proper and have the same meaning.”¹⁵¹ Homonyms, according to the definition of the *Categories*,¹⁵² are either things which share the same name *apo tuxhēs* (‘by chance’),¹⁵³ that is, which are not generically related such as the different meaning of the word *zōon* (‘living being’, ‘image’, ‘picture’);¹⁵⁴ or the homonymous things can be closely related in the case of “focused homonymy,”¹⁵⁵ in which different but related things carry the same name either in a primary sense, which is the “focal meaning”¹⁵⁶ of the homonymy, or in a derived sense; these are, thus, homonyms *pros hen* (‘in relation to one’).¹⁵⁷ This second sense is again ontological rather than rhetorical.¹⁵⁸ for example,

145 *An. post.* II 13, 97b31: δεῖ ὑπάρχειν ἐν τοῖς ὁροῖς τὸ σαφές (“there must be clarity in the definitions”).

146 Detel 1993, 743, 780 f.; Barnes 1993, 250.

147 *An. post.* II 13, 97b29–31.

148 Detel 1993, 780. Aristotle does not explicitly draw this connection, but simply says that one should not define by means of metaphors since one also should not discuss by means of metaphors (*An. post.* II 13, 97b37–39).

149 Horn 2005b, 560 with reference to *Cat.* 1, 1a6–12; Hübner 2021, 382.

150 *Ibid.*

151 λέγω δὲ κύρια τε καὶ συνώνυμα οἷον τὸ πορεύεσθαι καὶ τὸ βαδίζειν· ταῦτα γὰρ ἀμφοτέρω καὶ κύρια καὶ συνώνυμα ἀλλήλοις (*Rhet.* III 2, 1404b39–05a2).

152 *Cat.* 1, 1a1–6.

153 *Eth. Nic.* I 4, 1096b26 f.

154 Horn 2005a, 259.

155 Hübner 2021, 384–385.

156 Owen 1960, 169.

157 Hübner 2021, 384–385.

158 Horn 2005a, 259.

the ‘health’ of humans, medicine, color of the cheek, and gymnastics are all “focused homonyms” in relation to ‘health’.¹⁵⁹ In the third sense, a painted or stone eye is an eye (only) homonymously.¹⁶⁰ This third, likewise non-rhetorical sense is related to the aforementioned second one insofar as the things that carry the same name are closely related. Although the origin of this terminology is ontological rather than rhetorical, it enables Aristotle to look at terms both from a linguistic-rhetorical and from an ontological-philosophical point of view. ‘Homonymy’ is ‘what is said in many ways’ looked at from the side of language, and the above-mentioned “identity” of homonymy and ‘things said in many ways’¹⁶¹ allows for calling both things as well as names both ‘homonymous’ and ‘said in many ways’.¹⁶²

Besides, there is further indication that the present account also has a rhetorical side: Terms like homonymy and synonymy which are philosophical in origin are mentioned alongside terms of rhetorical origin such as metaphor. Moreover, the array of terminological features mirrors that of the *Poetics* and *Rhetoric*. Those features are treated under similar headwords denoting ‘style’ and are reviewed from the overall perspective of clarity. In the *Sophistical Refutations*, homonymy is named as a linguistic means of the rhetorical deception of the sophists.¹⁶³ Finally, the *Topics* as a whole, from which most of our passages stem, can be read, amongst other things, as a rhetoric of scientific (dialectic) discourse,¹⁶⁴ although the title of the work may be taken to show an ambivalent stance toward rhetoric.¹⁶⁵ One note about Aristotle’s own use of terms in the theory of definition: Although the terms ‘homonymy’ and ‘what is said in many ways’ indicate a different perspective on the same thing, they are, in a way synonymous. This means that Aristotle does not only use synonymy precisely in the context of recommending avoidance of synonymy and homonymy, but even does so with

159 Hübner 2021, 284.

160 *De an.* II 1, 412b12–22, cf. Horn 2005a, 259 f.; Hübner 2021, 377.

161 Hübner 2021, 382: “Die Aussagevielfalt wird meist nicht von der Homonymie unterschieden, erscheint aber an einigen Stellen als Oberbegriff. Gegenüber der Auffassung, die (. . .), hat sich die Auffassung durchgesetzt, dass die Homonymie identisch mit der Aussagevielfalt ist (. . .). Der gelegentlich geübte Kontrast zur Homonymie kann als Kontrast zur zufälligen Homonymie verstanden werden (EN I 4, 1096b27), die vorliegt, wenn die Bedeutungen eines Ausdrucks keinerlei sachlichen Zusammenhang besitzen.”

162 Hübner 2021, 382: “Die Identität von Homonymie und Aussagevielfalt erlaubt es Aristoteles zu sagen, dass nicht nur sprachliche Ausdrücke vielfach ausgesagt werden, sondern auch nichtsprachliches Seiendes. Wenn ein Name homonym auf verschiedene Dinge zutrifft, gelten die Dinge als Homonyme (bezogen auf den Namen); und wenn ein Name in vielen Weisen von verschiedenen Dingen ausgesagt wird, gelten analog die Dinge selbst als vielfach Ausgesagtes.”

163 *Soph. El.* 4, 165b23–166a23 (Malink 2021, 83).

164 “Rhetorik des wissenschaftlichen Streitgesprächs” (Wagner & Rapp 2004, 38).

165 The term, originally from pre-Aristotelian rhetoric, where it denotes commonplaces or set pieces – indicates the proximity to rhetoric, although Aristotle criticizes the unsystematic approach of using such set pieces so that he seems to mark himself off the rhetorical use of *topoi* precisely by using this term for his systematic approach to argumentation.

respect to one of these terms. Also, the term ‘in many ways’ in the respective phrase is not fixed (*pollakhōs, pleonakhōs*).

I have reviewed both of Aristotle’s *lexis* accounts and his statements on the form of terms in the *Organon* at such great length to show their potential relevance for describing and interpreting Aristotle’s own terminology. While none of his contributions to the subject of (terminological) form is specifically designed for describing his own terms or providing norms for terms in science and philosophy, all accounts somehow pertain to it in a general way: in terms of the overall function ascribed to the form and in terms of the arsenal of stylistic means provided. As far as function is concerned, all excursions on form display a common, functional perspective in which clarity has a decisive role and must be counterbalanced by sublimity (and strangeness, which is responsible for sublimity) to a different extent, respectively. They show a gradation of the meaning which clarity has for the form and conversely of that which sublimity/strangeness has: The stylistic form of poetry should result in a mixture of clarity and strangeness, the proportion being undefined, but that of strangeness, in any case, considerable; rhetoric prescribes a strong tendency toward clarity, whereas strangeness is only granted some but not too much importance; and according to the remarks in the scientific context, only clarity is accepted there.

Regarding the means of style, all three discourses, the poetic, the rhetorical, and the scientific one, center around the form and use of *onomata*. In the scientific context of the *Organon*, the reference of the term *onomata* comes closer to what we might have in mind when talking about terminology (i.e., the central terms), whereas in the *Rhetoric* and *Poetics*, the reference of *onomata* is closer to all parts of the language; nevertheless, the term *onomata* is used in all three discourses, and the same kinds, problems, and stylistic features that are associated with it are discussed in all of them. At the center of the debate about features of style, Aristotle has put the proportion of ordinary and strange terms which he differently calibrates each time in accordance with the functional gradation of proportion of clarity and strangeness: The works on science only allow for common words as terms, the *Rhetoric* mainly, but not exclusively, common words, and the *Poetics* a mix of common and uncommon words. That is, the shaded, genre-dependent evaluation of *onomata* reveals a common perspective which corresponds with the common functional perspective on the role of clarity in each type of text.

In other words, the different discussions of (terminological) form and clarity form a continuum, as it were, with the individual genre-related contributions differing not essentially but only quantitatively displaying varying emphases. On this continuum, Aristotle’s philosophical writings and scientific treatises seem to take a middle position between rhetoric and the ideal of formal logic of the *Organon* because they broadly share the genre and subject area of the latter but lack their rigorousness. This is confirmed by the central passage which implicitly locates knowledge texts, insofar as they are *didaskaliai*, except if they teach geometry, in the vicinity of speeches

(because these are also *didaskaliai*) and insinuates that knowledge texts – if only to a certain extent – fall under the scope of the *Rhetoric*.

The Aristotelian discourse on form as a whole suggests that the position of a genre on the continuum is not fixed, that the transitions on the scale are smooth¹⁶⁶ and that even disparate genres are linked: The *didaskalia* passage, by referring to the aim of clarity, calls up the common cognitive framework of the form; in doing so, it especially links rhetoric and science (under the heading *didaskalia*) which each other, as they most of all are focused on this aim, but it also links knowledge texts with poetry. This underlines that Aristotle's stylistic recommendations can be transferred to his own work; in fact, since Aristotle does not seem to allow for form outside the cognitive framework, transferring its norms to his own text even seems to be inevitable. Thus, from a combination of the position of Aristotle's writings in relation to the discussed genres and the discussion of the same means one should be able to conclude on what would be Aristotle's recommendations even though he has not specified them.

3 Form and Use of Terms in Aristotle: The Example of *aitia*

In the case of the central terms of the discussion of form – *lexis*, *saphēneia*, *onomata* – Aristotle does not differentiate the shades of meaning present in these colorful terms. In many other cases, however, Aristotle calls his terms *pollachōs legomena*, 'what is said in many ways', explicitly marking them, in so doing, as homonymous, and subsequently differentiates them. The list of homonymous terms in the above-mentioned 'lexicon', *Metaphysics* Δ, includes αἰτία/*aitia* ("cause"), originally a common legal term.¹⁶⁷ Besides this passage, there are four other places in Aristotle at which he classifies the term: *Metaphysics* A 3,¹⁶⁸ *Physics* II 3,¹⁶⁹ *Posterior Analytics* II 11,¹⁷⁰ and *Parts of animals* I 1.¹⁷¹ The passage from the *Physics* is almost word for word identical with the one from *Metaphysics* Δ. Since there is reason to believe that Aristotle, in *Metaphysics* Δ, copied it from the *Physics* (and not vice versa),¹⁷² I quote the latter passage here. This distinction of causes comes rather out of the blue: "Aristotle nowhere shows us how he reached it

¹⁶⁶ As we have seen above, certain types of rhetorical prose can be more poetic than some of the more prosaic poetic genres.

¹⁶⁷ *Metaph.* Δ 2, 1013a24–34.

¹⁶⁸ *Metaph.* A 3, 983a24–32.

¹⁶⁹ *Phys.* II 3, 194a16–195a3.

¹⁷⁰ *An. post.* II 11, 94a20–24.

¹⁷¹ *Part. anim.* I 1, 639b11–23.

¹⁷² Ross 1936, 511; 1924, 292.

nor offers any logical deduction of it.¹⁷³ Aristotle states the necessity of inquiring into causes (περὶ τῶν αἰτίων/*peri tōn aitiōn*) as regards their kinds and number, then claims that one can only have knowledge of a thing when one can answer about it “the (question) ‘Why?’” (τὸ διὰ τί/*to dia ti*), adding that “this is to grasp the first cause (τὴν πρώτην αἰτίαν/*tēn prōtēn aitian*),” and concludes that we must inquire into the causes of natural change in order to know their principles (τὰς ἀρχάς/*tās archās*).¹⁷⁴ Subsequently, Aristotle proceeds to differentiate four types of causes (which I, unlike Aristotle, number for the sake of clarity):

- (1) In one way, then, that out of which as its constituent a thing comes to be (τὸ ἐξ οὗ γίγνεται τι ἐνυπάρχοντος/*to ex hou gignetai ti enuparchontos*) is called a cause (αἴτιον/*aition*), for example, the bronze of a statue, the silver of a bowl, and the classes of these (sc. materials).
- (2) In another way, the form and model (τὸ εἶδος καὶ τὸ παράδειγμα/*to eidos kai to paradeigma*) (sc. is called a cause); this is the account of the what it is to be (ὁ λόγος ὁ τοῦ τί ἦν εἶναι *ho logos ho tou ti ēn einai*) and its classes (as for example of the octave it is the relation 2:1 and in general the number) and the parts of the account.
- (3) Moreover, from where the first beginning of the change or of rest is (ὅθεν ἡ ἀρχὴ τῆς μεταβολῆς ἢ πρώτη ἢ τῆς ἡρεμύσεως/*hōthen hē archē tēs metabolēs hē protē ē tēs ēremēsēs*) (sc. is called a cause), for example, the adviser is cause (αἴτιος/*aitios*) (sc. of a thing), and the father (sc. is cause of) of the child, and generally what makes (sc. is cause) of what is made, and what changes (sc. is cause) of what is changed (τὸ ποιοῦν τοῦ ποιουμένου καὶ τὸ μεταβάλλον τοῦ μεταβαλλομένου/*to poioun tou poioumenou kai to metaballon tou metaballomenou*).
- (4) Moreover (sc. a thing is called a cause) as the end (ὡς τὸ τέλος/*hōs to telos*). This is that for the sake of which (τὸ οὗ ἕνεκα/*to hou heneka*), for example, of walking health is the cause. For why (διὰ τί/*dia ti*) does one walk? In order to be healthy, we say, and in saying so, we believe to have indicated the cause (τὸ αἴτιον/*to aition*).¹⁷⁵

This passage is typically Aristotelian in terms of terminology: it abounds with terms, but these terms are often hardly recognizable, mostly because of their form. Let us start by looking at the central term which the passage aims to define – or rather: at the central *terms*. For what I have invariantly translated as “cause,” is, in the Greek, not one single term, but many; or perhaps, it is one term which is not fixed in terms of form: It occurs as an adjective (*aition*, *aitios*), as a nominalized adjective (τὸ αἴτιον/*to aition*) in the phrase *peri tōn aitiōn* of the introduction of the distinction, and as a noun (*aitia*). Such a paronymy is common in Greek and has been acknowledged by

¹⁷³ Ross 1924, 126.

¹⁷⁴ *Phys.* II 3, 194b16–23.

¹⁷⁵ ἓνα μὲν οὖν τρόπον αἴτιον λέγεται τὸ ἐξ οὗ γίγνεται τι ἐνυπάρχοντος, οἷον ὁ χαλκὸς τοῦ ἀνδριάντος καὶ ὁ ἄργυρος τῆς φιάλης καὶ τὰ τούτων γένη· ἄλλον δὲ τὸ εἶδος καὶ τὸ παράδειγμα, τοῦτο δ' ἐστὶν ὁ λόγος ὁ τοῦ τί ἦν εἶναι καὶ τὰ τούτου γένη (οἷον τοῦ διὰ πασῶν τὰ δύο πρὸς ἓν, καὶ ὅλως ὁ ἀριθμὸς) καὶ τὰ μέρη τὰ ἐν τῷ λόγῳ. ἔτι ὅθεν ἡ ἀρχὴ τῆς μεταβολῆς ἢ πρώτη ἢ τῆς ἡρεμύσεως, οἷον ὁ βουλευσας αἴτιος, καὶ ὁ πατὴρ τοῦ τέκνου, καὶ ὅλως τὸ ποιοῦν τοῦ ποιουμένου καὶ τὸ μεταβάλλον τοῦ μεταβαλλομένου. ἔτι ὡς τὸ τέλος· τοῦτο δ' ἐστὶν τὸ οὗ ἕνεκα, οἷον τοῦ περιπατεῖν ἡ ὑγίεια· διὰ τί γὰρ περιπατεῖ; φάμεν “ἵνα ὑγιαίνει,” καὶ εἰπόντες οὕτως οἰόμεθα ἀποδεδωκέναι τὸ αἴτιον (*Phys.* II 3, 194b24–35).

Aristotle,¹⁷⁶ but is at least notable in the context of definition. Both because of the formal variety and because the adjective and the noun are extremely common Greek words, the central concept is expressed here rather inconspicuously.

Aitia/aition is said in many ways, as Aristotle confirms¹⁷⁷ after having differentiated the term. This differentiation has a clear structure: Four times, Aristotle first substitutes the term by means of other terms and then supplies examples. Although he, in this way, outlines the range of meanings that are present in *aitia*, he does not explain the content and reference of the meaning of *aitia* itself – this is apparent from the fact that the meaning of the term here and in the other above passages – whether it is “cause” or something like “explanation”¹⁷⁸ or “reason,”¹⁷⁹ that is, whether the term primarily refers to “being” or “thinking,”¹⁸⁰ whether *aitiai* are “things,” “facts,” or, linguistically, “terms” or “propositions”¹⁸¹ – is still contested. In any case, the meaning of the term in common language which is still dominant in Plato, ‘guilt’, ‘blame’, and ‘accusation’, is neither part of the scheme nor is it its underlying general sense. All we can say is that it is the “answer to the question ‘why?’”¹⁸² Aristotle packages the question as a term in the introduction to his differentiation of *aitia*: “we do not believe to know each thing prior to having grasped *the* ‘Why?’” (*to dia ti*) about it,” that is, as we paraphrased it above, prior to having found the answer to the question ‘Why?’; for “this is to grasp the first cause.”¹⁸³

Unfortunately, thus, the general answer immediately provided to this question here is not merely *aitia*, but rather “the first cause” (*tēn prōtēn aitian*). It is not clear what the simple attribute “first” means in the present passage: whether “proximate” or “ultimate”/“primary.” For Aristotle does not explain nor refer to this qualification again in the subsequent distinction of (senses of) *aitia*. Ross argues that while it means “ultimate” at the beginning of the *Physics* in almost the same statement (“For we do not believe to know a thing until we have gained knowledge of its first causes and first principles (*ta aitia ta prōta kai tās arkhās tās prōtās*) (. . .)”),¹⁸⁴ it means “proximate” in our present passage because of the “instances given” in the following one.¹⁸⁵ In the parallel passage from *Metaphysics* A 3, however, which again states that “we say that we know each thing the moment when we believe to gain knowledge of its first cause,”¹⁸⁶ it seems to mean “ultimate,” since the focus of the context here is

176 *Cat.* 1, 1a12–15

177 *Phys.* II 3, 194a3 f.

178 Barnes 1993, *passim*.

179 Kirwan 1993, 124.

180 See Barnes 1993, 226 *contra* Ross 1936, 512.

181 Detel 2021, 369.

182 Kirwan 1993, 124 with reference to *Phys.* II 7, 198a14–16.

183 *Phys.* II 3, 194b18–20, my italics.

184 *Phys.* I 1, 184a12–14.

185 Ross 1936, 512.

186 *Metaph.* A 3, 983a25 f. (transl. Ross 1924, 126)

the “knowledge of the causes that are effective from the beginning.”¹⁸⁷ Accordingly, although Aristotle proceeds to provide exactly the same fourfold distinction as in the *Physics* (except that he does not offer any examples here), he mentions what it is called ‘formal cause’ in the reception of Aristotle first (unlike in the *Physics*) and emphasizes its primacy: “we say that one of these (sc. four causes) is the substance (*ousian*) and the ‘The what it is to be’ (*to ti ēn einai*); for the ‘Why?’ is finally (*eskhaton*) traced back to the definition (*logon*), and the first ‘Why?’ is a cause (*aition*) and principle (*arkhē*).”¹⁸⁸ Here, the ‘being first’ of the cause is explained by *eskhaton*. The use of this adjective shows that more unambiguous terminology than *prōtos* (‘first’) is available. Thus, it appears that apart from the respective immediate answer to the question ‘Why?’, there is a kind of primary cause among the four causes, and that there is a “first ‘Why?’” corresponding to it, while both primary cause and first ‘Why?’ may also be referred to by simple terms *aitia* and *to dia ti*.

With regard to the introduction of our *Physics* passage (“we do not believe to know each thing prior to having grasped the ‘Why?’” (*to dia ti*) about it; this is to grasp the first cause (*aitian*)),” this means that the passage equates *to dia ti* with *aitia*, regardless of the instantaneous qualification “first,” and indeed, Aristotle often uses *to dia ti* in the place of *aitia*, so that *to dia ti* can be regarded as a term itself – a term which is, in the rhetorical sense, synonymous with *aitia*. Although the nominalized question is highly transparent (there can be no question as to the meaning of the simple question ‘Why?’), it does not add anything regarding what could be the meaning of the answer to the question ‘Why?’, that is, *aitia*. The term *to dia ti* is meaningless and underdetermined; it is a slot that must be filled with meaning in a particular case, a placeholder for a concrete instantiation.

Before Aristotle indeed begins to classify *to dia ti*, he states why it is necessary to grasp the causes of every kind of natural change (so far, he has only argued in general that it is necessary to grasp the first cause of things to know them): it is to know their “principles” (*τὰς ἀρχάς/tās arkhās*) and trace every problem back to them. That is, Aristotle says “principles” where we would expect “causes.” The term *arkhē* is another one of these Aristotelian terms which are simple in form but extremely multi-faceted in meaning, both due to their origin and long history in the common language and to the special philosophical sense attached to it – and, not least, to the overlap of the common and technical senses. Of course, Aristotle’s informed readers know that he closely, sometimes even synonymously, relates the terms *arkhē* and *aitia*, as for example in *Metaphysics* Δ 1 in which he distinguishes the ways in which *arkhē* is said: “Causes (*ta aitia*) are said in an equal number of ways; for all causes (*panta ta aitia*) are principles

187 τὼν ἐξ ἀρχῆς αἰτίων (. . .) ἐπιστήμην (*Metaph.* A 3, 983a24 f., for the translation cf. Szlezák 2003, 7).

188 *Metaph.* A 3, 983a27–9.

(*arkhai*).¹⁸⁹ Despite this statement, the terms are not always synonymous.¹⁹⁰ Either one carries the respective meaning from the common language, and they function as an answer to different questions. My point here is that Aristotle relies on the synonymy in the present passage from *Physics* II 3 and indeed makes use of it. Notably, Aristotle employs the term here in a linguistic context which is the same as the one in which he uses *aitia* in the above passage from *Metaphysics* A3: both employ the terminology of ‘knowing’ (*eidenai*) and ‘tracing something back to’ (*anagein*) with regard to *arkhē* and *aitia* (more precisely, to the primary cause ‘logos’), respectively.¹⁹¹ In *Metaphysics* A 3, Aristotle subsequently uses the two terms again in the same breath: “the first ‘Why?’ is a cause and principle (*aition . . . kai arkhē*).¹⁹² Since Aristotle, here, as often, relates two main terms by means of a simple, underdetermined *kai* (“and”), it is not clear how the two terms are related. They could be used synonymously and, thus, pleonastically for the purpose of emphasis; they could function as *hendiadys*, so that the two terms, in sum, semantically amount to something more than what each of them means by itself; or Aristotle could mean that “the first ‘Why?’” is both “cause” and “principle” in the same way or at the same time.

Turning now to the above-quoted taxonomy of *aitia* in the *Physics* itself, we realize that the terms which are given as an answer to the question ‘Why?’ are, by themselves, no less abstract and meaningless than the term *to dia ti*. This is because several of these terms precisely take the form of *to dia ti*: of nominalized questions, that is, questions that are marked as terms by the neuter article put in front of them. Their formulaic generality enables their application in each and every case where they need to be posed and answered specifically. For example, the question which inquires after the ‘final cause’ (*τὸ οὗ ἕνεκα/to hou heneka*, “that for the sake of which”) is answered exemplarily: “For why (*διὰ τί/dia ti*) does one walk? In order to (*ἵνα/hina*) be healthy (. . .).¹⁹³ This shows, incidentally, that the question *dia ti* may adopt different senses according to the different causes for which it asks, and is, thus, homonymous. The nominalized relative clause *to hou heneka* appears in slightly modified form as a nominalized question (*τὸ τίνος ἕνεκα/to tinos heneka*) in the scheme of *Posterior Analytics* II 11.¹⁹⁴ While both *to hou heneka* and *to dia ti* are semantically transparent, a more complicated instance of a nominalized question is the famous *τὸ τί ἦν*

189 The divergent classification of *arkhē* and *aitia* in *Metaphysics* Δ 1 and 2, respectively, has to do with the origin of the text of *Metaphysics* Δ 2 in the *Physics*, which is not to say that Δ 2 has been inserted into the *Metaphysics* only after Aristotle (Ross 1936, 511).

190 On the relation of the two terms and on the linguistic cause of their semantic overlap (“daß die Fragen nach dem Woher (ὅθεν) und nach dem Warum (διὰ τί) nicht beziehungslos nebeneinander stehen, sondern sich in ihren Intentionen in bestimmten Fällen unterscheiden”) see Wieland 1992, 178 f.

191 *Phys.* II 3, 194b17–23 and *Metaph.* A 3, 983a25–28.

192 See above, p. 165 with n. 188.

193 *Phys.* II 3, 194b33 f.

194 *An. post.* II 11, 94a23.

εἶναι (*to ti ēn einai*, literally translated: ‘The what it is to be’).¹⁹⁵ Although it only consists of ordinary words, the result is a highly artificial construct, and the formation and exact meaning of this term is still far from clear.¹⁹⁶ In this way, too, it is typical of Aristotelian terms. In any case, *to ti ēn einai* is another instance of a term that itself has no meaning but awaits implementation in a particular case. While in the classifications of *Metaphysics* A 3 and *Posterior Analytics* II 11, *to ti ēn einai* is one of the terms which represent the ‘formal cause’, it occurs as an attribute of *logos* in the taxonomy of the *Physics*, resulting in a variation of the term for ‘formal cause’: “the account/definition of the what is was to be” (*ho logos hou to ti ēn einai*).¹⁹⁷

The formulaic term *to ti ēn einai* still remains recognizable because it is so important and famous, but in other cases, the syntactical variation of terms which consist of small and ordinary words can make it hard for a reader to identify these terms in the first place and to determine their meaning. The problem of recognizability is also connected to the length of the terms: a collocation like *to ex hou gignetai ti enuparchontos* (“that out of which as its constituent a thing comes to be”)¹⁹⁸ is hardly recognizable as a term, and the question is whether it may count as a term at all. In fact, from a formal point of view, it is only the *to* which could point to the terminological status of the term. But what if even the thematizing article is missing, like in the version of the term in the *aitia* scheme of *Metaphysics* Δ 2, where a nominalized phrase dissolves into a mere relative clause (*ex hou gignetai ti enuparchontos*)?¹⁹⁹ (This is, in fact, the only difference in this passage compared with the text of the *Physics*.) It seems justified to regard the article-including phrase *to ex hou gignetai ti enuparchontos* as a term since it stands for the ‘material cause’ analogously with the other terms of the *Physics* passage which are used to denote the remaining causes and of which many are also formed in the nominalizing way. The justification in turn for regarding as a term the mere non-nominalized relative clause from *Metaphysics* Δ 2 is that it – except for the article – agrees word for word with the nominalized version. This example indicates a certain preference of the periphrastic form because the parallel passages show that other, more concise and thus more term-like terms would have been available to express the notion of ‘material cause’, such as *hulē* or *to hupokeimenon*.

A similar case is that of the ‘terms’, if there are any at all, for the ‘efficient’ cause: it is called, in the present *Physics* passage and in the *Metaphysics* lexicon ὅθεν ἡ ἀρχὴ τῆς μεταβολῆς ἢ πρώτη ἢ τῆς ἡρεμίσεως (*hothen hē archē tēs metabolēs hē protē ē tēs ēremēseōs* “from where the first beginning of the change or of rest is”). A shorter version, likewise non-nominalized, which uses a different noun, can be found in *Meta-*

¹⁹⁵ On the structure of this kind of Aristotelian terms cf. the essential contributions by Tugendhat 1958; Wieland 1992, 173–186 (“Zur Thematisierung der Funktionalbegriffe”).

¹⁹⁶ Cf. Szlezák 2003, xxix.

¹⁹⁷ *Metaph.* A 3, 683a27; *An. post.* II 11, 94a21; *Phys.* II 3, 194b27.

¹⁹⁸ *Phys.* II 3, 194b24.

¹⁹⁹ *Metaph.* Δ 2, 1013a24 f.

physics A 3 ὅθεν ἡ ἀρχὴ τῆς κινήσεως (*hothen hē arkhē tēs kinēseōs*, “from where the beginning of movement is”). Finally, the same latter term, but nominalized this time, is used in *Parts of Animals* I 1. As the headword of the distinction there is the noun *aitia*, the nominalizing article is the feminine one for a change rather than the neuter article within the terms from the passages of the *Physics* and *Metaphysics* where the headword is the neuter *aition*.²⁰⁰ The common element of the variations of the term-like collocation is the small phrase ὅθεν ἡ ἀρχὴ (*hothen hē arkhē*), “from where the beginning?”), followed by a variable element indicating what the *arkhē* is the beginning of. In this way, the phrase is formulaic on multiple levels (the said noun may vary because of the variability of the phrase as well as the thing with regard to which the ‘efficient cause’ is being discussed). This example shows how many of Aristotle’s terms are just so standardized as to represent a concept (i.e., on closer analysis or, in any case, in the eyes of an expert readership); but they are so variable that they do not catch the eye as technical terms. It is true that the nominalizing *to* is a common linguistic feature and can nominalize all kinds of word classes, word phrases, statements, or even questions. However, one feels inclined to share Lennox’s impression regarding terms like *hē hothen hē arkhē tēs kinēseōs* and *hē hou heneka* that “the Greek (. . .) would have looked as odd to Aristotle’s readers as the English translation does to mine.”²⁰¹ This is to say, on assuming that the intended readership of Aristotle’s writing were members of the Peripatetic group, they surely would have been acquainted with such terminology at some point (however, not as being native speakers but as being Peripatetics), just as (some of) Lennox’s readers are used to ‘Aristotelian English’ as students or scholars of Aristotelian philosophy.

The other main type of terms which we encounter in the classifications of *aitia* is simple, common, but semantically extremely multi-faceted noun terms, such as τὸ εἶδος (*to eidos*, here: ‘form’), τὸ παράδειγμα (*to paradeigma*, here: ‘pattern’), ὁ λόγος, ἡ οὐσία (*hē ousia*, here: ‘substance, form, essence’), ὁ λόγος (*ho logos*, here: ‘account, definition’), τὸ τέλος (*to telos*, here: ‘ende’), and ἡ ὕλη (*hē hulē*, here: ‘matter’). All of these come with a number of connotations from ordinary language and earlier, especially Platonic, philosophy and evoke a net of references within Aristotle’s work. To further complicate the matter, Aristotle tends to accumulate terms. In our *aitia* passages, he does so many times by relating two terms by means of *kai* and by adding further terms by means of τοῦτο δ’ ἐστὶν (*touto d’ estin*, ‘that is’ or ‘this is’).

The latter means seems to unambiguously indicate the relation of the terms before and after the *touto d’ estin*. This is the case, for example, with the formulation: “Moreover, (sc. a thing is called a cause) as the end (*hōs to telos*). This is (*touto*

²⁰⁰ The neuter article *to* is, in fact, ambiguous as to its origin: In a term like *to ti ēn einai*, it is simply the abstract signal of the nominalization of a question, in a term like *to hou heneka*, it could have the same function or be the result of the ellipsis of *aition* (‘the reason for the sake of which’). On the function of the article cf. Wieland 1992, 183 f.

²⁰¹ Lennox 2001, 126.

d' estin) that for the sake of which (*to hou heneka*).” Here, the term *to hou heneka* indeed explains the preceding term *to telos*; the two terms mean the same, but only insofar *to telos* takes the meaning of *to hou heneka*, and this is what is made clear by *touto d' estin*. However, take the sentence “the form and model (*to eidos kai to paradeigma*) (sc. is called a cause); this is (*touto d' estin*) the account of the what it is to be (*ho logos ho tou ti ēn einai*),” which offers three or even four different terms – considering the interlocking of two terms in *ho logos ho tou ti ēn einai* – for defining the ‘formal cause’. The relation of the latter term to the former is not so clear because the relation of the first two terms (which the third term *ho logos ho tou ti ēn einai* is going to explain) to one another is not clear in the first place. So what exactly, that is, which of the two terms or which common idea is the third term going to explain? In any case, the *touto d' estin* seems to have the function of defining the kind of *aitia* more precisely, so one wonders why Aristotle does not mention this most precise term of all from the start: Do all terms mentioned mean the same, and does he aim to list all terms connected to a notion? Does he let his readers participate in his process of thinking and specification? Or are all the terms more or less related to the notion of ‘formal cause’ and add up to a comprehensive explanation?

These questions especially pertain to two-term phrases which are linked most generally by *kai*, the problems of which we have discussed with regard to the double expression *aition . . . kai arkhe* which occurred in the immediate context of the taxonomy of *Metaphysics* A 3. Within the differentiations of kinds of *aitia*, we encounter the following term pairs linked by *kai*: *to eidos kai to paradeigma*; *tēn ousian kai to ti ēn einai*; τὴν οὐσίαν καὶ τὸ ὑποκείμενον (*tēn hulēn kai to hupokeimenon*); τὸ οὐ ἕνεκα καὶ τὰ γαθόν (*to hou heneka kai tagathon*); and τὸ οὐ ἕνεκα καὶ τὸ καλόν (*to hou heneka kai to kalon*). The introduction of these term pairs is either “we say that one *aitia* is x” or “in one way, *aitia* is said x,” with the x often consisting of the form ‘one term *kai* second term’. That is, Aristotle announces one, but mentions two terms. This suggests that the *kai* is meant explicatively, rather than additively, or that the two terms add up to one term which merges two notions. In any case, the conjunction is still ambiguous; mentioning more terms does not lead to more clarity, but the underdetermination of their textual relation makes one wonder how they are related to one another and to the *definiendum*. One gets the feeling that Aristotle does not use this form accidentally, for he uses it quite often in our taxonomies although there would have been linguistic alternatives, as the use of *touto d' estin* shows.

The plethora and variability of terms increases even more if one compares the four main passages which explicitly distinguish kinds of causes (besides numerous passages which merely allude to what has come to be known as the ‘doctrine of four causes’). As we have said, such a comparison is, if at all, of limited use, since Aristotle is not a systematic philosopher. Nonetheless, by juxtaposing the parallel passages, one can see the impressive number of terms from which Aristotle chooses and the great variability of the terms. Indeed, it is precisely the great consistency of the form of the taxonomies that shows the differences *en détail*. We have already seen some of the minor formal

differences such as the variation between *to hou heneka* and *to tinos heneka* as well as that between using the nominalizing article and leaving it out; and we have seen that Aristotle – for the same concept – uses terms which completely differ from one another in form and content such as the different terms employed for describing the ‘material cause’. In most of these cases, as we have seen, the exact degree of their semantic overlap is not clear; it is only their being mentioned in explanation of the same kind of cause in different passages which suggests that they somehow overlap at the moment when they are used. The synonymy is indicated more strongly where the ‘final cause’ is called τὸ οὗ ἔνεκα καὶ τὰγαθόν (*to hou heneka kai tagathon*) in one passage and τὸ οὗ ἔνεκα καὶ τὸ καλόν (*to hou heneka kai to kalon*) in the other. Here, the exact relation of the respective terms which are connected by the underdetermined conjunction *kai* is not clear;²⁰² but the analogy of the two conjunctions and the analogical form of the two nominalized adjectives *to kalon* and *tagathon* suggest that these two terms are indeed (intertextually) synonymous.

Besides formal variety, also semantic instability occurs, as the same terms are applied for *different* concepts of the four causes scheme: The term *logos*, for instance, “can refer to a variety of linguistic units (words, definitions, reasons, arguments, books), as well as to mathematical relationships, such as ratios; and it can also refer to the *content* of a definition, or the *relationship* denoted by a ratio.”²⁰³ It occurs in the *Physics* passage, as we have seen, as part of the term for the ‘formal cause’ (*ho logos ho tou ti ēn einai*), meaning “account” or “definition.” In *Parts of Animals*, it refers again to the “definitional account” but in the sense of the “end product itself,” that is, of a craftsman who must know the account in order to accomplish the product.²⁰⁴ In this way, *logos* refers to the same thing in either passage; and although in *Parts of Animals*, it is applied from the perspective of the ‘final’ rather than the ‘formal cause’, “the argument trades on an ambiguity in the Greek term.”²⁰⁵

Further, more radical variation of terminology is due to differing conceptualizations of *aitia/aition*. In the *Posterior Analytics* passage, three out of four causes can be unequivocally identified, but the term which occurs at the place where we would expect the ‘material cause’ is τὸ τίνων ὄντων ἀνάγκη τοῦτ’ εἶναι (*to tinōn ontōn anankē tout’ einai*, “that if which items hold is it necessary for this to hold”).²⁰⁶ This phrase has been interpreted to denote the “premisses of deduction” and to present, thus, “a special case of material explanation – viz. the case in which the fact that the matter of *X* is such and such does necessitate *p*.”²⁰⁷ Aristotle himself draws the connection be-

202 The relation does not become any clearer by the fact that, as Lennox 2001, 126 f. notes, “Aristotle often conjoins, as here, references to what is good with references to goals.”

203 Lennox 2001, 126.

204 Lennox 2001, 125 f.

205 Lennox 2001, 125.

206 Transl. Barnes 1993, 59, modified.

207 Barnes 1993, 226.

tween “‘matter’ or ‘material explanation’” and “deductive premisses” at another passage later in the work and at passages in other writings,²⁰⁸ but the present passage itself does not indicate the ‘material cause’ nor does it reveal the relation to other terms which normally denote the ‘material cause’. However, it suggests itself to interpret the cited phrase as a term denoting an “instance” of the ‘material cause’²⁰⁹ and to restore the “canonical”²¹⁰ four causes because the ‘material cause’ is the only one seemingly missing from the four causes which are mentioned.

The problem with the passage in *Parts of Animals* is that it mentions only two instead of four causes and that it does not really say whether the number of causes which it mentions is exhaustive. First of all, it announces πλείους αἰτίας (*pleious aitiās*, literally, “more causes”),²¹¹ but the comparative seems to be used either synonymously with the positive (“many”),²¹² as an “intensive” to mean quite like the positive “many,”²¹³ in a softening way (“rather many”),²¹⁴ or elliptically (“more [sc. than one]”).²¹⁵ The following οἷον/*hoion* (“such as”) suggests that the subsequent distinction is somewhat arbitrary and includes only some of the causes which really can be found. For, normally, *hoion* is used to introduce examples, which can be seen in the *Physics* passage where the word is used to introduce examples for the kinds of causes which are being distinguished rather than to introduce the kinds of causes themselves. In the present passage from *Parts of Animals*, *hoion* calls up the fourfold distinction from the *Physics*, since it marks the introduced causes as examples. However, upon having stated two causes, Aristotle claims that he must “determine, about these causes, which sort is naturally first and which second.”²¹⁶ If there are more than two causes and the two stated are only stated exemplarily, then why establish an order of these two? Thus, Aristotle implicitly calls into question the indefiniteness of his first announcement of the number of causes, and indeed, further down in the same chapter, he states that “there are, then, these two kinds of causes: (. . .).”²¹⁷ A similar oscillation between vagueness and definiteness as regards the number of causes can be seen in the *Physics* passage, which, after listing the four causes, states that “the causes are said in more or less so many ways (σχεδόν

208 Barnes 1993, 226 with reference to *Part. anim.* IV 2, 677a18; *Phys.* II 3, 195a15–18; *Metaph.* Δ 1, 1013a15.

209 Ross 1936, 512.

210 Barnes 1993, 226.

211 *Part. anim.* I 1, 639b11 f.

212 Smyth § 1083.

213 Smyth § 1067.

214 Smyth § 1082d.

215 Smyth § 1082. For this interpretation, cf. Lennox 2001, 124.

216 *Part. anim.* I 1, 639b13 f.

217 *Part. anim.* I 1, 642a1 and again 642a13. By contrast, in the following passages (amongst others, Aristotle argues that all four causes are necessary: *Phys.* II 7, 198a21–b9, *Metaph.* H 4, 1044a32–b20; Ross 1924, 292).

τοσαυταχῶς/*skhedon tosauteakhōs*),²¹⁸ even though he, further on in the text, explicitly confirms the number of four causes.²¹⁹ What complicates the situation even further is that Aristotle's first distinction of two causes in *Parts of Animals* (upon stating that there is more than one cause) is not the same as the one which he provides after saying that there are two kinds of causes: first, Aristotle distinguishes 'final' (*tēn hou heneka*) and 'efficient cause' (*tēn hōthen hē archē tēs kinēseōs*); the second dichotomy consists of 'final cause' (*to hou heneka*) and something called "that from necessity" (τὸ ἐξ ἀνάγκης/*to ex anankēs*). Although Aristotle has dealt with the term in the text between the two twofold distinctions, and although the notion of 'necessity' can be related to the 'formal' and, as we have seen before, to the 'material cause', it is nevertheless surprising in view of the first distinction – especially because Aristotle does not explicitly relate the two distinctions or explain the difference between them. This example shows that Aristotle's drive to define by means of classification results in ever new taxonomies, even within the same passages. The lack of overlap of the taxonomies gives rise to questions of terminology: above all whether a differing term denotes a different concept or rather is (merely) the result of formal variability. It is precisely in view of this variation between different taxonomies (not only of the term *aitia*) that the almost equal wording of the classifications of *aitia/aition* in *Physics* II 3 and *Metaphysics* Δ 2 is so conspicuous and indicative of a dependency of the two passages, even though two equally worded definitions of the same term should hardly give rise to suspicion.

Let us now, at the end of this section, collect the features of terminology as they emerge from our reading of the *aitia* passages.

1) Use of ordinary words: With respect to the dichotomy of common and uncommon words, Aristotle re-uses and recycles mostly ordinary words which he supplies with new meanings; he does not use strange, poetic expressions nor does he coin (noun) terms (neologisms). The first main category of ordinary words which Aristotle uses is that of ἄσημα/*asēma*, that is, in themselves meaningless words, of which there are many in the Greek language. Using these *asēma*, Aristotle assembles new terms which nonetheless consist of ordinary words. The *asēma* are used to form artificial phrases that remain meaningless since they are placeholders to be filled with meaning in a specific case. In a way, these can be regarded as neologisms and strange terms, in the sense that they are not terms of the common language. To be sure, the nominalizing article is a common feature of Greek ordinary discourse, too; it is more the particular combination which makes them strange. However, they are not 'strange' in the way described in the theoretical accounts of style. Apart from collocations consisting of *asēma*, Aristotle uses common noun terms which often have a history in the earlier literature. However, he always uses them at least to some extent in a non-ordinary way. The noun

²¹⁸ *Phys.* II 3, 195a3 f.

²¹⁹ *Phys.* II 3, 195a15 f.

terms come with one or several non-ordinary meanings, with the ordinary meaning(s) remaining more or less present. Mostly, these terms keep their original meaning either as a nuance that is made to shine through now and then or as an ordinary word alternately used with the word in its new terminological meaning, from which confusion may arise as to which meaning has to be assumed when a term is used. The exact proportion and relation of the various meanings of a term is different in the case of each term (and its respective uses) and often remains unclear.

2) Semantic emptiness: Many of the terms in Aristotle do not have actual content but are suitably filled with meaning when used in a specific context. In this way, they are, on the one hand, de-contextualized and reusable in other contexts, on the other hand, when specified, not easily recognizable as an instance of an abstract term.

3) Formal variability and instability: This feature pertains, on the one hand, to the question of what a term is in Aristotle and what formal features it has. Generally, Aristotelian terms can take all kinds of unexpected grammatical forms, that is, of relative clauses, of adjectives, of adverbs, of questions, of nouns, of nominalized expressions, and so on. On the other hand, the feature of formal variability concerns the question of the stability of particular terms. Many Aristotelian terms are hardly ever used in the same way, not even within works or paragraphs. Their form varies, for instance, because of paronymy, sometimes because of the adaption to the syntax of the classification (indeed, they can be adapted because of their syntactic flexibility), because the nominalizing article is left out, or because word types change within term collocations (e.g., from interrogative to relative pronoun).

4) Lack of recognizability: As far as their form is concerned, Aristotle's terms are inconspicuous and look non-technical. They are formally indistinguishable from ordinary discourse and, thus, not automatically understood in their technical meaning. Further, they are hardly recognizable because of their formal instability. What demarcates them thus as terms is rarely their form. Rather it is their appearance in a classification which demarcates technical terms as such. However, since much of Aristotle's text consists of classification, the fact that his terms have no recognizable form makes it hard to identify them.

5) Restriction of technical vocabulary: Since Aristotle constantly recycles his terms, the amount of technical vocabulary is very much confined. At least in philosophical or theoretical contexts, Aristotle does not add many terms to the Greek language. The same broad vocabulary is used in all kinds of contexts, and it is semantically adjusted if necessary. If, however, one counts all variations of the terms as terms of their own, the number of technical terms is much higher.

6) Homonymy: Aristotle's differentiations of terms which are said in many ways such as that of *aitia*, both in his lexicon *Metaphysics* Δ and in the classification throughout his work show that many of his central terms are homonymous; the recurring classifications of the same term show that they must be continuously adjusted according to context. Outside their explicit classifications, terms are used homonymously; they are

constantly readjusted in content and focus on different aspects at different times – even within the same passage. Homonymous terms also appear within classifications in order to explain one of the meanings of a likewise homonymous term, but the meaning in which they themselves are used is not made explicit. If at all, such terms are implicitly explained by other terms mentioned alongside itself or by examples. But as we have seen, the relation of several terms which are mentioned in explanation of one of the senses of a homonymous term often is not clear, and similarly, the examples sometimes obscure a term rather than clarify it.

7) Synonymy: In and outside terminological classifications, terms are densely concentrated. One of the reasons for the abundance of terms might be, ironically, the restriction of the number of terms which there are to choose from. Since Aristotle uses a small number of terms loaded with many meanings, he seems to feel the need to mention several terms in order to express one concept, presumably for the sake of disambiguation.²²⁰ These terms semantically overlap and are often synonymous or nearly synonymous with their exact relation being unclear. Regarding our example of *aitia*, it is interesting that Aristotle mentions a number of terms which we trace back to what we invariantly call ‘material cause’, ‘motive cause’, ‘formal cause’, and ‘final cause’. Interestingly, Aristotle does not seem to feel the need for such a stably used overarching term that integrates all others.

8) Superfluosity: If terms are indeed used synonymously, many of them are superfluous. This is surprising in view of the general economy of the Aristotelian text which consists, above all in classifying and relating terms, and because the *Topics* explicitly recommends avoiding superfluosity in definitions.

9) (Non-)Systematicity: On the one hand, Aristotle uses his terms and terminological taxonomies non-systematically in the sense that that they are not applicable throughout a work or even across works. On the other hand, classifications suggest systematicity and Aristotle invites comparing passages as he classifies terms in a general way (‘there are two kinds of *aitia*’, as if this were to hold in general), only then to break the expectations of systematicity which he himself has raised. His constant drive to explain by classification has classification develop a theoretical life of its own. Aristotle develops ever new systems in which he reuses terms which he has given a specific meaning in other classifications. While regularly acknowledging the homonymy of terms, Aristotle saves himself meta-remarks about how the different classifications of a term are related. The terms are formed so as to fit their respective taxonomy and, as a result, only work within that taxonomy. Classifications as a whole can be taken out and adapted, but many subordinate terms have no use or existence independent of the classification out of which they evolve.

²²⁰ On the small number of terms in Aristotle and their lack of semantic differentiation as being a consequence of the form of these terms cf. Wieland 1992, 181 f.

10) Metaphor: Aristotle's occasional use of this feature is already well-documented; in our examples, we have noted only one metaphorical use of a word, though a non-terminological one (*thēreuein*, in the first part of the chapter).

4 Synthesis and Interpretation: Aristotle's Poetics of Terminology

To sum up our results: In the first main part of the chapter, we have seen that Aristotle's reflections on the form of *onomata* all have a common perspective: All three accounts – in the *Poetics*, in the *Rhetoric*, and in the theory of definition, regard the terminological form from a functional perspective and center on the criterion of clarity. Although the treatments of the *Poetics* and *Rhetoric* mention a lot more stylistic means than the passages in the *Topics* and *Posterior Analytics*, and although in the latter, the phenomena of homonymy and synonymy play a more important role than in the *lexis* accounts, the common focus in all three discussions is the proportion of common and uncommon words. Accordingly, the three discussions indicate a continuum with the poetic form of *onomata* occupying one end of the scale, the scientific one the other end, and the rhetorical one a middle position between the two as it makes use of poetic features but shares the cognitive perspective with the scientific view on *onomata*. Aristotle does not explicitly talk about his own genre of writing in any of the accounts, let alone his own texts; we have, however, argued that they can be located somewhere between the *Rhetoric* and the writings of the kind to which the *Organon* pertains, because, on the one hand, their form differs from dialectic and apodeictic discourse (on which the writings of the *Organon* are focused), and because the *Rhetoric*, on the other hand, proclaims to be relevant for all *didaskaliai* except for the teaching of geometry. In this way, it seems that the account of the *Rhetoric*, and, because of the fluid boundaries of the accounts, maybe even the whole theoretical discourse on style in Aristotle pertains to his own writings.

In order to realize this, we have had to discuss the central terms of the passages, above all the meaning and use of *lexis*, at great length. The discussion of this and other terms such as *saphēneia* and its synonyms has implicitly shown that Aristotle clearly deviates from the terminological requirements of the theory of definition in the *Organon* and of the recommendations of the *Rhetoric*. He does so above all by using synonymy, homonymy, and metaphor (as is forbidden by the scientific accounts), by not distinguishing the different ways in which homonymous terms are said, and by using common expressions in uncommon ways. Ironically and strikingly, Aristotle does so precisely while – as part of scientific treatises – discussing the terminological form and the said features as such that are to be avoided.

In the second main part of the chapter, we have analyzed the five passages in which the homonymous term *aitia* is explicitly differentiated according to the ways in which it is said. Our discussion has confirmed the impression which we have gained from Aristo-

tle's practical use of terms when trying to understand his theoretical view on scientific terminology, and we have more systematically worked out the features of Aristotle's terminology. Although he uses largely ordinary terms, as he himself recommends for the sake of clarity, he often uses them in a non-ordinary and, contrary to his own advice, homonymous and synonymous way. Thus, nearly all its features are to be avoided in the special kinds of scientific contexts of the *Organon*. Some of those features are allowed in poetry, for instance, synonymy and homonymy. However, it would not occur to us to call Aristotle's *lexis* 'poetical' in the sense which emerges from the *Poetics* and *Rhetoric*, not even a small part of it, as the *Rhetoric* concedes it to speeches. This is because Aristotle does not make use of the category that is most characteristic of the poetical *lexis*, namely *xenika*, 'strange words'. He only uses common words in an uncommon way (against which the *Rhetoric* advises) or forms new term phrases out of ordinary words. In turn, what is really typical for Aristotle's terms is not reflected anywhere in his accounts of *onomata*. It is not part of the genre-spanning discourse. This is a most astonishing fact. But why does Aristotle not reflect these features of the form? The answer to this question could have to do with the function and meaning of the form.

So far, we have focused on the obscurity of Aristotle's terms. We have struggled with the underdetermined and non-standardized use of *lexis* in trying to come to terms with Aristotle's theory of it, and we have analyzed some of Aristotle's terms through Aristotle's own lens from the perspective of clarity – and noted, again, underdetermination and non-standardization. But Aristotelian terms do not only have the potential to impede understanding, but also are extremely useful precisely because of their peculiar form. Because of their formal variability, they can be adjusted to the syntax; one and the same term can be formulated as a question, declined as an adjective, take attributes as a noun, and it can be a genitive of something when its genitive becomes nominalized. Because of their semantic emptiness, they can be (re-)used in different thematic contexts and filled with ever new meanings instantaneously. Because of their origin in ordinary language and semantic broadness, they can carry a lot of meanings – technical, related, competing – at the same time and are transparent as to the original common meanings which they let shine through the specialized ones. Rather than being clarity, the function of the form of Aristotle's terminology seems to be a kind of flexibility and reusability which allows for ever-new differentiation, adjustment, and hierarchization in different contexts. Most importantly, the terminology is able to support the process of thinking and accompany it in writing, and it makes the thought process available to Aristotle's readers. For them, the peculiar form of the terminology would not have been problematic – otherwise it would have been different. It is this form that is indicative of Aristotle's communicative context which the terminology mirrors: He would not have had to sell his terms and mark off his school like the Greek medical authors; rather, he would have been able to count on his inclined readership to follow his thoughts and be acquainted with certain central, ever-recurring terms. In view of this situation, the question arises all the more why Aristotle keeps relating ever new terms where one of them could stand for all or

why he laboriously nominalizes long phrases where enough noun terms to choose from would have been available.

I would like to suggest that there is an unexpected aesthetic dimension of the terminology besides the functional one. In doing so, I do not mean to insinuate that Aristotle practices some sort of *l'art pour l'art* in the way which Hellenistic literature is only yet to develop. Rather, the terminological features of the Peripatetic writings, for example, nominalized questions like the *to dia ti* first would have been singled out because of their functionality, and other terms would have been formed by analogy with the existing ones. At some point, however, when Peripatetic readers and writers alike would have gotten used to the form of such term phrases, they might also have developed an aesthetic preference for such terms, that is, nominalized questions consisting of the simplest words: *asēma*. Similarly, different reasons for using extremely common noun terms could have emerged: While it proved highly practical to apply technical senses to existing well-known words that have a common meaning that is somehow connected with the technical one, using such terms and supplying them with ever new meanings might also have been due to an aesthetic criterion at some point. There even seems to be an aesthetic dimension to the constant classification of terms and to the practices of using of terms within these classifications, which we have seen. Of course, the taxonomies such as that of *aitia* serve the differentiation of the different meanings of a term and, in this way, its definition. However, one also gets the feeling that Aristotle likes relating and re-relating terms. One way of relating them is by the connection of two underdetermined terms by means of an underdetermined *kai*. It is not really useful from the point of view of unambiguous definition (compared with linguistic alternatives of relating two terms); I argue that Aristotle aesthetically favors the form of two generically similar underdetermined terms being connected by an equally underdetermined *kai*. This can be seen from the fact that the terms which he connects in this way are indeed of a similar kind from a formal point of view.

Let us consider, in closing, how Aristotle introduces another, if not *the* central term of the *Poetics*: μίμησις (*mimēsis*), an iridescent term with common and technical nuances, which is not explicitly defined anywhere in the work. I do not want to go into the question of its meaning(s), on which much ink has been spilled, and leave the term itself untranslated.²²¹ Instead, I am interested in the differentiation of aspects of the term at the beginning of the *Poetics*. Aristotle straightforwardly claims that poetry is a kind of *mimēsis* and immediately proceeds to a threefold division (which at the same time is an outline of the first three chapters): Different kinds of *mimēsis* differ in three ways: 'by using for the mimesis different media, different objects, and a different manner'; literally 'by doing mimesis either in other things, of other things, or otherwise' (*tōi en heterois mimeisthai, tōi hetera, tōi heterōs*). Thus, Aristotle simply uses the word *heteros* ("another") in different grammatical functions – as part of a

221 For one more try cf. the chapter by Loren Marsh in the present volume.

prepositional phrase, as a transitive object and as an adverb – for what has conventionally been rendered into English by the abstract nouns ‘media,’ ‘objects,’ and ‘manner.’ The term *heteros* can hardly be translated. It effectively points to the fact that medium is ‘one’ in a certain genre and ‘another one’ in another genre, and that mimesis is ‘another one’ or ‘different’ each time regarding its medium.

For being some of the most common words of Greek everyday speech and as non-nouns, *en heterois*, *hetera* and *heterōs* run counter to our expectations of what technical terms should look like. However, they are demarcated as terms by their very position in the unfolding taxonomy. Just as they tag *mimēsis* as a technical term, they themselves are explained by a further classification: As media of mimesis Aristotle names ‘rhythm,’ ‘speech,’ and ‘melody,’ as its objects ‘people in action’ who are either ‘better than we are’ or ‘worse’ or ‘such (as we are),’ and as manners ‘narration’ either by ‘becoming another (person)’ or by ‘remaining the same,’ and ‘dramatization’. It is only by this differentiation that *en heterois*, *hetera*, and *heterōs* are given the specific technical meaning they have in connection with the term *mimēsis* / *mimeisthai* in the context of Aristotle’s theory of poetry. The neuter plural *hetera*, for example, does not refer to any objects of mimesis, like animals or pottery, but specifically to the quality, that is, the character and social status, of the people in action. There is, however, nothing about the term itself (‘other things’) which suggests this meaning.

The three word forms are semantically highly under-determined and not in any way recognizable as technical terms outside the *Poetics* or even outside their immediate context. They need to be filled with meaning by the examples to follow, that is, by their own concrete subcategories. In what is the most general instantiation of each term, the recurring *heteros* serves as a placeholder: It foreshadows the classification ahead of the term which is vital for its own meaning. In the differentiation of the subcategories, the *heteros* is no longer part of the term; only the form *to hetera mimeisthai* is repeated one more time in Chapter 2. Instead, the term occurs in a non-technical way to denote ‘other’ arts or artists using a particular medium etc. Typically, Aristotle manages to confuse the reader by the close succession of the terminological and the non-terminological version of the common *heteros*.

The fact that the terms are virtually content-free suggests it is their grammatical form that is their stable feature which makes up for their semantic emptiness and guarantees their being at all recognizable. Indeed, this seems to be the case for all further instances of the terms that likewise lack concrete content. At the end of the discussion, which repeats the general division from the beginning, the terms are adjusted to their syntactical position, taking no longer the place of objects of *mimeisthai*, but of relative pronouns (Chapter 3: *en hois te kai ha kai hōs*). While the *heteros* becomes redundant by the change of syntax, the grammatical form of each term appears to be its stable feature, that is, that which makes it a term. However, the form of the concrete implements of the term deviates significantly from this. The media of mimesis are not consistently denoted by *en* + dative, but rather by the mere (instrumental) dative or *dia* (‘by means of’) + genitive, from which confusion on the reader’s part

may arise as to which of the examples are media of poetic mimesis and other arts, and which are not.

Thus, the terms (or rather non-terms) for the media, objects, and manner of mimesis share all the features which we have seen so far: they are highly common, inconspicuous *asēma*, placeholders that are underdetermined in content, awaiting to be filled, unstable in form, adjustable to fit their respective syntactic implementation; they are highly functional and effective since they are extremely flexible; indeed, they are so flexible as to be non-standardized; and they fit in with the aesthetics of Aristotle's terminology. The aesthetic quality of the terms is most apparent at the beginning of the passage 'by doing mimesis either in other things, of other things, or otherwise' (*tō en heterois mimeisthai, tō hetera, tō heterōs*). This phrase seems to be rhetorical even in the classical Aristotelian sense with its paronymous tricolon.²²² However, these stylistic features rather seem to be a corollary of functionality. The *aesthetics* of this statement precisely lies in the utmost concision, simplicity, and austerity of its formulation.

The assumption that Aristotelian terminology is both functionally and aesthetically motivated could explain why Aristotle does not reflect upon the specific nature and point of his terminology. His approach to *lexis* is a technical one: He describes the means and their benefits as regards the overall function of the genre or work. From the cognitive perspective of rhetoric and science, he recommends using mostly, or even only common words. Although we have argued that Aristotle deviates from this recommendation by using common words in uncommon senses (a category which he also recognizes in the *Rhetoric*), it is still a fact that he uses common words, especially because the common meaning(s) remain(s) always present to a smaller or larger degree (though how exactly, it is not sure). This, by the way, is an argument against assuming certain once and for all fixed technical senses. As for the aesthetic dimension, it is unsurprising that Aristotle does not reflect upon it because he does not do so either in the case of the poets: Just as he does not attempt to grasp the specific aesthetic quality of, say, Sophocles, he does not talk about aesthetic qualities of his own style which, in either case, does not mean that there is no such dimension.

²²² Here and there, classical figures and tropes may be found in Aristotle's writings (cf. Schütrumpf 1989), but they do not make for the specificity of his style.

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