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DISSERTATIONEN DER LMU

UB

37

NIELS TOLKIEHN

**The Notions of Homonymy,  
Synonymy, Multivocity, and  
*Pros Hen* in Aristotle**

Niels Tolkienn

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Band 37

# The Notions of Homonymy, Synonymy, Multivocity, and *Pros Hen* in Aristotle

von  
Niels Tolkieln

Herausgegeben von der  
**Universitätsbibliothek der Ludwig-Maximilians-Universität**  
Geschwister-Scholl-Platz 1  
80539 München

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Text © Niels Tolkiehn 2019  
Erstveröffentlichung 2020  
Zugleich Dissertation der LMU München 2019  
Titel der Einreichung: The Notion of *Pros Hen* within a  
Reassessment of the Relationship between Homonymy,  
Synonymy, and Multivocity in Aristotle

### **Bibliografische Information der Deutschen Nationalbibliothek**

Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet abrufbar über <http://dnb.dnb.de>

Herstellung über:  
readbox unipress  
in der readbox publishing GmbH  
Rheinische Str. 171  
44147 Dortmund  
<http://unipress.readbox.net>

Open-Access-Version dieser Publikation verfügbar unter:  
<http://nbn-resolving.de/urn:nbn:de:bvb:19-252486>

978-3-95925-142-6 (Druckausgabe)  
978-3-95925-143-3 (elektronische Version)

# Acknowledgements

I would like to take this opportunity to express my gratitude to all of the people offering their help and support in the completion of this thesis. Without those, the work presented here would not have been possible. This list can only give an incomplete account of the many people who helped me during this long process.

First and foremost, I would like to thank my supervisor Christof Rapp for allowing me to be a part of the Munich School of Ancient Philosophy. I am particularly grateful for his helpful comments on the present study. Further, I owe gratitude to Peter Adamson for his feedback on this work and insightful discussions.

I am grateful to the entire programme community, both for their help and support in several situations. In particular, I wish to thank Christian Pfeiffer for answering dozens of questions almost any time of the day throughout the last years. I would also like to especially thank Melpomeni Tiedt for always offering help correcting translations of several passages contained in this work. In addition, I am indebted to Jonathan Greig for correcting parts of this work and helpful discussions in the office. Moreover, I owe special thanks to my sister Marie who spent many hours revising this work up to the last day. Finally, I want to express my gratitude to my wife, Julia, for supporting me from the beginning to the end of the project “Dissertation”.



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# Abbreviations

## Works of Aristotle

|                  |                                      |
|------------------|--------------------------------------|
| <b>An. Post.</b> | <i>Posterior Analytics</i>           |
| <b>An. Pr.</b>   | <i>Prior Analytics</i>               |
| <b>Cat.</b>      | <i>Categories</i>                    |
| <b>DA</b>        | <i>De Anima</i>                      |
| <b>De int.</b>   | <i>De interpretatione</i>            |
| <b>EE</b>        | <i>Eudemian Ethics</i>               |
| <b>EN</b>        | <i>Nicomachean Ethics</i>            |
| <b>GA</b>        | <i>Generation of Animals</i>         |
| <b>GC</b>        | <i>De Generatione et Corruptione</i> |
| <b>MM</b>        | <i>Magna Moralia</i>                 |
| <b>Met.</b>      | <i>Metaphysics</i>                   |
| <b>Meteor.</b>   | <i>Meteorologica</i>                 |
| <b>PA</b>        | <i>Parts of Animals</i>              |
| <b>Phys.</b>     | <i>Physics</i>                       |
| <b>Poet.</b>     | <i>Poetics</i>                       |
| <b>Pol.</b>      | <i>Politics</i>                      |
| <b>Rhet.</b>     | <i>Rhetoric</i>                      |
| <b>SE</b>        | <i>Sophistici Elenchi</i>            |
| <b>Top.</b>      | <i>Topics</i>                        |

## Works by Other Authors

**In Arist. Cat.** Simplicius, Commentary on Aristotle, *Categories*

## Note to the Reader

Unless otherwise indicated, all the translations used in the text are my own. Any factual errors, inaccuracies or omissions that remain are my sole responsibility.



# Introduction

This study investigates Aristotle's notion of *pros hen* and, moreover, how this notion is related to the Aristotelian notions of *homonymy*, *synonyms* and *multivocity*.<sup>1</sup> It is controversial what exactly these notions mean, how they are related, and whether Aristotle's terminology is consistent throughout his works. Although there have been attempts to answer each of these questions,<sup>2</sup> so far no satisfactory answers have been found. This study aims at answering these questions. In order to state my theses concerning these questions most clearly, I first provide some general remarks about the field of interest. Secondly, I provide a preliminary overview of the four notions and my thesis on the issues connected with them. Thirdly, I outline the structure of the chapters of this study.

According to Aristotle, many central philosophical concepts, such as *cause*, *principle*, *nature*, or *being* are said in many ways – λέγεται πολλαχῶς. Its meaning is still subject of debate. One standard but also debated answer is that if F is said in many ways, “F” has different senses. The question for the many ways appears in almost every work of Aristotle. This phrase often occurs at the beginning of new chapters, and it is a characteristic feature of Aristotle's strategy of approaching a new topic.<sup>3</sup> Any thorough investigation requires *clarity* – τὸ σαφές about the terms that are used within.<sup>4</sup> Clarity is one of the most fundamental conditions of constructing arguments and reaching agreement on a

1 I use the term “multivocity” to refer to Aristotle's phrase *to be said in many ways* – πολλαχῶς λέγεσθαι.

2 There is a barely manageable amount of secondary literature on this topic. Among others, most relevant for this study are the following contributions: Owen, G. E. L. (1960). *Logic and Metaphysics in some earlier works of Aristotle*. In *Aristotle and Plato in the mid-fourth century*, ed. Ingemar Düring, Gwilym Ellis Lane. Owen and Symposium Aristotelicum, 164–191. Göteborg. Owens, J. (1978<sup>3</sup>). *The doctrine of being in the Aristotelian 'Metaphysics': A study in the Greek background of mediaeval thought; with a preface by Etienne Gilson*, 3rd edn. Toronto. Shields, C. J. (1999). *Order in Multiplicity: Homonymy in the Philosophy of Aristotle*. Oxford. Irwin, T. H. (1981). *Homonymy in Aristotle. The Review of Metaphysics* 34 (3): 523–544. Ward, J. K. (2008). *Aristotle on homonymy – Dialectic and science*. Cambridge. Brakas, J. (2011). *Aristotle's "Is Said in Many Ways" and Its Relationship to His Homonyms. Journal of the history of philosophy* 49 (2): 135–159.

3 In *Phys.* II.3, Aristotle begins examining the notion of *cause* by considering in how many ways “cause” is said. Cf. for more examples chapter 1 of this study.

4 Cf. *Top.* I.18, 108a18–22.

certain topic, e.g. if one constructed an argument containing a term that is said in many ways without specifying what is meant, one would risk drawing unwarranted conclusions.<sup>5</sup> Aristotle often mentions that some of his predecessors disregarded the multiplicity of ways in which something can be said. A prominent example of this kind of critique is found in *Phys.* 1.2–3, where Aristotle criticises the monistic position of Parmenides (and/or other Eleatics). Aristotle raises the question in which way “being” is used by those people who claim that *all things that are are one* (cf. *Phys.* 1.2, 185a20). Aristotle spells this out in terms of his doctrine of the *Categories* according to which saying that something exists is to say that it is one substance, one quality, or an item of one of the other categories. He claims that if *the things that are* belong to different categories, then there will be obviously more than one thing. And if there are qualities or quantities, there must also be substances, since nothing that belongs to one of the non-substantial categories can exist independently of substance.<sup>6</sup> Thus, according to Aristotle, one of the problems of Parmenides’s theory was that he disregarded that *being* is said in many ways. This is only the beginning of Aristotle’s critique on Parmenides in *Phys.* 1.2–3 and may suffice for now.<sup>7</sup>

Another philosopher that may be accused of underappreciating the multiplicity of ways in which something can be said is Plato who claimed that a single Form of Goodness is responsible for all things being good. All good things are good because they participate in the same Form of Goodness. In *EN* 1.6, Aristotle formulates five arguments against the Platonic proposal of the existence of such a (*universal* – *καθόλου EN* 1.6, 1096a11) Form of the good.<sup>8</sup> According to Aristotle, Plato assumes that

5 A popular example for this is: The end is the purpose; death is the end of life; hence, death is the purpose of life. This is a fallacy related to the ambiguity of “end”. Aristotle deals with such fallacies in *SE* 4.

6 Cf. *Cat.* 5, 2b5-9 and *Phys.* 1.2, 185a31-32.

7 The chapters of *Phys.* 1.2-3 are highly controversial. For further remarks on Aristotle’s critique cf. Spangler, O. A. (1979), *Aristotle’s Criticism of Parmenides in Physics I*, in *Apeiron* 13 (2). More recently in Clarke, T. (2018). *Physics I.2*. In *Aristotle’s Physics I: A Systematic Exploration*, ed. Diana Quarantotto, 60–81.

8 Cf. for a detailed discussion of these arguments cf. Flashar, H. (20062). *Die Platonkritik (I 4)*. In *Aristoteles: Nikomachische Ethik*, 2nd edn, ed. Otfried Höffe, 63–82, Berlin. Moreover, usually there is a crucial difference between the Form of the Good and the universal Good. The common element exists in all good things, while the Form of the

all things are good in the same way.<sup>9</sup> The character that is common to all good things is the Form of Goodness. Since this is the same in all cases “good” must be said in one way only. Aristotle rejects this belief and claims that the “good” is said in many ways because there are different accounts of being good in various cases and there is no account of being good that is common to all different cases. In his second argument (*EN* I.6, 1096a23-29), he claims it is said across all categories. For example, in the category of quantity, it is *moderation in amount*, in that of quality, it is *virtue*, in that of time, a *favourable opportunity*.<sup>10</sup> He concludes that there cannot be a universal good that is common to all. In his next argument (*EN* I.6, 1096a29-34), he argues that there should be a single science of the good, but as a matter of fact there are various sciences of the good. *There are various sciences of the goods that are in one category – νῦν δ’ εἰσὶ πολλὰ [ἐπιστήμαι] καὶ τῶν ὑπὸ μίαν κατηγορίαν* (*EN* 1096a31-32). From this, it is already clear that Aristotle accuses Plato of having overlooked the actual complexity of the things that are called “good”. This critique may be transferred to other cases in which Plato incautiously treats subtly complex phenomena as unified by a single form.<sup>11</sup> It may be important to emphasise that the core of Aristotle’s critique does not aim at Plato or Parmenides having overlooked that the term “good” or “being” can have different senses in different applications but that the underlying extra-linguistic phenomena are more complex than their theories suggest. In this regard, Aristotle’s analysis of the many ways in which something can be said is central to the way he deals with

Good has a separate existence. (cf. *MM* I.1, 1182b11ff.). In this context a thorough distinction is not necessary.

**9** Aristotle believes that Plato assumed there is only one definition of “good”. This can be derived from Aristotle’s remark that there is only *one and the same definition* – εἰς καὶ ὁ αὐτὸς λόγος ἐστὶν for the *man* and the *man-itself* (*EN* I.6, 1096b1, also *Met.* XIII.4, 1079a33-b3 = *Met.* I.9, 991a2-8). Therefore, (for Plato) “good” is said in one way only, and nothing hinders there being a single science of the good (cf. *EN* 1096a29). However, among other things, Aristotle claims (*EN* 1096a30-32) that this contradicts the facts, i.e. the fact that there are many sciences of the good which support Aristotle’s proposal that there must be many ways in which something can be good. Cf. also Plato’s *Meno* 71e1-72a5.

**10** There are differences in the accounts of being good for *honour*, *wisdom* and *pleasure*. Cf. *EN* I.6 1096a24-33 and *EE* I.8, 1217b27-18a1.

**11** I allude to the case of *being*, which is touched upon by Aristotle’s first *EN* I.6, 1096a17-23 and second argument *EN* I.6, 1096a23-29.

insufficiently fine-grained philosophical distinctions. When Aristotle focuses on the distinctions of several senses in which something can be said, he does so to reveal the corresponding real differences, which sometimes have been disregarded by his predecessors. In this light, the analysis of the many ways may be considered a critical tool primarily. Yet, this assessment would be too narrow. Aristotle uses his analyses also to present his own views, which are allegedly more accurately making sense of the complexity of the worldly reality.

Of specific interest for the present study is a proposal he makes in the *Metaphysics* IV.2. While in *EN* I.6, Aristotle denied that there is a single science of the good because it is said in many ways, in *Met.* IV.2 it seems that this criterion is not valid any more. One may assume that Aristotle revised his view in this regard.<sup>12</sup> In *Met.* IV.2, Aristotle claims that a scientific investigation is also possible of things that are not unified by a common genus<sup>13</sup> but unified in a different way, namely by their dependency on one *principle*<sup>14</sup> or one common *nature*.<sup>15</sup> The acknowledgement of an order different from genus-species relationship enables Aristotle to justify a unified scientific investigation of fields, which otherwise could not be examined in a single science, as he stated in *EN* I.6 (and the parallel *EE* I.8). In this context, it is clear that with his analysis of the many ways, Aristotle discovered a relationship that other philosophers did not see. Thus, the question for the many ways is evidently part of his own constructive philosophising. In *Met.* IV.2, and in other passages, Aristotle claims that these things are said in many ways, i.e. multivocal, but not homonymous. The meaning and the influence of this claim for Aristotle's doctrine of homonymy, synonymy and multivocity will be of crucial importance for the present study. In order to

12 Cf. also *EE* I.8, 1217b27-18a1. In addition, I discuss the question "What is the innovation of the *Metaphysics* IV?" in section 8.2.

13 In *An. Post.* I.28 Aristotle states that a science is one when it is of one genus. He does not mention the alternative of *Met.* IV.2 in that chapter. Because of that, one may assume that the proposal of *Met.* IV.2 is an innovation, cf. section 8.2 of this study.

14 Cf. for *principle* – ἀρχή *Met.* IV.2, 1003b6.

15 Cf. for *nature* – φύσις *Met.* IV.2, 1003a34. Also, cf. *Met.* IV.2, 1003b12-16: *For not only in the case of those things that are said according to one – καθ' ἓν, it is possible to examine one science, but also in the case of those things said in relation to one – πρὸς μίαν nature it is possible to examine one science.* This passage is discussed in detail in section 8.4.2.

clarify this, I now present an overview of these notions and the claims made in this study connected with them.

Firstly, we focus on the notion of Aristotelian synonymy. For Aristotle, a single term can refer to a multiplicity of things. In cases of synonymy, a single common term refers to a multiplicity of things because all these things are of the same kind. For example, the term “animal” refers to every animal there is, because the feature of each animal, in virtue of how each belongs to the kind *animal* is the same in all cases.<sup>16</sup> A human and an ox are synonymously animals in the sense that both can be identified as animals, and being an animal is the same for them, which is why the definition of the term “animal” and the definition of what it is to be an animal is the same in all cases. In *Cat.* 1, 1a6-12, Aristotle defines the relation between the particular man and ox insofar as both are *animals* as synonymy.

Aristotle recognises another way how terms can refer to a multiplicity of things. Some common terms apply to a multiplicity of things that do not constitute one kind. Thus, the definitions of such things are different. Aristotle addresses these cases in two ways. Sometimes, he calls them *πολλαχῶς λεγόμενον*, i.e. multivocal, sometimes homonymous. For instance, the term “bank” can refer to river banks and savings banks. However, in this case, what it is about each thing that is called “bank” in virtue of how it counts as a bank is different. There is no single bank-kind as there was with animals, which is common to all the things that are called “bank”, but there is a multiplicity of bank-kinds, namely river banks and savings banks. The term “bank” is multivocal and homonymous at the same time.

Because of that, one could assume that homonymy and multivocality coincide. Yet, there are many passages where Aristotle denies homonymy but not multivocality.<sup>17</sup> Hence, at least in these cases, the notions do not coincide, and there must be a third way terms can be used.

<sup>16</sup> Cf. *SE* 1, 166a6-31. Aristotle states that it is a matter of necessity, that there are single terms that signify a multiplicity of things, since he assumes that the number of terms is limited, while the number of things is infinite.

<sup>17</sup> These are the relevant passages: *Met.* IV.2, 1003a33-34; *Met.* IX.1, 1046b4-7; *GC* I.6, 322b29-32; *Met.* VII.4, 1030a29-b3, and also *Top.* II.3, 110b16-22; homonymy is also denied of some multivocals in *EE* VII.2, 1236a16-22.

According to Aristotle's description, it may be plausible to call them non-homonymous multivocals. I assume this third possibility to be a consequence of the following deduction: It is plausible to assume that the distinction of synonymy and homonymy rests upon the presence and absence of a common character F, which is either present or absent in all cases where a multiplicity of things are called "F". From this point of view, there is a conceptual space for intermediate cases between homonymy and synonymy, i.e. cases in which a common character is neither entirely given nor entirely absent. Aristotle's standard example for such cases is the term "healthy" (*τὸ ὑγιεινὸν*). The term "healthy" applies to a multiplicity of different things, while the definition of what it is to be healthy differs in each case. Some things are healthy because they *bring about health*, such as warmth, some things are healthy because they *are a sign of health*, such as good shape or full grown hair or similar.<sup>18</sup> Because of this, just as in the case of banks, healthy things do not form a single kind, but a multiplicity of kinds.

Nevertheless, the cases of "bank" and the case of "healthy" are not identical. Unlike the example of banks, there is an underlying concept that all ways of being healthy have in common. Aristotle claims that all healthy things are *related to one thing* – *πρὸς ἓν*.<sup>19</sup> He states that they *are all related to health* – *ἅπαν πρὸς ὑγίειαν*.<sup>20</sup> In the following, this relation to one thing is called the *pros hen relation* (PHR). The *hen* – *ἓν*<sup>21</sup> is called "focal reference".<sup>22</sup> The multiplicity of healthy things will be addressed as "focally related entities". The most distinctive feature of the PHR is a

18 Cf. *Met.* IV.2, 1003a34-b6 and also *Met.* XI.3, 1060b37-a7.

19 See the references of the previous footnote. Moreover, it is difficult to translate "pros hen". One may assume that it means "pointing towards one". This is a translation Ferejohn (1980: 119) describes as "hopelessly vague" and "intolerably metaphorical". Ferejohn, M. T. (1980). *Aristotle on Focal Meaning and the Unity of Science*. *Phronesis* 25 (2): 117–128. Yu (2001: 208) agrees on "metaphorical". Yu, J. (2001). *What is the Focal Meaning of Being in Aristotle? Apeiron* 34 (3). The obscurity of the translation though rests upon the obscurity of the basis i.e. the expression "πρὸς ἓν". Yu, J. (2001), *What is the Focal Meaning of Being in Aristotle?*, in *Apeiron* 34 (3): 205–231.

20 *Met.* IV.2, 1003a35. Cf. for the example of *medical* – *ιατρικόν* *Met.* IV.2, 1003b1 and also *Met.* XI.3, 1060b37-a7.

21 Aristotle calls this also *principle* – *ἀρχή* in *Met.* 1003b6 and *nature* – *φύσις* in 1003a34.

22 This label is an allusion to Owen's (1960; 1965) terminology. Although often criticised, Owen's contributions are still seminal.

relation of logical priority<sup>23</sup> of the focal reference to the focally related entities, which therefore depend in definition on it.<sup>24</sup> A is logically prior to B, if A is part of the definition of B, while B is not part of the definition of A. This feature is most important for the PHR and I argue that this is the only way in which the focal reference is prior to the focally related entities. Even though there are focal references that are prior in other ways as well (such as *οὐσία* – *substance* in the case of *beings* – *τὰ ὄντα*)<sup>25</sup>, I consider logical priority the only kind of priority that is common to all instances of the PHR. As an operational definition of the PHR, I suggest considering it a relation of definitional dependence of multi-vocals to one thing, i.e. the focal reference. Whilst all the focally related entities are related to the focal reference, each entity has a distinct relation to it, i.e. the unity between the different entities is not grounded in their *having the same relation* to the focal reference, but *by the identity of the focal reference*. In this sense, focally related entities are *connected*, whereas in homonyms, there is no such connection.<sup>26</sup>

Unfortunately, Aristotle does not offer a proper definition of the PHR. He primarily works with examples. The best approach to delineate the PHR is examining both the various applications of it and the scattered remarks on the nature of this relation. There have been attempts to define the PHR.<sup>27</sup> Two recent monographs try to complete Aristotle's fragmentary account of the PHR following virtually the same strategy. Both use an approach one could call a *causal analysis* even though

23 "Logically prior" is equivalent with "prior in definition". It is the sort of priority Aristotle calls *λόγῳ* or *κατὰ τὸν λόγον*. Cf. *Met.* XIII.2, 1077b3-4 and *Met.* V.11, 1018b32-36. Cf. also Owen (1960: 169–170) and Ferejohn (1980: 118–120) who also determine this kind of priority as most distinctive of the PHR.

24 In connection with the PHR this thesis is found at various places; cf. *EE* VII.2, 1236a20; *Met.* VII.1, 1028a35–36; *Met.* IX.1, 1045b31.

25 In *Met.* VII.1, 1028a31–33 substance is said to be prior in time, knowledge and definition. For a discussion of this passage cf. Cleary (1988: 65ff.). Cleary, J. J. (1988). *Aristotle on the many senses of priority*. Carbondale, Great Britain.

26 Here I presuppose a *narrow* conception of homonymy, i.e. one that is restricted to accidental homonymy which will be explained in the following paragraphs.

27 In this study I discuss the attempts of Shields (1999) and Ferejohn (1980) in detail in section 6.1.1. Shields, C. J. (1999), *Order in Multiplicity: Homonymy in the Philosophy of Aristotle*, Oxford.

only Ward (2008) refers to her approach with precisely this label.<sup>28</sup> I will discuss the problems of their strategy, and I will suggest a tentative definition that is based on the remarks Aristotle makes in the different cases he applies this notion. Given the lack of strict criteria for the PHR, I analyse the application area of the PHR in greater detail. I present a comprehensive discussion of the relationship between homonymy, synonymy and multivocity, which primarily serves to determine the application area of the PHR.

While many of Aristotle's works testify that multivocity and homonymy do not coincide,<sup>29</sup> there is a strong tendency in the literature to neglect or trivialise this fact.<sup>30</sup> The reason for this is that beside passages, which show that multivocity and homonymy do not coincide, there are also passages where Aristotle switches back and forth between multivocity and homonymy apparently without a terminological difference. Bonitz has already noticed the inconsistency between these passages and those where the notions do not coincide.<sup>31</sup> Nowadays, a quite popular way to deal with such passages is with the following work-around: One assumes that in those passages Aristotle only denies a certain kind of homonymy and not homonymy *simpliciter*. To justify that, scholars refer to *EN* I.6, 1096b26-27<sup>32</sup> where Aristotle states that *the good* does not belong to the *accidental* – ἀπὸ τύχης homonyms. This passage has become the standard reference to argue that Aristotle's

28 Shields (1999: 110ff.) claims that the way of being F of a focally related entity must stand in one of the four causal relations to the focal reference. In addition to that, he claims (123f.) that the focal reference is asymmetrically responsible for the existence of the focally related entities. Ward (2008) provides an improved version of Shields's approach which, as I take it, basically has the same difficulties as Shields's approach, cf. section 6.1.1.

29 These are the relevant passages *Met.* IV.2, 1003a33-34; *Met.* IX.1, 1046b4-7; *GC* I.6, 322b29-32; *Met.* VII.4, 1030a29-b3, and also *Top.* II.3, 110b16-22; homonymy is also denied of some multivocals in *EE* VII.2, 1236a16-22.

30 The two recent monographs concerning homonymy in Aristotle tend to blur the subtle difference between these notions. Cf. Shields (1999) and Ward, J. K. (2008), *Aristotle on homonymy – Dialectic and science*, Cambridge.

31 The list of passages can be found in Bonitz *Ind. Arist.*, 514a48-49 and 615a45-46. Bonitz, H. (1870). *Index Aristotelicus*. Berlin.

32 1096b26-27: ἀλλὰ πῶς δὴ λέγεται; οὐ γὰρ ἔοικε τοῖς γε ἀπὸ τύχης ὁμωνύμοις. Sometimes scholars also refer to *EE* VII.2, 1236b25 even though this passage is not entirely equivalent.

notion of homonymy is comprehensive<sup>33</sup>, i.e. encompassing accidental homonyms as well as non-accidental homonyms.<sup>34</sup> I presented two examples for each case already: The case of banks illustrates accidental homonymy, whilst the healthy-example classifies as a case of non-accidental homonymy.<sup>35</sup> Based on this distinction, they claim that “homonymy” and “multivocity” can be used interchangeably unless in a given context “homonymy” is meant in its accidental sense.

Shields (1999: 10; 22ff.; also 219 n. 284) and others<sup>36</sup> suggested that it is Aristotle’s dominant practice that homonymy and multivocity can be used interchangeably. It may be oversimplifying the case, but this assessment of the relationship of homonymy and multivocity puts too strong a focus on *EN* I.6, 1096b26–28 and *Top.* I.15 and it evaluates later passages on this basis. Scholars that adhere to this view are required to provide the workaround mentioned for passages in which multivocity and homonymy are not used interchangeably.<sup>37</sup> In this study, I propound that one should propose quite the opposite, i.e. that with some exceptions (especially in *Top.* I.15) Aristotle clearly distinguishes between these notions. Even elsewhere in the *Topics*, namely in *Top.* II.3, Aristotle clearly distinguishes multivocity from homonymy.

The most prominent passage which proves this is given in *Met.* IV.2, 1003a33–34. In this passage, Aristotle claims that *being* is said in many

33 Shields (1999) and Irwin (1981) argue in favour of a unified “comprehensive” (Shields), or “moderate” (Irwin), account of homonymy. Cf. the list of the various sorts of homonymy in Shields (1999: 41). Ward (2008) follows the assessments of Shields and Irwin. One can also add to the list of adherents of a comprehensive view on homonymy Hamlyn (1977) and Lewis, F. A. (2004). *Aristotle on the Homonymy of Being. Philosophy and Phenomenological Research* 68 (1): 1–36.

34 However, it is a matter of debate how to draw the line between these two kinds of homonymy.

35 In the literature there are many names for “non-accidental homonymy”. In this study, I will call it polysemy and I will refrain from calling it a type of homonymy, since according to my view it is a species of multivocity. Sometimes this kind of homonymy is assimilated to synonymy, cf. Leszl (1970: 135–55). Leszl, W. (1970). *Logic and Metaphysics in Aristotle*. Antenore. In Ward (2008), Shields (1999) and Irwin, T. H. (1988). *Aristotle’s first principles*. Oxford. – this is a type of homonymy, whereas it is called a type of equivocity by Owens (1978<sup>3</sup>: 265–67). Owen (1960: 187) assimilated this notion to synonymy).

36 Ward (2008) follows Shield’s assessments in this regard. For a more detailed overview cf. section 2.2.1 of this study.

37 Cf. the passages mentioned in footnote 17.

ways *not homonymously, but in relation to one thing* – ἀλλὰ πρὸς ἓν (*Met.* IV.2, 1003a34). If homonymy and multivocity were simply identical, statements like that would be uninformative. Yet, they are informative, although it is debatable how exactly they are informative. One way previously presented is to assume that the denial of homonymy is a denial of accidental homonymy only. I argue that this and similar passages deny homonymy without qualification because I propose that if one reconstructs Aristotle's terminology in the "right" way, it emerges that Aristotle's notion of homonymy is less comprehensive than often proposed.<sup>38</sup> I will claim that any assessment of Aristotle's doctrine of homonymy should pay more attention to Aristotle's subtle distinction between multivocity and homonymy as it is reported in various passages across several works.<sup>39</sup> The attempt to regard both concepts as identical is misleading, especially when it comes to an investigation of the PHR. Because of that, I argue that speaking of "*pros hen* homonymy"<sup>40</sup> or "core-dependent homonymy"<sup>41</sup> or "core-related homonymy"<sup>42</sup> threatens the distinctiveness of Aristotle's doctrine of homonymy. These labels assume a comprehensive account of homonymy that strains their textual basis. In order to emphasise this, I label such comprehensive accounts on homonymy inflationary. They are inflationary because, within such views, the notion of homonymy absorbs the notion of multivocity even though it is true to say about the whole Corpus that everything that is homonymous is also multivocal. At the same time, it is not true to say that everything that is multivocal is also homonymous.

It is a quite widespread assumption that in earlier works (especially in *Top.* I.15 and the *SE*) the distinction between homonymy and multivocity is not as sharp as in some later works (especially the *GC* and the *Metaphysics*).<sup>43</sup> As indicated above (concerning Shields and Ward), I argue that the currently dominant assessment of the relationship of

38 Several scholars who suggest this view are mentioned in footnote 19.

39 Cf. footnote 17.

40 Hamlyn, D. W. (1977), *The Presidential Address: Focal Meaning*, in *Proceedings of the Aristotelian Society* 78: 1–18.

41 Shields (1999).

42 Ward (2008).

43 This thesis is proposed by Owen (1960) and it is shared by many other scholars. Cf. e.g. Owens (1978<sup>3</sup>), Irwin (1981), Brakas (2011).

homonymy and multivocity is based on the terminology of the earlier works, and it assesses later passages on that basis. As a consequence, there are several passages, which only fit into this model if one interposes workarounds in passages where Aristotle clearly distinguishes between homonymy and multivocity. I assume it is correct that there is a difference between earlier and later works as there is no terminological model that applies to all passages without restrictions. Nevertheless, the model that represents the relationship of homonymy and multivocity more adequately is one in which homonymy and multivocity do not coincide.<sup>44</sup> I will call this view the deflationary view on homonymy since it deflates the notion of homonymy from the perspective of the inflationary view. According to this view, homonymy coincides with what was termed accidental homonymy.<sup>45</sup> The inflation of multivocity compensates the deflation of homonymy. I consider this an advantage for the following reasons: Although homonymy and multivocity do not coincide, they are very closely related. I propose that multivocity is the broader notion in comparison to homonymy. It is broader in the sense that it is the genus of homonymy. Thus, homonymy is a subcategory of multivocity beside others. If that is true, all homonyms are multivocals, but not all multivocals are homonyms.<sup>46</sup> If homonymy is a subcategory of multivocity, there must be at least one further (non-homonymous) subcategory of multivocity. From the passage mentioned above (1003a33-34), it is clear that there are at least *pros hen* multivocals. However, there is another kind of non-homonymous multivocals, namely analogical cases.<sup>47</sup> These are non-homonymous because they are also connected but in a different way compared with the PHR. They are

44 Moreover, I will claim that the terminological tension of homonymy and multivocity between earlier and later works correlates to the developmental thesis of Owen (1960).

45 The assumption that homonymy in Aristotle primarily amounts to what we called accidental homonymy is available since Alexander: τὰ κυρίως ὁμώνυμα λεγόμενα, ἃ ἐστὶ τὰ ἀπὸ τύχης. Hayduck (1891: 241, page lines 25–26). Hayduck, M. (1891). *Alexandri Aphrodisiensis in Aristotelis Metaphysica commentaria*. Berlin. A similar claim has been proposed by Hintikka, K. J. J. (1959). *Aristotle and the ambiguity of ambiguity*. *Inquiry* 2 (1–4): 137–151. Furthermore, also Brakas (2011) argues that homonymy and multivocity do not coincide.

46 “Being” or “healthy” are non-homonymous multivocals.

47 Cf. *EN* I.6, 1096b26–28. There is yet another kind of non-homonymous multivocals. This is rather special because as far as I can see it occurs only once (*Top.* II.10) in Aristotle’s works. It will be called *synonymous multivocals*.

connected by an analogy. I claim that these two cases constitute a class of non-homonymous multivocals that I term polysemous multivocals. In general, polysemy is the capacity of a single term to have multiple meanings that are in some way connected.<sup>48</sup>

There is a feature that connects this modern distinction to Aristotle. It is the challenge to define criteria that enable us to assign the different multivocals into their appropriate classes. In Aristotle, there are many cases, which are difficult to classify. For instance, there is a certain class of examples of homonymy Aristotle quite regularly uses, which will be called spurious homonyms.<sup>49</sup> These cases govern the homonymy between two things of which one is a genuine F. In contrast, the other is only a spurious F. This is the case in the following examples: The name “man” can refer to the statue of a man and the genuine, i.e. living man.

Moreover, the name “hand” can refer to the dead hand and the living hand. Aristotle has a typical way of addressing these cases. He often states that *some x is no F*, or *some x is no longer an F*, *πλὴν ὁμωνύμως*<sup>50</sup> – *except homonymously*. Intuitively, cases like these appear to be different from the case of banks which are not connected, as stated earlier. There is no simple answer to the question about the relation of the genuine and the spurious F. Neither is there an answer to the question whether this kind of example falls into polysemous or homonymous multivocality. Straightforwardly, one could assume that it depends on how the spurious Fs are defined. If they depend *in their definition* on genuine Fs, one might argue that they are polysemous multivocals, if not, they are homonymous multivocals.

48 The label “polysemy” is borrowed from the contemporary distinction between homonymy and polysemy. This notion is first introduced by Michel Bréal. Bréal, M. (1897), *Essai de sémantique: science des significations*, Paris. Murphy (2010: 84) and Brown (2006 vol. 9: 742–744) offer a good overview of the contemporary distinction. Cf. section 5 of this study. Here, only a short but elucidating remark of Murphy (2010: 88): “in the case of polysemy, we expect that the different senses are related in some way – you can figure out why the word came to have this range of senses.” Murphy, M. L. (2010). *Lexical meaning*. Cambridge.

49 This label is borrowed from Irwin (1981: 527f.). It will be discussed in section 4. Shields (1999: 27ff.) calls them *discrete, non-accidental homonyms*.

50 PA 640b36; DA II.1, 412b2; similarly, GA 734b25–27 and 735a8; *Meteor.* 389b20–390a16; *Pol.* I.2, 1253a20–25.

Literature yields different answers to this question.<sup>51</sup> Up to this point, it seemed that logical priority among multivocals was sufficient to establish a PHR, but apparently, the matter is more complicated. Under the assumption that logical priority is sufficient, and that the dead F is dependent *in definition* on the living F, they will be related by the PHR. Moreover, we have to accept that in all cases where something shares the same name because of mere resemblance, there is a PHR. If that were the case, something counter-intuitive would be the consequence: Since Aristotle states in *Met.* IV.2, 1003b12-16<sup>52</sup> that the PHR is a principle of the unity of sciences, we would have to admit that the science of the artificial and the original, the dead and the living man is the same.

If one accepts this, Aristotle would have quite radically broadened his requirements concerning the question for which groups of things there is a single science and for which groups of things there is none. In works before the *Metaphysics* IV, Aristotle requires the things of which there is a single science to be of one genus.<sup>53</sup> In the *Metaphysics* IV.2, he expands this restriction to things that are related by the PHR. Hence, one needs to admit that there are sciences of spurious homonyms – a highly counter-intuitive result.

There are two ways in which one could avoid this counter-intuitive consequence. Either (a) one would have to explain that the definition of the statue of a man cannot be something like “semblance of a man”, or (b) one would have to explain that even though the genuine F is logically prior to the spurious F, there is no PHR unifying them. Thus, there must be further requirements for the PHR that are yet undetermined. I focus primarily on the first way (a). I argue that Aristotle had a practice of defining things with reference to their function. Since a dead man or a statue of a man in no way functions as a man, there is no reason to assume the spurious F and the genuine F to have anything definitionally in common.

Regarding option (b), I discuss the difficulties of the possibility to determine further criteria, that dispel problematic cases from being

51 Shields (1999) and Irwin (1981) propose opposing views concerning this question.

52 Cf. also *Met.* IV.2, 1004a23-25.

53 Cf. *An. Post.* I.28.

*pros hen* related. Since Aristotle did not state further criteria there have been attempts to supplement them.<sup>54</sup> I will discuss these attempts, and I will argue that alternative (a) allows a leaner definition of the PHR while requiring more background assumptions meaning that problematic cases can be discarded by clearer theses on how things (such as spurious homonyms) are defined.

In the first section of this study, I focus on Aristotle's phrase "being said in many ways". One cannot overemphasise its importance for Aristotle's philosophy. It occurs in almost all of his works. Nevertheless, as for the case of the PHR, there is no strict terminological approach to this phrase. As a result of my enquiry, I provide two different approaches to this notion. 1. The semantic approach; 2. The different reasons approach; I suggest that the semantic approach is most dominant in Aristotle's works. It is a view that assumes that there is a *plurality of logoi* corresponding to each multivocal, be they related or not. I conclude that Aristotle's use of the phrase *πολλαχῶς λέγεσθαι*, or related phrases, is relatively flexible and that it is undoubtedly more flexible than Aristotle's use of the notion of homonymy.

The second section concentrates on the differences and the relationships of homonymy, synonymy and multivocality and how the literature deals with them. I present three models that try to represent Aristotle's terminology involving the notions homonymy, synonymy and multivocality (the inflationary view, the tertium quid view, and the deflationary view). I claim against the currently dominant view that the deflationary view is superior to other views. According to this view, many of the statements in which Aristotle contrasts homonymy and multivocality are immediately informative. In addition, the notion of homonymy can be subordinated to the notion of multivocality. Furthermore, following this view, spurious homonyms immediately disqualify from being focally related.

In the third section, I discuss the definitions of homonymy and synonymy in *Cat.* 1. I translate the text, and I present a detailed analysis of the problematic elements of these definitions. The interpretation of these definitions influences the overall assessment of the relationship of hom-

54 As mentioned earlier, I will primarily focus on Shields (1999) causal analysis.

onymy, synonymy and multivocity. In addition, this section contains a discussion of the “traditional” distinction between accidental and non-accidental homonymy, and its implications and problems.<sup>55</sup> I claim that the notion of homonymy that is introduced in the *Categories* does not require an association between the homonyms.<sup>56</sup> This has often been observed especially by scholars that adhere to an inflationary view on homonymy.<sup>57</sup> They usually argue that although Aristotle does not mention that there could be associations between homonyms, the definition of *Cat.* 1 by no means excludes that homonyms can be connected.<sup>58</sup> As this is a weak argument that is based on Aristotle’s silence, and since nothing follows from it with necessity, there has been the attempt to justify this possibility in a different way. For instance, Irwin (1981: 525) argues that it is more plausible to assume that the introduction of homonymy at the beginning of the *Categories* introduces “connected homonyms” because “connected homonyms are important in the argument [of the *Categories*].” Because of that, he contemplates about the possibility that the example Aristotle uses in the definition of homonymy is an example of “connected” homonymy whilst acknowledging the text being ambiguous.<sup>59</sup> In contrast to this proposal, I argue that the example in the definition of homonymy in *Categories* 1 illustrates accidental homonymy.<sup>60</sup>

In section four, I discuss the controversial topic of spurious homonyms, i.e. the class of typical examples of homonymy, which are concerned with living and dead things, and with originals and copies, respectively. In both cases, these things have the same names while it is evident that these things do not share their name by mere accident.

55 This distinction will be called the ANAD: accidental-non-accidental-distinction.

56 Irwin (1981: 525 ff.) claims that the definition of homonymy in the beginning of the *Categories* primarily is concerned with “connected homonyms”.

57 Cf. Irwin (1981) and Fine, G. (2004). *On ideas: Aristotle’s criticism of Plato’s theory of forms*. Oxford.

58 Cf. Ward (2008: 17).

59 In that context the example uses the term “animal”. Aristotle states that it refers to the animal and to the drawing. But the text is ambiguous. He may mean either (1) that the term “animal” refers to the animal and the drawing of an animal or (2) that the term “animal” refers to an animal and a drawing (of anything).

60 Cf. also Owens (1978<sup>3</sup>: 117) interpretation of this passage. He claims that Aristotle in that context introduces accidental homonymy.

It is far from clear whether they are defined with definitional overlap. Since Aristotle does not present a clear-cut answer to this, scholarly opinions vary. The present study argues that the reasons to assume definitional overlap are scarce and not convincing. This supports the adequacy of the deflationary view since it supports the assumption that Aristotle's standard notion of homonymy is accidental homonymy even though "accidental" might not be the appropriate label for this case since there is some kind of non-accidental connection between these names. There are two linked aspects of this connection: 1) The connection rests on linguistic conventions (i.e. what was called "custom and courtesy"), and these may differ in different languages; 2) the spurious Fs are connected to the genuine Fs merely by resemblance. Neither of these aspects suffices to establish a PHR between the genuine and the spurious Fs. In a subsection, the relevance and impact of the case of spurious homonyms on the relation of homonymy, synonymy and multivocity is discussed with a particular focus on arguments that support the adequacy of the deflationary view.

The fifth section introduces the notion of polysemy. With this section, I regard the application area of the PHR as sufficiently determined.

The sixth section discusses polysemous multivocals, i.e. multivocals that are associated either by PHR or by analogy. This section begins with a discussion and a critique of a selection of contributions that provide attempts to characterise the PHR. It continues to analyse the most informative passage about the PHR, given in *EE VII.2*. Among other things, the outstanding result of this analysis is that it is possible to distinguish between two kinds of examples for the PHR. One kind employs paronymy between the focal reference and the focally related entities while the other kind does not. In the latter cases, the focal reference and the related entities bear the same name. The first kind I will call healthy-examples, the latter friendship-examples. This distinction is present also outside of *EE VII.2*, but it has not been discussed yet. It influences the reconstruction of the PHR. Both Ferejohn's (1980) and Shields's (1999) attempts to define the PHR are designed to only to apply to cases that I call friendship-examples. Their accounts do not cover the more common healthy-examples unless they add specific qualifications, in particular, that also in those cases the focal reference itself is one of the

Fs. I argue that this assumption is not essential to the PHR according to the diversity of examples he provides.

On the contrary, in the conventional example, i.e. the healthy-example, the focal reference, *health*, bears a paronymous name.<sup>61</sup> It is *health* that occurs in the accounts of the focally related entities. Thus, one cannot deny that the focal reference in those cases bears a paronymous name. Even though the difference is not huge, one cannot ignore the case that it influences the form of any intended definition. I will show that this distinction influences the minimal number of focally related entities. In friendship-cases, a single focally related entity is sufficient while in healthy-examples at least two such items are required. The reason for this is that a PHR requires multivocity.

In section 6.2, I discuss the question of whether there is a *pros-hen*-specific definitory-dependence-relation, i.e. one that exclusively belongs to the PHR. Aristotle does not draw fine-grained distinctions between different kinds of logical priority. One may doubt whether he draws distinctions at all, although it is evident that there should be at least some difference. Intuitively, I would agree if he claimed that there was a difference between the logical priority of a genus and the logical priority of a substance to a non-substance. However, there is no textual evidence for a terminological distinction. I try to characterise Aristotle's attitude to logical priority in the following way: I call him a *mereological essentialist about definitions*.<sup>62</sup> This label tries to elucidate that he considers anything that is part of a definitory logos is logically prior to the definiendum regardless of whether this thing is a substance or whether it is a genus.<sup>63</sup>

Within this section, I reject the assumption that other kinds of priority are part of the PHR. Although some scholars suggest that there are other kinds involved, I do not come to the same conclusion.<sup>64</sup> I assume

<sup>61</sup> Section 6.1.3 is devoted to the relation of the PHR and paronymy.

<sup>62</sup> Whereas of course, he is not such sort of essentialist about sensible objects.

<sup>63</sup> This label is supposed to show that if a part of the definitory logos is different the definiendum is a different thing, cf. *Top.* VI.4, 141a35-b1.

<sup>64</sup> This has been argued by Hamlyn (1977), Shields (1999) and Ferejohn (1980). Fonfara (2003) either attempts to determine the PHR separated of its application to being. Fonfara, D. (2003). *Die Ousia-Lehren des Aristoteles, Untersuchungen zur Kategorienschrift und zur Metaphysik*. Berlin, Boston.

that the main reason to integrate other kinds of priority is based on two connected things: 1) There is no strict definition. Hence everyone strives to determine the missing criteria. 2) In the most critical application of the PHR, i.e. its application to being, there is some sort of ontological priority unmistakable. However, there are no reasons to assume that the ontological priority of substance to non-substantial entities is an effect of the circumstance that all beings<sup>65</sup> are focally related to substance. I consider this feature independent of the PHR since not in all cases in which there is a PHR, do the focally related entities depend existentially on the focal reference. Thus, ontological priority or existential dependence is not an essential feature of the PHR.<sup>66</sup>

Since logical priority alone is not sufficient for the PHR and there is no evidence to assume another sort of priority to be involved, I discuss the possibilities to determine the PHR with additional requirements. The result of this discussion suggests that Aristotle's descriptions of the requirements of the PHR are too general to formulate a definition allowing us to distinguish genuine from dubious cases of the PHR. Genuine cases are at least all those that are used as examples for a PHR by Aristotle. Dubious are those that *only seemingly* exhibit a PHR, as in the case of spurious homonyms. There is no reason to assume a PHR between a dead and a living hand or the artificial and the real man.<sup>67</sup> Yet, it is difficult to justify this given the lack of a strict definition of the PHR.

Despite this, I claim that there is no PHR in these cases because absurd consequences would ensue. As stated earlier, the PHR is a principle of the unity of sciences. If there were a PHR between the spurious F and the genuine F, they would have to be part of the same science. Even without strict criteria for the PHR, this consequence is at least

65 Actually, it is not very precise to assert that "all beings" are related to substance. As I argue in the very last part of this study (8.7) Aristotle's pros-hen science of being is not a science of the linguistic term "being". Hence, strictly speaking, it is only correct to assert that "all beings" are related to substance without restricting the scope of "all" to those cases that are focally related since only those are part of that science. The challenge is to show which cases qualify and which disqualify "from focal connection".

66 In the case of being everything else other than substance only is being because it inheres into substance, e.g. such as *the walking* – τὸ βαδίζον inheres into substance, respectively "belongs to substance". Cf. *Met.* VII.1, 1028a25f.

67 This kind of homonyms will be discussed under the heading *spurious homonyms*.

counterintuitive. Because of it being counterintuitive the assumption of a PHR in those cases is also counterintuitive. The number of sciences would increase tremendously. If this conjecture is true, a vast number of Aristotle's standard examples of homonymy employs the deflated notion of homonymy I am arguing for. A side effect of this discussion is that it revisits the crucial question of whether spurious homonyms contain definitional overlaps, or not. The denial of a PHR in these cases does not necessarily imply a denial of definitional overlap in these cases. Thus, even with definitional overlap, as suggested by Irwin (1981: 528), it might not be necessary to assume that there is also a PHR.

The seventh section addresses the connection of the PHR and the case of things *in serial succession* or things *ordered in series* – τὰ ἐφεξῆς, e.g. figures or souls. I conclude that the connection between the PHR and ordered series is far more remote than often assumed.<sup>68</sup> I argue that it is misleading to consider the PHR an abbreviated series of things or to regard ordered series as a variant of the PHR. My argument demonstrates a difference between the relationship of *things ordered in series* and things that are related by the PHR despite Aristotle's claim that also beings are ordered.<sup>69</sup> I argue that whilst being may be ordered in some sense, there is a difference in the kind of order that is attributed to these different cases. I point out that the priority relations in these cases are genuinely different and hence ordered series and the PHR are more dissimilar than usually assumed. This result explains the oddness that Aristotle never applied the PHR to analyse things that are ordered in series, although one might expect him to do so since also things that are ordered in series lack generic unity.

The eighth section examines the PHR in the context of *Met.* IV. It contains a discussion concerning the question about the most innovative features of the book. The conclusion is that Aristotle's modification of

<sup>68</sup> It has been suggested by Robin (1963: 168 n. 172) that ordered series are a special case of the PHR. Cf. also Krämer, H. J. (1967). *Zur geschichtlichen Stellung der aristotelischen Metaphysik. Kant-Studien* 58 (1–4): 313–354. Krämer follows him in this regard. This tendency is also found in Owen (1960: 173) although he does not go into detail.

<sup>69</sup> The only allegedly “clear” connections between the PHR and serial order are found in *Met.* XII.1, 1069a19–21; *EN* I.6, 1096a17–23 and *Met.* IV.2, 1005a8–11. I argue against the assumption that these remarks imply that the categories of being form a series in the same sense in which figures or souls form a series.

his notion of science plays a crucial role, i.e. his admission of the PHR as a principle of unity of science. This modification is only possible as Aristotle also ascribes a new feature to the PHR: It becomes a principle of unity for sciences. This section also highlights a discussion of the alleged tension between “earlier” and “later” works of Aristotle with respect to the question about the absence of the PHR as a tool to explain the unity of sciences, especially in the *Ethics* (*EN* and *EE*). Furthermore, this part proposes that not all ways in which being is said are relevant for Aristotle’s general metaphysics but only some. These insights help understand the various lists about the ways in which being is said, which are spread throughout the corpus.

In section 8 of this study, I assess the PHR in the context of *Met. IV*. The first part of section 8 is devoted to some of Shields’s arguments aiming to show that Aristotle fails to prove that being is said in many ways. The next part discusses the question of the “real” innovation of *Met. IV*. It is a widespread belief that Aristotle had the notion of the PHR long before *Met. IV*, but that he never saw the opportunity to apply it also to “being”. In addition, there is another innovative aspect of *Met. IV*, which has not received the attention it deserves.<sup>70</sup> As indicated before, Aristotle introduces a distinction between two ways in which sciences can be unified, i.e. the distinction between *kath hen* and *pros hen* unification of sciences. This distinction also has an impact on the determination of the PHR (section 8.3). It adds a new feature, which needs to be appended to the list of features of the PHR, which I provide in section 6.1.2. It helps to discard deceptive cases such as the cases of spurious homonyms. I suggest that it is not so much the application of the PHR to being, which is the most pivotal innovation in *Met. IV* but that Aristotle claims that the PHR is a principle of unity for sciences.

Often, it has been reported that there is a tension between the (earlier) *Ethics* and the (later) *Metaphysics*.<sup>71</sup> In the *Ethics*, Aristotle (implicitly) denies the possibility of a *science of being* since being is said in many ways, and if something is said in many ways, there must be many

<sup>70</sup> Some attention is paid to this issue by Yu (2001) and Wilson, M. (2000), *Aristotle’s Theory of the Unity of Science*, Toronto.

<sup>71</sup> An important proponent of this view is Owen (1960). Cf. also Yu (2001) and Bostock, D. (1994). *Metaphysics. Books [zeta] and [eta]*. Oxford.

sciences.<sup>72</sup> Thus, I propose that it is very possible that Aristotle already saw that the PHR also applied to being, just as he saw the possibility that the ways in which the good is said are related. However, he missed the insight that the PHR can function as a principle of unity of sciences. On this background, I discuss several theses concerning the relationship of the *Ethics* and the *Metaphysics*. These theses are not necessarily mutually exclusive, but they emphasise different aspects of the relationships between these works. I propose and argue for the so-called expansion-of-science thesis as the most enlightening thesis in this context.<sup>73</sup>

In section 8.4 to 8.6, I discuss the details of the *kath hen/pros hen* distinction that are connected to the expansion of science thesis. The very last section (8.7) of this study raises the question, which ways of being are part of the science of being qua being.<sup>74</sup> Since Aristotle provides many lists of the alleged ways of being but does not contain much information about the relation between these lists, I claim that not all ways in which the term “being” is said are relevant for the *pros hen* science of being but primarily only what is called *categorical* or *per se being* according to *Met.* v.7. In addition to that, it is clear that Aristotle also considers part of this science *being in actuality* and *potentiality*. Yet, it is not entirely clear on which basis it is part of this science. Aristotle does not clarify this case. Since being in actuality and potentiality are in some sense modes of being of so-called categorical being, one may reason that they enter this science on this basis. If this were the case, potential and actual being would in some sense also be related to substance, even if this relation were somewhat “more remote”.

72 Relevant are *EE* I.8, 1217b27-18a1 and the parallel *EN* I.6, 1096a24-33. Moreover, in *An. Post.* II.7, 92b14 and in *Top.* IV.1, 121a16-19 and 121b7-9 there are remarks that make us wonder whether Aristotle had a unified science of being at the back of his mind, yet, these remarks do not exclude this necessarily. Remotely related is also *SE* 11, 172a9-15.

73 Though Yu (2001) does not literally propose a name for this claim it is due to his work that I am proposing this claim.

74 A more comprehensive approach to the question what is part of Aristotle’s science that sometimes is called “general metaphysics” is given by Wilson (2000).



# 1 Varieties of Multivocity in Aristotle

Without any intended doctrinal import, the present study follows Shields (1999) and Irwin (1981) and uses the term “multivocity” to pick up Aristotle’s phrase *πολλαχῶς λέγεσθαι* and cognate versions of it. The reason to substitute one obscure term with another obscure is pragmatic. A shorthand is useful in this case. As will be shown below, Aristotle uses to the same effect many different phrasings to assert that *something is said in many ways*, or at least, *in more than one way*. There is, e.g. *πολλαχῶς λέγεσθαι*, *πλειοναχῶς λέγεσθαι*, the interrogative *ποσαχῶς λέγεσθαι* as well as *διχῶς* or *τριχῶς λέγεσθαι* or *λέγεσθαι καθ’ ἕτερον τρόπον* and their cognates.

To acquaint oneself with the topic, one should first examine the phrase itself. There is a variety of possible translations.<sup>75</sup> The phrase *πολλαχῶς λέγεσθαι* traditionally translates as “to be said in many ways”. The corresponding participle *πολλαχῶς λεγόμενον* is often translated as “something that is said in many ways”.<sup>76</sup> The *something* is usually perceived as a linguistic entity rather than an entity of some other kind.<sup>77</sup>

75 Brakas (2011) offers a good overview about the available variety of translations of *λέγεσθαι*. His favoured interpretation of “F is said in many ways” is “F is uttered signifying many things”. One can agree with this interpretation since it is aptly compatible to the approach to multivocity which is called *the semantic approach* below. It is called that way because of the close relationship between *πολλαχῶς λέγεσθαι* and *πλείω σημαίνειν* or *πολλὰ σημαίνειν* which will be argued for within this section. Moreover, cf. Smith (1997: 88, 93). Smith, R. (1997), *Aristotle, Topics I, VIII, and Selections*, Oxford.

76 Notoriously, *GC* I.6, 322b29-32 describes these things as *ὄνοματὰ* as quoted below in section 2.3.1. However, there are more candidates for the “something” in this phrase which have been listed Owens (1978: 108). He suggests that the phrase “may refer to terms, or to concepts and definitions (*λόγοι*), or to the things defined, and even to all three in the same passage.” He refers to *Top.* V.2, 129b30-130a4. However, it is unclear how he came to assume that the passage states that *the things defined* are said in many ways. Hence, one has to disagree with that. Nevertheless, phrases as well as single terms are usually mentioned as those things which can be said in many ways. In the *SE* Aristotle considers homonymy as a belonging to terms while concerning phrases he speaks of *ambiholy*; cf. *SE* 4, 166a6ff., and *SE* 7, 169a22ff. For a similar list of “candidates” cf. Ferejohn (1980: 127 n. 4).

77 Cf. Smith (1997: 89; 93). Among those scholars who argue that homonymy and multivocity do not coincide (as e.g. Matthews, G. B. (1995). *Aristotle on existence. Bulletin of the Institute of Classical Studies* 40 (1): 233–238; Brakas (2011); Hintikka (1959)) it is quite common to consider multivocity as a concept that is tied more closely to language than to extra-linguistic entities.

However, there is the following difficulty: If Aristotle states something such as “the F is said in many ways” it is necessary to remind ourselves that locutions such as “the F” in Aristotle are often ambiguous between the item *f* and the word *F*. Unfortunately, Aristotle frequently switches back and forth between these two without removing its ambiguity. One cannot impose a rigorous rule that is generally applicable to identify which of the cases is intended.<sup>78</sup> Because of that, the presumptions by the different scholars of the kind of thing that is said in many ways are so diverse. Smith (1997: 87–89; 92–93) claims that multivocity itself is multivocal because of the ambiguity of λέγεται.

On the one hand, Smith suggests that it is possible to translate “λέγεται” with the passive voice “is called”. In that sense, there are “different things to which the same word applies may sometimes be called the same thing in different ways.”<sup>79</sup> In this way, justice and courage are called *good* in one way and what is conducive to health is called *good* in another way (cf. *Top.* I.15, 106a4–5). In this sense, what is called something in a different way is the *thing* to which the word applies, not the word itself.

On the other hand, it can also mean “to be said of”. If *A is said of B*, then the subject of λέγεται is the word. It is important to note that these two variants are interrelated. If two things *x* and *y* are called *A* in different ways, then *x* and *y are called A* in many ways (πολλαχῶς λέγεται). But also, if *A is said of* (λέγεται) *x* and *y*, but in many ways, then the term *A is said in many ways* (πολλαχῶς λέγεται) of other things. However, although it is possible to distinguish these cases the traditional way to translate πολλαχῶς λέγεται, i.e. as “is said in many ways” is adequate in most contexts that are relevant for this study. Hence, I continue assuming that the things that are said in many ways are interpreted as linguistic terms.

The term “πολλαχῶς” of the phrase “πολλαχῶς λέγεται” usually is translated to “in many ways”. If a term is said in many ways one may

78 Cf. Barnes (1971: 77). Barnes, J. (1971). *Homonymy in Aristotle and Speusippus*. *The Classical Quarterly* 21 (01): 65–80. He discusses this topic under the headline “the Hambruch thesis”.

79 This quote is taken from Smith (1997: 88). Ward (2008: 56–57) takes over this assessment from him. Cf. also *Top.* I.15, 106a1–2.

assume that this term is ambiguous<sup>80</sup>, i.e. that there is a multiplicity of *meanings* or *senses* corresponding to this term.<sup>81</sup> I use “term” to refer to *ὄνομα* – *name* and *ῥῆμα* – *verb*, i.e. those linguistic entities that successfully fulfil the linguistic function of *σημαίνειν* – *signifying*. Thus, the phrase *πολλαχῶς λεγόμενον* describes an ambiguous term, i.e. a term with many meanings/senses/significations.<sup>82</sup> As stated above, in this study, I refer to such terms as multivocals.

Nevertheless, one should neither propose that multivocity is reducible to ambiguity, nor that multivocity is a sufficient condition for ambiguity. I show that ambiguity is a sufficient condition for multivocity, but also that it is not the only sufficient condition for multivocity and that in those cases, it is not even a necessary condition. The reason

**80** Here a term is called “ambiguous” if it has many meanings regardless of whether they are related or not. Quite usually “ambiguity” is related to *word uses*, i.e. the datable utterances of words, rather than to words. If one considers it this way, then a homonymous term does not necessarily imply ambiguity, because e.g. the context of the utterance in which the word is used may eliminate the ambiguity. I agree with Owen (1965: 74f.) (and also Irwin (1981: 530)) who notice that the closest concept of Aristotle to the *just mentioned way of using* the term “ambiguity” is what Aristotle calls *amphiboly* (cf. SE 166a6–7). Owen, G.E.L. (1965). *Aristotle on the snares of ontology*. In *New essays on Plato and Aristotle*, ed. Renford Bambrough and G.E.M. Anscombe, 69–96. New York.

**81** This study does not distinguish between *meanings* or *senses*. I agree with Matthews (1972: 150) and Irwin (1981: 534) in assuming that an (independent) sense or meaning of a term is that which is found in a dictionary and that a speaker should be able to learn one meaning (or sense) without learning the other. Matthews, G. B. (1972). *Senses and Kinds*. *Journal of Philosophy* 69 (6): 149–157.

The assumption that multivocity (and/or homonymy) amounts to words having different senses has been suggested by Kung, J. (1986). *Aristotle on „Being Is Said in Many Ways”*. *History of Philosophy Quarterly* 3 (1): 3–18. by Hintikka (1959: 15), Owen (1965: 74), Barnes (1971: 66) and others. Irwin (1981: 534) doubts this, because he doubts the identification of *meaning* with *σημαίνειν*. His elaborate views on this matter is found in Irwin, T. H. (1982), *Aristotle’s Concept of Signification*, in *Language and Logos*, ed. Schofield, M. and Nussbaum, M. C. pp. 241–266.

**82** For the sake of shortness and simplicity this section does not discuss the relation of *meaning* and *signification*. For a thorough discussion of this issue see Irwin, T. H. (1982). *Aristotle’s Concept of Signification*. In *Language and Logos*, ed. M. Schofield and M. C. Nussbaum, 241–66. Irwin concludes that Aristotle’s use of *σημαίνειν* is not systematic and that *meaning* does not entirely coincide with Aristotle’s *signification*. Further see Kirwan (1993: 94) who suggest that *σημαίνειν* could either be understood as “to mean”, or “to denote” in different texts. Kirwan, C. (1993). *Metaphysics: Books Gamma, Delta, and Epsilon*. Oxford. Moreover, sometimes it is claimed that Aristotle does not distinguish between *sense and reference*, cf. Hamlyn (1977: 6). Hamlyn claims that Aristotle’s theory of meaning is a *realist* one: “He thinks, that is, of the meaning of a term as what is picked out by it” Hamlyn (1977: 12).

for this is that “multivocity” itself is said in many ways in some sense. I outline two different accounts of multivocity which differ in their criteria how something qualifies as multivocal. The first connects multivocity to ambiguity, the second does not imply ambiguity:

- I. The semantic account of multivocity
- II. The different reasons account of multivocity

This distinction is based on various remarks about multivocity scattered throughout the corpus.<sup>83</sup> These fragmented remarks are used to attempt a reconstruction of an alleged underlying theory. While this distinction cannot be reduced to a single account the following section demonstrates that the semantic account is more widely applied by Aristotle. Nevertheless, the distinction adds value since the importance of multivocity in Aristotle’s philosophy cannot be emphasised enough. Aristotle uses it as a methodological tool with which he criticises other philosophers, especially Plato, Parmenides, and some other Eleatics. He objects that they overlooked that terms can be said in many ways. Without the distinctions, Aristotle introduces, they draw conclusions that, for Aristotle, amount to obscurity or even to absurdity.<sup>84</sup>

I) The semantic account of multivocity: This approach assumes that a term is multivocal if the term *F* *signifies various things* – *πλείω σημαίνει*. I deem it the most widely distributed approach to multivocity in the corpus. The following instances, in which Aristotle uses the phrase *πολλαχῶς λέγεσθαι* or one of its cognates help justify this approach. The *question* (indicated by the interrogative *ποσαχῶς*) of the *ποσαχῶς* – *how many ways* occurs regularly at the beginning of new topics. It can easily be shown by examples that this is a characteristic feature of Aristotle’s strategy to ask *in how many ways some F is said*. In *EE* I.8, 1217b1 Aristotle wants to enquire the best: *now let us examine*

<sup>83</sup> For the different reasons account consider the examples of “being” *Met.* IV.2, 1003b6-10; “potency” *Met.* V.12, 1019b35-1020a6; *contraries* *Met.* V.10, 1018a31-35. For passages that support the semantic account cf. *Met.* VIII.2, 1042b25-28; *Top.* V.2, 129b30-32. *Met.* VII.1, 1028a10-14, *DA* I.5, 410a13-15, *Met.* VI.2, 1026a33-b4; *Met.* XIV.2 1089a7-8).

<sup>84</sup> Such as the Parmenidean claim that there is not change which originates from Parmenides’s failure to distinguish between different senses of “being”. Cf. *Phys.* I, 2–3.

what the best is, and in how many ways it is said – σκεπτέον τοίνυν τί τὸ ἄριστον, καὶ λέγεται ποσαχῶς. Similarly, in *De cael.* I.9, 278b9-11: let us explain first what we say the heaven is and in how many ways, in order to make clear what is enquired by us – Εἴπωμεν δὲ πρῶτον τί λέγομεν εἶναι τὸν οὐρανὸν καὶ ποσαχῶς, ἵνα μᾶλλον ἡμῖν δῆλον γένηται τὸ ζητούμενον. Also in *Phys.* III.5, 204a2-3: first we have to determine in how many ways the infinite is said – πρῶτον οὖν διοριστέον ποσαχῶς λέγεται τὸ ἄπειρον. Even in the early *Categories* (12) he enumerates in how many ways *prior-πρότερον* is said.

Anyone reading Aristotle will notice that the issue of the many ways in which words are said is almost omnipresent throughout his works. Nevertheless, one has to clarify what is meant by that. Any attempting this needs to make some speculations as there is no proper passage in the corpus where Aristotle explicitly explains this notion.<sup>85</sup> Fortunately, there are several enlightening remarks about this in the corpus that alleviate developing a reconstruction of this notion.

In *Top.* I.13–17, Aristotle introduces four *instruments* – ὄργανα which are used to construct arguments.<sup>86</sup> The second of these instruments proposes that one has to be able to determine in *how many ways each is said* – ποσαχῶς ἕκαστον λέγεται (*Top.* 105a23-24). In *Top.* I.18, 108a18-22 Aristotle tells us that the examination of the many ways is *useful* – χρήσιμον (primarily) for two reasons. Firstly, it is useful *in relation to clarity* – πρὸς τὸ σαφές, and secondly to ensure that the *reasonings* – τοὺς συλλογισμούς proceed *according to the thing itself* – κατ’ αὐτὸ τὸ πρᾶγμα, and *not with regard to the name* – μὴ πρὸς τὸ ὄνομα. Since it is not explicitly said which kind of clarity Aristotle talks about one may consider it *terminological clarity*. The following passages support this kind of understanding:

The opposite of clarity – σαφές is *obscurity* – ἀσαφές. In *Top.* VI.2 there are various *Topoi*, which are related to avoiding *obscurity* –

<sup>85</sup> Ward (2008: 64 n. 42) even calls the phrase a “broad, non-technical expression”.

<sup>86</sup> Cf. especially *Top.* I.13, 105a21-25.

ἀσαφές and, mutatis mutandis, preserving clarity.<sup>87</sup> Moreover, *clarity* is often connected with language. In the context of *Top.* VI.1–2, 139b12–140a22 Aristotle urges to be *mostly clear in expression/interpretation – σαφειστάτη τῆ ἔρμηνεία*, especially concerning definitions. Another testimony of the connection of *clarity – σαφές* with language is given in *Poet.* 22, 1458a18 and *Rhet.* III.2, 1404b1, for Aristotle describes it as a virtue of *speech – λέξις*. The way terminological *clarity* comes about is to start with a differentiation of the various significations of *that which is said in many ways*.<sup>88</sup> The examination of the many ways *in many cases* is best described as *disambiguation*. Revisiting the *De cael.* example of “heaven” from above Aristotle suggests that “heaven” signifies three different things, namely (*De cael.* 278b10–21):

1. The substance of the extreme circumference
2. The body continuous with the extreme circumference, which contains other heavenly bodies
3. All bodies that are within the extreme circumference

Accordingly, the starting points of many enquiries are linguistic, while the overall enquiry certainly is not merely linguistic. However, in order to establish a solid basis from which the enquiry can proceed one needs certainty about which things are signified by which terms. Aristotle explicitly states (*Top.* I.18, 108a18–22 see above) that one reason to enquire *into the many ways* is to ensure that the reasonings proceed

<sup>87</sup> There is another *Topos* that is closely connected to the last one which is about *metaphors*. *All that is said metaphorically is obscure – πᾶν γὰρ ἀσαφές τὸ κατὰ μεταφορὰν λεγόμενον* (139b34–35). A further *Topos* (140a3–5) states that *unclear is all that is unaccustomed – πᾶν γὰρ ἀσαφές τὸ μὴ εἰωθός*. He refers to Plato who sometimes uses artificial and not well-established words as he calls e.g. “the eye ‘brow-shaded’ or the poison-spider ‘bite-mortifying’ or ‘marrow’ as ‘bone-begotten’” (*Top.* VI.2, 140a3–5). Another quite interesting remark is made subsequently in 140a6–8. The distinction of ambiguous terms between metaphors and homonymous terms is not exhaustive. Apparently, there are terms that fall into neither of these two classes.

<sup>88</sup> Aristotle sometimes writes *ἐν τοῖς περὶ τοῦ ποσαχῶς* (*Met.* VI.4, 1028a5; *Met.* VII.1, 1028a10–11 and X.1, 1052a16). The book that is meant is (presumably) *Met.* V. This book often is called Aristotle’s philosophical lexicon in which many important terms are disambiguated. It has been suggested that the expression *περὶ τοῦ ποσαχῶς* or some relative formulation has been considered as the title of that book (cf. Menn (2008: 40 appendix vii)).

according to the things themselves. Thus, the enquiry into the many ways is an auxiliary enquiry, which has to be done in advance. The *Met.* 1.9, 992b18-20 also testifies this. Aristotle states, using the example of *being*, that examining the many ways is a prerequisite of starting a new enquiry. This auxiliary enquiry is a necessary part of the “actual” enquiry, since one apparently cannot proceed without it, and moreover such an enquiry will lead to a more satisfying result.<sup>89</sup>

In this light, the *question* for the many ways appears to be a question that asks for the *semantics* of a certain term: in order to achieve *terminological clarity* it may suffice to formulate a *disjunctive account*<sup>90</sup> of the term, for example

“F” either signifies A, B or C...

This corresponds to Aristotle’s procedure in the “heaven”-example. According to this view, a *πολλαχῶς λεγόμενον* is a term that, generally speaking, signifies a *plurality* of different *significates* or *meanings* (in the broad sense of “meaning”). However, there is not only one answer to the question what this plurality exactly is. How one conceives the *significate* or *meaning* which is signified by a name or term, primarily depends on how one conceives Aristotle’s remarks about signification. In the *De int.* names and nominal terms, spoken or written, are called *symbols* – *σύμβολα* (16a3-4). The term “σύμβολον” is a derivate of *συμβάλλειν* – *to throw together, bring together, unite*, but also of *συμβάλλεσθαι* – *to contribute, to have something to say*. The meaning of the derivative, *σύμβολον*, can refer to the two halves into which a whole separates and which fit together exactly, like, for instance, a tally does. The two complementary halves of a tally can be called *σύμβολα*. Thus, a symbol is something that can be used to identify some other corresponding part. In this sense, one can consider it as a *token* of something, a token serv-

<sup>89</sup> *Top.* 1.18, 108a19-20: *someone knows better what he is stating, after having shown in how many ways it is said – μάλλον γὰρ ἂν τις εἰδείη τί τίθησιν, ἐμφανισθέντος ποσαχῶς λέγεται.*

<sup>90</sup> Here “account” is used instead of “definition” in order to avoid misunderstandings with Aristotle’s (stricter) notion of definition. For Aristotle, there are only definitions of (accidental) compounds possible in a *derivative sense* – *ἐπομένως* (1030a22), e.g. there is no definition of the *Ilias*, cf. *Met.* VII.4, 1030a6ff. The disjunctive account cannot be considered a proper definition for the same reasons as the *Ilias*, because it’s a compound lacking the proper sort of unity. Aristotle criticises disjunctive definitions in *Top.* VI.7, 146a21-24.

ing as proof of identity. (Also Whitaker (1995: 9ff.)<sup>91</sup> makes use of the option to translate “σύμβολον” with “token”).

Whilst it may seem rather unimpressive for us to talk about symbols (in the sense of linguistic signs) within a linguistic theory, one has to regard the application of the term “σύμβολον” in Aristotle’s theory of signification as quite innovative. In the *De int.* Aristotle states that linguistic expressions can function *as symbols*, and that, not by nature<sup>92</sup>, but by being *conventional* – *κατὰ συνθήκην signs – σημεία* (16a26-29).<sup>93</sup> The function that symbols fulfil is to *signify* – *σημαίνει*.<sup>94</sup> According to the notion of symbols outlined earlier, signification then is to bring two parts together. However, one would have to call both parts symbols, according to the etymological remarks about symbols linguistic theories usually refer to both parts as “symbol”, but only one. When a symbol enables us to identify something that is attached to one of “two halves”, it is only the linguistic token that is *a symbol for something else*. What this something else is, depends on the respective semantic theory. For Aristotle, there is no simple answer to the question what it is that terms signify. There is at least a twofold, if not a threefold answer to this. This topic is controversially discussed in the literature.<sup>95</sup> The *plurality*, as mentioned earlier, can be thought of as

91 Whitaker, C.W.A. (1996). *Aristotle’s De interpretatione: Contradiction and dialectic*. Oxford, New York.

92 This is a hint to the dispute between the position called semantic naturalism which proposes that there is an intrinsic relation between words and the things they signify and (semantic) conventionalism which proposes that the relation between signs and things is conventional. This has been discussed in Plato’s *Cratylus*.

93 See further below for some remarks about signs in comparison to symbols.

94 Also a *verb* – *ῥῆμα* signifies something like a name when it is used without connection. There are various possible translations for *σημαίνειν* none of which is undisputed. This study prefers “to signify”, “to denote” and “to stand for”.

95 I refer to Irwin (1982). Weidemann, H. (2015), *Hermeneutik*, Berlin. Charles, D. (2000). *Aristotle on meaning and essence*. Oxford. Modrak, D.K.W. (2001). *Aristotle’s theory of language and meaning*. Cambridge, U.K., New York. Whitaker, C.W.A. (1996), *Aristotle’s De interpretatione: Contradiction and dialectic*, Oxford, New York.

1. *thoughts* – παθήματα τῆς ψυχῆς (*De Int.* 16a3ff. and 24b1)
2. *things* – πράγματα (*SE* 1, 165a6-9 and *De int.* 16a6-8)<sup>96</sup>
3. *logoi* (especially *Met.* VII.4, 1030a6-17; *An. Post.* II.7, 92b31-32)

One of these three kinds of *pluralities* corresponds to every *πολλαχῶς λεγόμενον*. What a *πολλαχῶς λεγόμενον* is or how one can formulate it, thus, depends on these three options, because they determine how to conceive of the status of the possible significates that supposedly belong to the *πολλαχῶς λεγόμενον*. The three options emanate from remarks made in different Aristotelian works such as the *De Int.* (1) the *SE* (2) and the *Metaphysics* and the *An. Post.* (3). This list does not imply there are incompatibilities following from these options. It illustrates that a simple answer to the question what it is that terms signify, and hence, what the questions of the many ways asks for, when it is a question for the semantics of a term, is not possible.

In *De int.* 1, 16a6-8 it is said that terms *primarily* – *πρώτων* signify *thoughts* – *παθήματα τῆς ψυχῆς*. Aristotle adds that *that of which these <thoughts> are likenesses of, the actual things, are also the same* – *καὶ ὧν ταῦτα ὁμοιώματα πράγματα ἤδη ταύτά*. These statements mention the three fundamental elements of Aristotle's theory of signification: there is the term, the thought and the thing in the world.

It is a matter of debate what is denoted by *primarily* – *πρώτων*. The description of Ammonius (1897: 17ff.)<sup>97</sup> is quite popular, but not undis-

96 Cf. Ferejohn (1980: 118 n. 4). He provides a list of different sorts of *things* that can be signified: "The sorts of things that can serve as significata include (1) primary substances (concrete individuals), (2) non-substantial particulars (individual qualities, quantities, times, places, etc). and (3) the genera and species which contain things of these sorts. (1 make no claims here as to whether these genera and species are intensional entities, or simply classes of entities of sorts (1) and (2).) Also included are even more bizarre „entities” such as (4) *differentiae* (e.g. two-footed) and (5) „compounds” [συνδυαζόμενα] such as white man.” This list shows well how broad “things” can be. One could object that “things” is so broad that it encompasses thoughts and logoi, however, Aristotle intended to use “things” in contrast to thoughts, i.e. meaning things in the world, or in other words “extra-mental” things while thoughts are usually considered mental things.

97 Ammonius, H. (1897), *In Aristotelis de interpretatione commentarius*, A. Busse (ed.) CAG IV, Berlin. Ammonius' approach is followed by Weidemann (2015: 159ff.) and Whitaker (1997: 18ff.). In Whitaker (1997: 18ff.) there is a discussion of the alternative views which assert that *πρώτων* qualifies either sign, i.e. “words are *primarily* signs of *thoughts*”, cf. Kretzmann, N. (1974), *Aristotle on spoken sound significant by convention*, in *Ancient Logic*

puted. For the sake of simplicity, I will follow his suggestions for the most part. He claims that words are signs *primarily of thoughts*. Although not stated explicitly he assumes that signs signify *things secondarily*.<sup>98</sup> Moreover, the *thoughts* become intermediaries between words and things. Thus, words are direct signs of thoughts, while they are only indirect signs of things. Accordingly, I assume that words signify extra-mental things through our thoughts or beliefs about them. Since almost anything can be denominated by a name, “things”, in this context, has to be understood in a broad sense.<sup>99</sup> In order to clarify the relationship between thoughts and things we have to specify what is meant by the term *likenesses – ὁμοιώματα*.

Immediately after mentioning “likenesses”, Aristotle refers to the *DA* (cf. *De Int.* 16a8-9). Apparently, there must be a passage in the *DA* that mentions thoughts as likenesses of things, however, it is not clear to which passages he is referring to.<sup>100</sup> I attempt to solve this issue not by referring to a single passage, but instead by referring to a theory which is given in the *DA*. I assume that a reference to Aristotle’s theory of the *φαντασία – imagination* can bridge the relation between *thoughts* and *things* in the world. The *φαντασία* is a faculty that enables those who have it to have a purely internal image or concept of something that is not evoked by simultaneous sensory stimulation. Perception is necessary for *φαντασία* (*DA* III.3, 428a11-16). On the one hand, the *φαντασία* is able to reproduce sensory perceptions of things in the world, and as a consequence forming a percept. In this regard, *thoughts* are *likenesses* of

*and its Modern Interpretations*, Corcoran, J, pp. 3–21. Furthermore, *πρώτων* may qualify words, i.e. it is *primarily* words that are signs of thoughts, and *secondarily* some other items are signs of them. Cf. for this Belardi, W. (1981), *Riconsiderando la seconda frase del De Interpretatione*, in *Studi e saggi linguistici* 21, pp. 79–83. For a criticism of this view see Weidemann, H. (1991), *Grundzüge der aristotelischen Sprachtheorie*, in *Geschichte der Sprachtheorie*, Schmitter, P. ed. Vol. 2 *Sprachtheorien der abendländischen Antike*, Tübingen, pp. 175–185.

<sup>98</sup> There is a passage in which Aristotle is even more explicit that names are symbols for *things – πράγματα*. He states that since we are not able to talk with each other by circulating the things themselves we use their names as symbols for them and often one assumes, that what follows from the names follows in the things as well, cf. *SE* 1, 165a6-9.

<sup>99</sup> Below I will claim that non-existent things should be excluded from the scope of “things”.

<sup>100</sup> Whitaker (1997: 14ff.) provides an overview about the suggestions that have been made so far.

perceivable, extra-mental things. Still, there exist also names for *things* no one has ever perceived, such as the *goat-stag* – *τραγέλαφος*. It is a “thing” that does not exist. Because of that, I do not assign it to the class I called *extra-mental things*. A goat-stag surely is something one can think about, however, as Aristotle insists, one cannot know what it is (*An. Post.* II.7, 92b6-7) since it lacks an essence. Nevertheless, Aristotle explicitly claims that the name “goat-stag” signifies something and that it is possible to provide a *logos*, in the sense of a formula, of its name.<sup>101</sup>

Thus, the scope of *thoughts* must be broader than the scope of *things*. An explanation for this is also given by Aristotle’s theory of *φαντάσια*. The *φαντάσια* is also able to recombine the contents of previous perceptions with another. Those combinations are causing fictional imaginations that can result in fantastic constellations such as a goat-stag, or a centaur, or a dream. For such things, there is no corresponding extra-mental thing.<sup>102</sup>

In this light, it seems plausible that Aristotle claimed that the significates of names are *primarily thoughts* and only secondarily things. A name can signify a thought without signifying an extra mental entity, whereas the opposite is apparently not possible. A name cannot signify a thing without also signifying a thought. The reason for this is given by the definition of names as *conventional signs* (*De int.* 16a26-29). They signify by *convention* and any *convention* is dependent on thinking agents.

101 Cf. also *De int.* 16a16-18 and for the nominal definition *An. Post.* 92b29f.

102 Ultimately these combinations can be traced back to an extra-mental sources, such as a man and a horse in the combination of the centaur. In this context it is often discussed whether the lack of an extra-mental thing can be classified as a lack of a reference. Though Aristotle’s distinction between thoughts and things resembles the distinction between meaning/sense and reference it has often been argued that these distinctions do not coincide. I will not address this issue in the following. Cf. Irwin (1982: 246f.). Moreover, Shields (1999: 79ff.) and Carson, S. (2003). *Aristotle on Meaning and Reference. History of Philosophy Quarterly* 20 (4): 319–337.

The last option from above is the assumption that names signify *logoi*.<sup>103</sup> Names can be *signs* – *σημεία* of *logoi* (cf. *Met.* IV.7, 1012a22-24; VIII.6, 1045a26). Here *logos* is understood in a broad sense meaning *formula, account or definition*. The following two passages from *Met.* VII.4 illustrate this:

Not every *logos* – *formula* is a definition – *ὀρισμός*:

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|---|--|
| <i>Met.</i> VII.4, 1030a6-9: ὥστε τὸ τί ἦν εἶναι ἐστὶν ὄσων ὁ λόγος ἐστὶν ὀρισμός, ὀρισμός δ' ἐστὶν οὐκ ἂν ὄνομα λόγῳ ταῦτο σημαίνῃ (πάντες γὰρ ἂν εἴεν οἱ λόγοι ὄροι· ἔσται γὰρ ὄνομα ὅτῳ ὄσων λόγῳ, ὥστε καὶ ἡ Ἰλιάς ὀρισμός ἐσται) | There is an essence in all those cases in which the <i>logos</i> is a definition. A definition is not given each time a name signifies the same thing as the <i>logos</i> (for then all <i>logoi</i> were definitions: there will be a name for any <i>logos</i> whatsoever, then the <i>Ilias</i> would be a definition). |
|---|--|

For every name there is a phrase which spells out what the name signifies:

|   |   |
|---|---|
| <i>Met.</i> VII.4, 1030a14-17: ἀλλὰ λόγος μὲν ἔσται ἐκάστου καὶ τῶν ἄλλων τί σημαίνει, ἐὰν ἢ ὄνομα, ὅτι τὸδε τῷδε ὑπάρχει, ἢ ἀντὶ λόγου ἀπλοῦ ἀκριβέστερος. | There will be a <i>logos</i> that signifies what it is of each of the other things, if there is a name <for them>, <this <i>logos</i> states> that this belongs to that, or instead of a simple formula <stating that this belongs to that> a more precise. |
|---|---|

The latter thought is also presented in the *An. Post.* II.7, 92b31-32. According to these remarks, the many ways in which a name is said can be regarded as the different *logoi*, for which there is only one name.<sup>104</sup>

In order to disambiguate a name, one could denominate the different *logoi* that are related to the same name with other names.<sup>105</sup>

Further, one could ask what it is that the *logos* signifies. If the *logos* is a definition it is clear that it is an *essence* that is signified by the *logos* (cf. *Top.* I.5, 101b38 and *Met.* VII.4, 1030a6-9). However, as stated, it is clear

<sup>103</sup> Cf. *De Int.* 4. In general, *λόγοι* are spoken sounds or written marks which signify something by convention and whose parts also signify something. For the sake of simplicity, in this context I generally speak about defining *λόγοι*. Not every *λόγος* is a defining one, but only those in which the *λόγος* is of something primary, and of this kind are those in which it is not the case that some one thing is said of some other thing. *τοιαῦτα δ' ἐστὶν ὅσα λέγεται μὴ τῷ ἄλλο κατ' ἄλλου λέγεσθαι* (*Met.* 1030a11).

<sup>104</sup> Aristotle also knows the opposite situation. There can be two names corresponding to one formula. The standard example for this case is *λάπιον καὶ ἱμάτιον* – cloak and coat. Cf. *Met.* IV.4, 1006b25-27; *Phys.* I.2, 185b20; III.3, 202b13; *Top.* I.7, 103a10.

<sup>105</sup> Cf. *Met.* IV.4, 1006a34-b2: *It makes no difference, if someone would assert that <'man'> signifies more <than one>, but only limited <things>, for one could set for each *λόγος* a different name – διαφέρει δ' οὐθὲν οὐδ' εἰ πλείω τις φαίῃ σημαίνει μόνον δὲ ὀρισμένα, τεθείη γὰρ ἂν ἐφ' ἐκάστῳ λόγῳ ἕτερον ὄνομα.*

that not every *logos* is a definition and hence not in every case where a formula can be given for a name there is an essence that is signified by it. One of Aristotle's standard examples for things lacking essence is, again, the *goat-stag*.<sup>106</sup> The account of "goat-stag" states presumably what it would be if it existed. Thus, nothing prevents assuming that Aristotle allows for a mental image of it. However, in such cases, one can only *know what the logos or the name signifies, if one utters 'goat-stag' – ἀλλὰ τί μὲν σημαίνει ὁ λόγος ἢ τὸ ὄνομα, ὅταν εἶπω τραγέλαφος* (*An. Post.* II.7, 92b6-7). Aristotle discusses definitions in the context of this passage. Broadly speaking, a *definition – ὁρισμός* is a *logos* that states *what* something is, i.e. a statement of the essence. This kind of *logos* is contrasted with those, which only tell us what a name signifies.<sup>107</sup> These *logoi* are strictly speaking no definitions. Often, they are called *nominal definitions* for they do not tell us what something really is, but only what the name signifies. Not everything that can be denominated has a definable nature. One can even *signify the things that are not – σημαίνειν γὰρ ἔστι καὶ τὰ μὴ ὄντα* (92b27-30). In this sense, the *logos* 'rational animal' is what the name 'man' signifies and 'fantastic wild goat-like animal' is what the name 'goat-stag' signifies.

One could object to the possibility that names signify *logoi*, and that this may not be a real alternative because they signify in the same way as names do. One could object that this alternative is based on an insignificant linguistic detour. Names and *logoi* only differ in their linguistic form. However, I claim that exactly this is what makes *logoi* so interesting when it comes to disambiguation of names. The formal difference of the *logoi* allows a comparison between them and thus makes a distinction of different senses possible. If something is said in many ways it is decisive that we are able to distinguish a different *logos* for every way in which the name is supposedly said. If there is more than one *logos*, the name is said in many ways.<sup>108</sup> I call this view the *plurality of logoi-view*.

<sup>106</sup> Cf. also *De int.* 16a16-18. There are other examples for such cases. Often Aristotle uses the Iliad or the accidental unity of the white man which he baptises "cloak" *Met.* VII.4, 1029b26-29 as illustrations of things lacking essences (in the strict sense).

<sup>107</sup> *An. Post.* II.7, 92b26-28.

<sup>108</sup> A *plurality of logoi-view* on multivocity is also formulated by Ferejohn (1980: 119).

ii) The different reasons account of multivocity: There is an alternative approach to multivocity that supposedly does not involve ambiguity. In this approach, the multiplicity of ways in which something is said is related to the multiplicity of reasons that explain why something belongs to a certain class F. For example, a sceptre may be royal *because* it belongs to a queen and honour may be royal, *because* a queen awarded it.<sup>109</sup> At the same time, the semantics of “royal” are considered to be untouched by this approach. Thus, multivocity and synonymy are compatible with this approach.

I assume Barnes’s (1995: 73)<sup>110</sup> approach to multivocity fits into this pattern. He explains his interpretation of multivocity using the example of *cause*:

“Rather, he seems to hold that there are four *types* or kinds of cause, so that he is committed to the view that the word “cause” or “aitia” (as it is used in sentences pertinent to the theory) **has a single meaning and is not ambiguous**. But although the word “cause” has only one (pertinent) sense, what it is for x to be cause of y may be different from what it is for z to be cause of w – x is cause of y, perhaps, insofar as x is the object which *produced* or made y, whereas z is the cause of w insofar as z is the *matter* or stuff of which w is composed. In general, Fs are so called in several ways if what it is for x to be F is different from what it is for y to be F” (bold prints are mine)

This approach is appealing as an option to discuss, but it is not clear how Barnes’s approach avoids ambiguity, at least not without a modification. Barnes proposes that it is not a problem to assert the following claims together:

1. x and z are both causes,
2. “causes” is said in many ways and
3. “cause” is unambiguous

**109** This example is used by Brentano (1981: 65): “We call royal not only the royal sovereign who bears the royal power, but we also speak of a royal sceptre and a royal dress, of royal honour, of a royal order, of royal blood, etc.” Brentano, F. (1862). *Von Der Mannigfachen Bedeutung Des Seienden Nach Aristoteles*. Freiburg im Breisgau.

**110** Barnes, J. (1995). 3 *Metaphysics*. In *The Cambridge Companion to Aristotle*, ed. Jonathan Barnes, 66–108. Cambridge.

I assume these three claims create tension, because of Barnes's explanation of *being said in many ways*. Let this be his *general claim*: In general Fs are said in many ways, "if what it is for x to be F is different from what it is for y to be F". How could one still assume that "F" is not ambiguous, if the same term "F" in two cases signifies two different accounts of *being F*? It is not obvious how this approach avoids the ambiguity of the term "cause", without modifying the general claim. I assume that Barnes applies "causes" in "x and z are causes" in a *generic sense*<sup>111</sup>, that equally applies to the two different kinds of causes x and z. I agree that with this generic sense (regardless of the question whether Aristotle accepted such a sense) the claim "x and z are causes" is unambiguous. But the reason why the generic sense of "cause" applies to the different kinds of causes is that *there is something* all kinds of causes have in common, let us call this "*causeG*". Next to the *causeG*-sense of "cause" there are several other senses of "cause" that refer to the individual kinds of causes 1–4.<sup>112</sup> Let me call them "causesK1–4".<sup>113</sup>

Because of that, I assume that Barnes's approach does not avoid ambiguity. The name "cause" is not merely a name for *causeG* but also for all *causesK1–4* which in this context lack a specific name. If one denies that "cause" is a specific name for *causesK1–4* then one has to consider the application of the term "cause" to a *causeK* as a metaphor from genus to species.<sup>114</sup> However, there are no reasons to assume that Aristotle believes that the name "cause" is used metaphorically when it is applied to a specific *causeK*. Consider the following analogy. If "cause" were unambiguous and only the name of *causeG* then an application to *causeK* would be analogous to an application of the name "animal" to

111 Not in the sense of a genus of things, but simply in the sense of *more universal*.

112 I.e. the efficient, formal, material and final cause.

113 There is a paper of Matthews (1972) that is concerned with the confusion of senses and kinds or senses and ways. It raises interesting questions about the way in which senses are confused with kinds. An elucidating example is the following. Matthews claims that if one thinks that 1. "'To exist' has ten senses"; and 2. "There are ten kinds of existence" are jointly acceptable one is to fall into the sense-kind confusion. In our example I avoid this confusion by suggesting that there is a generic sense of "cause" besides specific senses of "cause". Thus, there are five senses of "cause" but only four kinds of causes. Matthews mentions this strategy (1972: 151) but does not go into detail about it.

114 Cf. *Poet.* 21, 1457b6–9. For more remarks about metaphors cf. section 6.4.

the species *man*. Let us further assume that there is no such name as “man” and that we would call the *rational animal*, formerly known as “man”, simply “animal”. Then the name “animal” has become ambiguous between the genus *animal* and the species *rational animal*. In this sense I consider “cause” ambiguous between *causeG* and *causeK*, and further between the different kinds of *causesK14*. If one unqualifiedly asks “what it is for x or z to be a cause” in the way the general claim does, then the target of the question is not entirely clear since there are two possible targets: the answer could refer to *causeK* or to *causeG*. For this reason “cause” is still ambiguous, according to Barnes’s general claim. Since Barnes assumes a difference in *being F* for two x and y, his formulation in the general claim, i.e. “what it is for x to be F” and “what it is for y to be F” aim at the accounts of the specific kinds *FKx* (in my examples *causesK1* and *man*) and *FKy* which both may fall under a generic sense of *Fness (FG)* which is applied in the assertion “x and z are both causes”. In that assertion, one could only substitute “causes” with the definition of *causeG* and not with a definition of any specific *causeK* unless x and z are causes of the same kind. Because of that, I conclude that Barnes’s assertion that “the word ‘cause’ has only one (pertinent) sense” needs to be revised.

While I agree that if “cause” were only a name for *causeG* it would be used synonymously the term “cause” has only one “pertinent” sense if one disregards its other senses. To summarise, on the one hand, there is its generic sense of “cause” which applies to all kinds of causes synonymously. On the other hand, there are also specific senses because of the lack of different names for the different kinds of causes. Hence, the term “cause” cannot be considered as having only one sense. Thus, I assume, Barnes’s approach does not avoid ambiguity entirely, but only at the generic level. Modifying the *general claim* in the following way may preserve Barnes’s intentions:

*F is said in many ways if two things x and y can be F for different reasons.*<sup>115</sup>

<sup>115</sup> This approach is admittedly quite rough since it not clear what exactly “different reasons” means in this context.

In this way, multivocity does not imply ambiguity. Consider the term “boring”. One can assume that something is boring for various reasons. However, these reasons need not enter the semantics of the term “boring”.

One possible reason or motivation to interpret multivocity in this way is inspired by passages such as the following:

*Met.* IV.2, 1003b6-10: τὰ μὲν γὰρ ὄτι οὐσίαι, ὄντα λέγεται, τὰ δ' ὄτι πάθη οὐσίας, τὰ δ' ὄτι ὁδὸς εἰς οὐσίαν ἢ φθοραὶ ἢ στερήσεις ἢ ποιότητες ἢ ποιητικὰ ἢ γεννητικὰ οὐσίας ἢ τῶν πρὸς τὴν οὐσίαν λεγομένων, ἢ τούτων τινὸς ἀποφάσεις ἢ οὐσίας.

Some things are called beings **because** they are substances, others **because** they are affections of substances, others **because** they are the way towards a substance or <they are> destructions or privations or qualities or productive or generative of a substances, or they are of those things which are said to be in relation to a substance or because it is the negation of something of these things or of a substance <itself>.

In this passage Aristotle lists various reasons why different things qualify as *being*. There are two other passages which proceed in the same pattern. They address *potencies* (*Met.* V.12, 1019b35-1020a6) and *contraries* (*Met.* V.10, 1018a31-35). In the current passage, nothing seems to necessitate that “being” is ambiguous. There might be just one universal sense of “being” that is said synonymously of all beings. By considering passages of this kind the different reasons account of multivocity seems to be a viable interpretation of multivocity. Although I considered the way in which Barnes stated his approach, imprecise it was possible to preserve it with some modification. Nevertheless, this approach is only applicable to a minority of passages since one cannot assert without restrictions that terms such as “being”, “unity” or “potency” in Aristotle are not ambiguous, acknowledging passages such as the ones mentioned do not state their ambiguity explicitly either.

One may consider the following passage as a critique of the different reasons approach. For instance, in *Top.* I.15, 106a18 Aristotle advises that it is not enough to merely state that something is said in many ways, but that one must also try to render the different accounts. This directive revisits the thought expressed by Barnes’s unmodified general claim<sup>116</sup> which has been determined as establishing ambiguity.

<sup>116</sup> In general Fs are said in many ways, “if what it is for x to be F is different from what it is for y to be F”.

*Top.* I.15, 106a1-8: τὸ δὲ ποσαχῶς, πραγματευτέον μὴ μόνον ὅσα λέγεται καθ' ἕτερον τρόπον, ἀλλὰ καὶ τοὺς λόγους αὐτῶν πειρατέον ἀποδιδόναι, οἷον μὴ μόνον ὅτι ἀγαθὸν καθ' ἕτερον μὲν τρόπον λέγεται δικαιοσύνη καὶ ἀνδρεία, εὐεκτικὸν δὲ καὶ ὑγιεινὸν καθ' ἕτερον, ἀλλ' ὅτι καὶ τὰ μὲν τῷ αὐτῷ ποιά τινα εἶναι, τὰ δὲ τῷ ποιητικῷ τινος καὶ οὐ τῷ αὐτῷ ποιά τινα εἶναι. ὡσαύτως δὲ καὶ ἐπὶ τῶν ἄλλων.

As regards the number of ways [in which a term is used], we must not only treat of those terms which are used in different ways, but we must also try to render their definitions; e.g. we must not merely say that justice and courage are called good in a different way, and that what conduces to vigour and what conduces to health are called so in another, but also that the former is so called because of a certain intrinsic quality they themselves have, the latter because they are productive of a particular result and not because of any intrinsic quality in themselves. Similarly, also in other cases.

This passage supports the *semantic approach to multivocity* since Aristotle explicitly demands different *logoi* for each way in which something is said to be F. Further support for the semantic approach to multivocity can be given by the fact that Aristotle sometimes uses clarificatory clauses in which he states that *what is said in many ways signifies many things* – πλείω σημαίνειν or πολλά σημαίνειν. This has also been noticed by Bonitz, who even states that *πολλαχῶς λέγεσθαι* is synonymous with *πλείω σημαίνειν*.<sup>117</sup> Some evidence for this claim is given in the following passage:

*Top.* V.2, 129b30-32: Ἐπειτ' ἀνασκευάζοντα μὲν εἴ τι τῶν ὀνομάτων τῶν ἐν τῷ ἰδίῳ ἀποδοδομένων πλεοναχῶς λέγεται, ἢ καὶ ὅλος ὁ λόγος πλείω σημαίνει.

in the next topos for destructive arguments see if any of the names which are part of what has been given <in the account> is said in many ways, or whether the whole account signifies many things

In this context, *πλείω σημαίνειν* seems to be the function of *πολλαχῶς λεγόμενα*; it is what they do. Moreover, in *SE* 10, 170b12ff., Aristotle argues against the distinction *arguments against words* – πρὸς τοῦνομα λόγους and *arguments against thought* – πρὸς τὴν διάνοιαν. He denies that there is real distinction corresponding to these labels. In that context, some of Aristotle's standard examples for *πολλαχῶς λεγόμενα*, namely *being* and *unity*, are said to *signify many things* (*SE* 10, 170b21-22: *being and unity signify many things* – τὸ ὄν ἢ τὸ ἐν πολλά σημαίνει). From this passage we can directly infer that Aristotle talks about the terms “τὸ ὄν” and “τὸ ἐν” as names which signify not one but *many*

117 Bonitz *Ind. Arist.* 615a43-44: *Top.* V.2, 129b31-130a28.

*things*. There are several other passages which support the connection of *πολλαχῶς λεγόμενα* and *πολλὰ σημαίνειν*: cf. *Met.* VII.1, 1028a10-14, *DA* I.5, 410a13-15, *Met.* VI.2, 1026a33-b4; *Met.* XIV.2 1089a7-8). In the following passage, the semantic approach of multivocity is applied, and it is especially evident that multivocity is connected to ambiguity.

*Met.* VIII.2, 1042b25-28: ὥστε δῆλον ὅτι καὶ τὸ ἐστὶ τοσαυταχῶς λέγεται· οὐδὸς γὰρ ἔστιν ὅτι οὕτως κείται, καὶ τὸ εἶναι τὸ οὕτως αὐτὸ κείσθαι σημαίνει, καὶ τὸ κρύσταλλῳ εἶναι τὸ οὕτω πεπυκνώσθαι. Just it is clear that the “is” is said in these many ways: For this is a threshold, because it lies thus and so, and “being” (τὸ εἶναι) signifies its laying thus and so, and “being ice” <signifies> being solidified thus and so.

One usually refers to this passage in order to illustrate that “being” has many different senses. Aristotle clearly states that “τὸ εἶναι” signifies different things in different applications. “τὸ εἶναι” can signify *laying thus and so* – τὸ οὕτως αὐτὸ κείσθαι and “τὸ κρύσταλλῳ εἶναι” signifies – *σημαίνει to be solidified thus and so* – τὸ οὕτω πεπυκνώσθαι. The same pertains for other cases. Hence there is a vast multiplicity of senses of “τὸ εἶναι”.<sup>118</sup> According to this passage, it would not be appropriate to consider “τὸ εἶναι” as an unambiguous term. It is clearly stated that “τὸ εἶναι” signifies *more than one thing* – i.e. *πλείω*.

To conclude, there are two accounts of multivocity. Thus, “multivocity” is itself said in many ways. The different reasons account is only applicable in a minority of cases while the semantic account of multivocity is more widely applicable. From this, one may formulate the following rule: In Aristotle, ambiguity is sufficient for multivocity, but multivocity is not sufficient for ambiguity, at least not in every case. However, although the different reasons account does not necessitate ambiguity, it also does not exclude it. It is neutral regarding the question

<sup>118</sup> Cf. also *DA* II.4, 415b13: *to be for living beings is to be alive, but cause and principle of them is the soul* – τὸ δὲ ζῆν τοῖς ζῴσι τὸ εἶναι ἐστίν, αἰτία δὲ καὶ ἀρχὴ τούτου ἢ ψυχῆ. In this passage “to be” for a living thing means “to be alive”. Moreover, cf. *Phys.* I.3, 186b3-4 where Aristotle mentions that “being” signifies many things – πολλὰ τὸ ὄν σημαίνει. This quote is taken out of its context. Aristotle argues against the Parmenidean claim that *being signifies one thing* – τὸ ὄν σημαίνειν ἓν. Nevertheless, in that chapter it is quite clear that Aristotle indeed adheres to the view that “being” signifies many things. Cf. also his claim that in *Phys.* I.2, 185b32-34 that *the things that are are a plurality* – πολλὰ δὲ τὰ ὄντα, either *in account* – λόγῳ or *in division* – διαίρεσει. Moreover, cf. *Phys.* I.3, 186a30-31: things such as whiteness and the thing that is white differ *in being* – τῷ εἶναι ἕτερον.

of ambiguity. Hence, even if something is multivocal according to the different reasons account of multivocity, there may be different senses of the term that is said in many ways which then satisfies the semantic account of multivocity. Unless stated otherwise, the following sections pursue the semantic account of multivocity.

## 2 On Multivocity, Homonymy and Synonymy and Their Relation in Aristotle

### 2.1 Possible Views on Their Relation

Having investigated multivocity in the previous chapter, I will clarify the notions of homonymy and synonymy and their relations to multivocity. To analyse and assess the relationship of these notions, one has to consider the various occurrences and applications in the corpus. A comparison of the different occurrences reveals what they have in common. Often, scholars propose that Aristotle's use of these notions, especially that of homonymy, allegedly changed from earlier to later works. The most prominent adherent of this thesis is Owen.<sup>119</sup> Whether there is a development of Aristotle's thoughts or not, the following distinction shows that Aristotle does not always follow a strictly regimented theory in his use of the terms "homonymy", "synonymy", and "being said in many ways". From this, however, one cannot infer that his doctrine changes correspondingly.

I distinguish *technical* from *non-technical* occurrences of homonymy and synonymy in the corpus. It is still a matter of debate what Aristotle's technical accounts of these concepts are exactly, but it is widely agreed that the definitions of the *Categories* set the pattern for these notions.<sup>120</sup> Non-technical are those occurrences of the term "homonymous" (a) in which one would expect the text to provide "synonymous" instead (cf. *GC* I.10, 328b21; *Met.* I.6, 987b7-10; *Met.* I.9, 990b6; *Met.* VII.9, 1034a22-23, b1<sup>121</sup>; moreover, *Met.* XIII.4, 1079a2; *Met.* XIII.10, 1086b27) or (b) those in which it merely has its literal meaning, i.e., "having the same name" (a combination of *ὁμοιος* and *ὄνομα*) (cf. *Phys.*

119 For further remarks on his thesis, cf. section 6.1.1.

120 See also *Top.* VI.10, 148a23-27. The definitions of homonymy and synonymy will be discussed in section 3 of this study.

121 Concerning the latter passage, one often speaks of "synonymy-principle of generation", i.e. a (corporeal) house comes into existence through a house (in thought), although in most editions we find "ἐξ ὁμωνύμου").

VII.3, 245b16; *PA* I.3, 643b7, and *PA* II.2, 647b18). The latter non-technical use does not tell us whether there is or is not anything the two things share beyond the name.<sup>122</sup>

The term “synonymy” literally denotes almost the same, something like “commonly named” (a combination of *σύν* and *ὄνομα*). By only considering the meaning of the compounds and/or their components in isolation, i.e. without a technical approach, one can barely distinguish homonymy from synonymy. Similar to the case of (a) in *Top.* VIII.13, 162b38 the text provides “synonymous” while “homonymous” should be given, however, the case of synonymy bears another vagueness.

As stated earlier, the standard Aristotelian notion of synonymy is what is presented in the *Categories*. This notion of synonymy is a relation between (numerically different) things which both have a common name, and the logos that corresponds to the name is the same.<sup>123</sup> In contrast to this, there is the “modern” synonymy, which is a relation between different names referring to the same thing. Speusippus introduced this as *Polyonymy*.<sup>124</sup> Aristotle knew this notion, albeit not under this name. One can find his standard example for *polyonymy* in *Top.* I.7, 103a9-10: What is one in number but has many names like *dress or cloth* – *οἶον λώπιον καὶ ἱμάτιον*, however, according to the definition of synonymy as mentioned earlier this is not a technical case of synonymy for Aristotle.<sup>125</sup> If one examines Aristotle’s remarks in *Rhet.* III.2, 1404b37-1405a2, one could be puzzled by his choice of terms. He states *Synonymies <are useful> for the poet, I call ordinary and synonymous e.g., “advancing” and “proceeding”, for both are ordinary <words> and synonyms to each other* – *τῶ ποιητῆ δὲ συνωνυμία, λέγω δὲ κύρια τε καὶ συνώνυμα οἶον τὸ πορεύεσθαι καὶ τὸ βαδίζειν· ταῦτα γὰρ ἀμφοτέρα καὶ κύρια καὶ συνώνυμα ἀλλήλοισι*. It is evident that in the example given, there are two different names involved, and the notion described in

122 Whether the two things with the same name are related by homonymy or synonymy, or in any other way cannot be determined if we only know that two things have the same name.

123 For thorough discussion of this notion see section 3 of this study.

124 Simpl. in Arist. Cat. CAG VIII, p. 29,5 ff.; 36,25 ff.; 38,11 ff.

125 Ammonius (1991: 23) also wondered in his commentary on the *Categories* of why Aristotle does not discuss the contraries of homonymy and synonymy, i.e., polyonymy and heteronymy, since these were apparently well-known concepts in the Academy.

this passage is what Speusippos called *polyonymy* or what also is called “modern” *synonymy*. This case repeats in *SE* 5, 167a24.

I assess the non-technical uses of homonymy and synonymy as occasional reversions to looser usage. I do not think that these occasional deviations compromise an investigation of his technical accounts of these notions. For the present purposes, it is important to note that my approach is aiming at the most appropriate depiction of the relation between the three concepts multivocity, homonymy and synonymy. It is not trying to incorporate, harmonise or explain *all* non-technical occurrences of these concepts. Nevertheless, the exact nature of these technical uses remains to be clarified and is subject of this enquiry.

The relation of homonymy and multivocity has often been discussed by several scholars without paying enough attention to the concept of synonymy.<sup>126</sup> Yet, it is impossible to assess their relation accurately without also assessing the way synonymy is related to these two. The aim of the discussion in the following sections is firstly to present three different views of the relation of homonymy, multivocity, and synonymy, and then, secondly, to narrow down and justify which model of the relations of these concepts describes Aristotle’s doctrine in the best way.

The broader purpose of this conceptualisation is the determination of the application area of the PHR.<sup>127</sup> I propose there are three ways the relation of multivocity, homonymy, and synonymy can be dealt with and sometimes is dealt with in the literature. The three views originate from different interpretations of Aristotle’s works. The last view (the

<sup>126</sup> As e.g., in Irwin (1981), Brakas (2011), Hintikka (1959), and also in Owens (1978<sup>3</sup>). In contrast to these studies, one has to mention Leszl (1970: 123-126), who divides the contributions to the PHR into those who take a synonymy view of it and those, who take a homonymy view of it. Moreover, there are two other possible views he discusses, which however, are not of importance in the present context. Leszl categorises the PHR as a certain type of synonymy (cf. especially Leszl (1970: 135-155)).

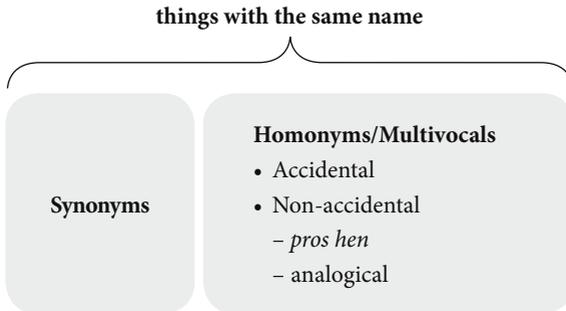
<sup>127</sup> Even though the PHR is not a certain kind of multivocity or homonymy, the following diagrams might suggest something that looks like a generic subordination. This is not intended. The PHR, just as the analogy, are possible explanations for connections between multivocals, as I will argue. Some exciting remarks about possible views of the PHR are provided by Leszl (1970: 123-126). He gives a list of four possible interpretations of “focal meaning.” His different options also presuppose different views of the relation of homonymy, synonymy, and multivocity, which is discussed in the present section. For some critical remarks on his distinctions cf. Shields (1999: 104 n.125).

DefH-view) reflects my own exegetical efforts.<sup>128</sup> Usually, a detailed discussion of these three options is not available.<sup>129</sup> The controversy about these alternatives is to a certain degree about terminological regimentation and not doctrinal. The reasons that support the preferred view of the present study also have a doctrinal impact as it is apt to implement a case of multivocity (namely *synonymous multivocals*)<sup>130</sup> that is not covered by the other two models.<sup>131</sup>

### I. The inflationary account of homonymy – InffH

Theses:

- 1) “homonymy” and “multivocity” can be used interchangeably (With “some” exceptions)
- 2) The standard use of “homonymy” in Aristotle covers more than accidental homonymy.
- 3) Homonymy and synonymy are mutually exclusive
  - a) Hence multivocals do not appear in the diagram as a third class
- 4) Homonymy is inflated to cover the following kinds:
  - a) Accidental homonyms
  - b) Non-accidental homonyms: *Pros hen* and analogical cases



**128** Of course, my exegetical work is influenced by the works of several other scholars.

**129** An exception is Irwin (1981) who discusses the first and the third, i.e., what he calls the “moderate” and the “extreme” view.

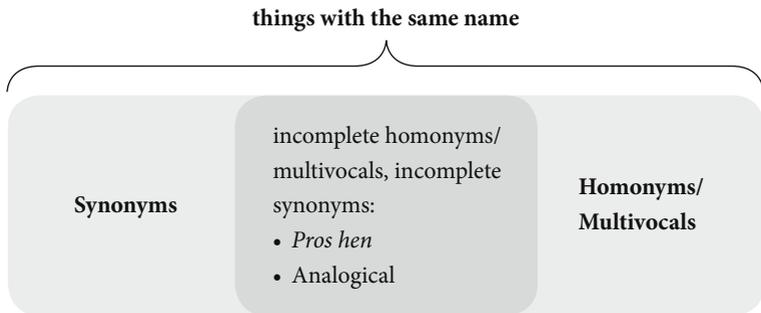
**130** This class is explained in section 2.3.2.

**131** This is actually a matter of debate. What I call synonymous multivocals sometimes is not considered synonymous but homonymous.

## II. The “tertium quid” account of homonymy and synonymy.

Theses:

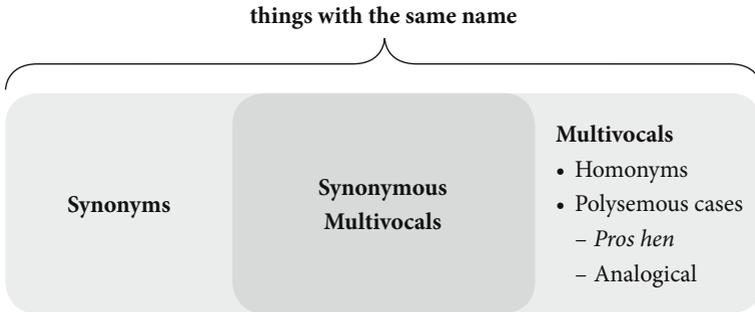
- 1) *With some exceptions* “homonymy” and “multivocity” can be used interchangeably
- 2) Homonymy and synonymy are overlapping. There are cases which can neither be determined as completely synonymous nor as completely homonymous
- 3) Homonymy and synonymy are not mutually exclusive
- 4) One can account for the tertium quids in different ways, either as incomplete synonyms or as incomplete homonyms
- 5) It is not possible to accommodate synonymous multivocals in this approach



## III. The deflationary account of homonymy – DefH

Theses:

- 1) “Homonymy” means “accidental homonymy”
- 2) Homonymy and synonymy are not mutually exclusive
- 3) Homonymy is a kind of multivocity
- 4) There are different kinds of multivocals
  - a) Homonymous multivocals
  - b) Polysemous Multivocals
    - i) *Pros hen* Multivocals
    - ii) Analogous Multivocals
  - c) Synonymous Multivocals (multivocal synonyms re-spectively)



A note on the diagrams: The entirety of the area that is divided up has no name in Aristotle. One can call it “things with the same name” as indicated by the vertical bracket on the right-hand side. The three diagrams are supposed to show that it is possible to divide those things in different ways. Amongst other things, the most conspicuous advantage of the latter view is that it contains a further subclass (*synonymous multivocals*), whereas one cannot account for them with the other two approaches of the relationship of homonymy, multivocity, and synonymy.

Overall, it is possible to correlate the most prominent scholarly contributions to these three approaches. The assignment is possible in broad outline only since many contributions do not primarily focus on a reconstruction of the relationship of homonymy, synonymy, and multivocity. Nevertheless, most contributions apply at least an implicit general framework that determines the relationships of these notions. Two of the most recent monographs in this field topic, i.e. Shields (1999)<sup>132</sup> and Ward (2008), but also Irwin’s (1981) and Hamlyn’s (1977) contributions, respectively, apply a framework that is represented by InfH. Owen’s position can be assigned to the *tertium quid* view which involves something in between homonymy and synonymy. Sometimes he states that “focal meaning” is to be seen as an extension of synonymy rather than of homonymy. At any rate, in his opinion, the distinction between homonymy and synonymy is not exhaustive and allows for a

132 Lewis (2004) follows Shields’s terminology.

tertium quid (Owen (1960: 168, 188; for tertium quid 180, 181)).<sup>133</sup> In addition, although Owen does not refer to it, there is indeed a passage where Aristotle assimilates *pros hen* with synonymy, at least indirectly, by stating that *pros hen* is in a way *kath hen* as well (*Met.* IV.2, 1003b14-17).<sup>134</sup> Moreover, Alexander<sup>135</sup> mentions that a tertium quid view, is plausible even though Alexander also shows a tendency to the DefH-view. Hintikka (1959) follows him in this regard.

The difficulty allocating Owen's position rests on the fact that he adheres to a developmental thesis. This thesis claims that the relation of the three notions is changing throughout Aristotle's works in line with his philosophical development. Also, Brakas (2011) and Owens (1978<sup>3</sup>) distinguish early and mature views, and like Owen (1960), they propose a developmental thesis and assign the views accordingly. Irwin (1981) accepts the developmental thesis but nevertheless considers the InfH view as the most appropriate approach to assess Aristotle's notion of homonymy in general (as does Owens (1978<sup>3</sup>: 118)). Owen (1960: 183) argues that there was a "period" (he refers to the developmental stage of the *Organon*) in which Aristotle worked with an exhaustive *dichotomy* of synonymy and homonymy. However, then, he claims, Aristotle *changed his mind*<sup>136</sup>. Owen assumes that Aristotle came to recognise a third possibility (tertium quid) in a later period (he refers to the *Metaphysics* IV).<sup>137</sup> He argues<sup>138</sup> that the reason why *focal meaning* is absent in parts of the *Metaphysics* (*Met.* I.9, 991a2-8 and *Met.* XIII.4, 1079a33-b3) is that he deliberately ignored it as part of his polemic against Academic

133 Senfrin-Weis (2009: 263 n.4) asserts the tertium quid view is "certainly wrong". Further she thinks that any view that affiliates *pros hen* with synonymy is wrong as well. Senfrin-Weis, H. (2009). *Pros hen and the foundations of Aristotelian Metaphysics*. In *Proceedings of the Boston Area Colloquium in Ancient Philosophy*, 24 (2008), ed. Gary M. Gurtler, John J. Cleary, J. J. Cleary and Gurtler, 261–285. Leiden.

134 This passage plays an important role in the distinction between *kath hen* and *pros hen sciences* cf. section 8.5.

135 *In Arist. Metaph.* p. 241, line 5–9 ff.

136 I will discuss what is meant with "change of mind" in section 8.2.

137 Shields (1999: 42) argues that a *tertium quid* is not necessary to explain the change. He, as Irwin, instead argue that Aristotle's notion of homonymy simply is broader than it is sometimes assumed.

138 Cf. Owen (1960: 181–182).

views.<sup>139</sup> According to my own research, I share the developmental thesis Owen suggests. But unlike Irwin (1981), I assume that the DefH-view is the most appropriate approach to assess Aristotle's notion of homonymy in general.

The following sections attempt to justify the DefH-view. The conclusion is that the reasons to consider the DefH-view as the most appropriate interpretation prevail. This approach creates the most coherent terminology with fewest deviations and exceptions. As these sections convey, there are many passages in many different works of Aristotle that suggest a difference between multivocity and homonymy. These sections aim to demonstrate that the assumption of co-extension of multivocity and homonymy as a general doctrinal view of Aristotle does not represent Aristotle's doctrine on these matters in an appropriate way. I will argue for a narrower notion of homonymy, i.e. one that is seemingly orientated on Aristotle's "mature" works (in this context I refer to the *Metaphysics* and the *GC*), however, I will argue that there are many reasons which reveal that this allegedly "mature" notion of homonymy indeed coincides with the notion of homonymy that is defined in the *Categories*. In section 1.4, I will also address the problems of the DefH-view and suggest a solution.

## 2.2 The Relation of Multivocity, Homonymy, and Synonymy – Arguments for DefH

As stated earlier, the relation of homonymy and multivocity has often been discussed.<sup>140</sup> Yet, it is still a matter of ongoing debate. I think the main problem of adherents of the InfH-view, such as Shields (1999), Ward (2008), or Irwin (1981), is that they rely without necessity on the idea that homonymy and synonymy must be mutually exclusive.<sup>141</sup> When it comes to cases such as "being" or "healthy" which are said in many ways but not homonymously they must inflate the notion of homonymy to avoid synonymy in such cases and to maintain the exhaus-

<sup>139</sup> For the full remark cf. section 4.1.2 footnote 251.

<sup>140</sup> As stated earlier, especially important for this study are the views of Irwin (1981), Shields (1999), Owen (1960), Owens (1978<sup>3</sup>), Hintikka (1959) and Brakas (2011).

<sup>141</sup> So does Shields (1999: 23

tive distinction of homonymy and synonymy. As these conclusions are unsatisfactory, I argue for an alternative, the DefH-view.

The following example shall serve as a starting point to enter the discussion:

Assume there are precisely two properties, which can be denominated by the term “sharp”, i.e. the sharpness of a tone and the sharpness of a knife. The application of “sharp” to the knife signifies the sharpness of a knife. The application of “sharp” to the tone signifies the sharpness of a tone. The difference can be made obvious by *comparison of their accounts*:

1. “sharp” – knife → def. “what it is to be sharp for a knife”  
e.g. “to cut well”
2. “sharp” – tone → def. “what it is to be sharp for a tone,”  
e.g. “to be of high frequency” or something similar.<sup>142</sup>

According to the semantic account of multivocity, the term “sharp” in this example is multivocal. The sharpness example is one that occurs in the context of tests for homonymy in *Top.* I.15, 107b13-18. “Sharp” is used homonymously, since the two ways of being sharp are not related. According to this test, one has to verify whether a comparison is possible (cf. also *Phys.* VII.4, 248b6-12). One can call this the *commensurability-test*. One has to ask whether a comparison is valid in two cases where something has a common name.<sup>143</sup> If the answer is negative, it is a case of homonymy. This is the case in the example given. One cannot compare the sharpness of a knife with the sharpness of a tone. Aristotle infers from this that *being sharp* is said of them homonymously. Evidently, this test shows that the multivocal “sharp” is said homonymously. This claim is only informative if there is a difference between multivoc-

<sup>142</sup> Cf. *Top.* I.15, 107a36-b5.

<sup>143</sup> One has to presuppose that Aristotle thinks of terms that allow comparison and not of terms that disallow it as e.g. the term “animal”. Even if “animal” was said synonymously a comparison would not be possible, but from this it does not follow that it is used homonymously. Hence, only in some cases in which comparison is not possible one can infer homonymy.

ity and homonymy. Whether there is a difference between these notions and what it consists of is a matter of debate.

Since Aristotle clearly states in several passages that something that is said in many ways is not necessarily said homonymously, it is clear that these notions do not coincide. Nevertheless, in the literature, this aspect is sometimes neglected, ignored or considered trivial, since in other passages these two notions apparently coincide. Because of the very close relation of homonymy and multivocity, the assumption prevails that they are “indeed co-extensive” (cf. Shields (1999: 10; 22ff; also 219 n. 284)): what is said in many ways is said homonymously and what is said homonymously is said in many ways.<sup>144</sup>

There are several reasons to regard the assumption of co-extension of homonymy and multivocity as an inappropriate assessment of the relation of the two in Aristotle. Owens (1978<sup>3</sup>) restricts the assumption of co-extension to certain works, i.e. the *Top.* and the *SE*, which in fact only pertains to certain parts of these works.<sup>145</sup> Brakas (2011: 148) presents a similar approach. He suggests that Aristotle changed his usage of homonymy throughout his works, assuming that in his earlier works, such as the works of the *Organon*, multivocity and homonymy were the same thing. In his later works, “his views shift” until he reaches the point where homonymy implies multivocity but not vice versa. Other scholars such as Hintikka (1959) refuse to identify them in any context whatsoever. The four scholars mentioned propose three positions with two extremes and one moderate view. One can identify one extreme as the assumption of co-extension (Shields), whereas the other is the

<sup>144</sup> This position is also Owen's in Owen (1960: 182 n. 5): “If a word is *pollachôs legomenon* then it is a case of homonymy, requiring different definitions in different uses”. Owen refers to *Top.* 106a1-8. Also Shields (1999: 23 n. 22) refers to Owen and the same passage Owen quotes. However, I do not see how that passages in any way can be used to justify Shields's assessment that it is Aristotle's dominant practice (cf. also Shields (1999: 42)) to use “the terms interchangeably – where the interchange, as in *Topics* i. 15, esp. 106a 1–8, heads in both directions indifferently.” In addition, Shields (1999: 219 n. 284) claims “his [Aristotle's] commitment to the multivocity of being is sufficient for its homonymy.” The present study claims instead: if something is homonymous it is also a multivocal and not the other way around.

<sup>145</sup> It is not correct that Aristotle identifies homonymy and multivocity in the *Topics*, since also the *Topics* there is a passage (*Top.* II.3, 110b16-22) in which Aristotle clearly distinguishes the two.

exclusion of co-extension (Hintikka). Both extreme positions assume that Aristotle's terminology of multivocity and homonymy is consistent throughout his works, at least for the most part. Still, one can argue with respect to the relevant passages that the DefH-view represents Aristotle's terminology more appropriately than the InfH-view. I mean by "more appropriately" that the DefH-view with its clear distinction of homonymy and multivocity does not only represent Aristotle's most mature view on the relation of homonymy and multivocity, but that its narrow notion of homonymy is also adequate to interpret Aristotle's *Categories*. By proposing this, I do not want to deny development in Aristotle's thought about these notions, but there is no reason to assume a radical change from earlier to later works with regard to the question of whether there is a narrower or a broader notion of homonymy. What Aristotle develops in his *Metaphysics* and *GC* is a clear articulation of the difference between homonymous and non-homonymous multivocals. In comparison with other scholars who work on homonymy and multivocity in Aristotle, my deflation of homonymy is compensated for by inflating of the notion of multivocity, which will be identified as the notion that is broader and more flexible in contrast to the notion of homonymy.

The subsections hereunder argue for, but also discuss and restrict, the following claims by referring to the relevant passages in order to provide a reassessment of the relations of homonymy, synonymy, and multivocity supporting the DefH-view. The main focus lies in showing *that* there is a difference.

1. Homonymy and multivocity are not co-extensive
2. Homonymy in Aristotle is *homonymy ἀπὸ τύχης* (cf. *EN* I.6, 1096b27)
3. Homonymy is a kind of multivocity

The result is that everything that is said *homonymously* is *said in many ways*, whereas the converse is not true. From this, it is clear that homonymy is a kind of multivocity. However, it is only a kind of multivocity if one defines the standard use of homonymy as what is called accidental homonymy. Moreover, the relation between synonymy and multivoc-

ity will be further determined. These notions are not mutually exclusive. There is a hybrid class of synonymous multivocals or multivocal synonyms, which needs to be distinguished from other multivocals or synonyms.

### 2.2.1 Multivocity and Homonymy are not Co-Extensive

There are several crucial passages contrasting homonymy with multivocity.<sup>146</sup> Most prominent and instructive is the following passage, which is also most important in the application of the PHR to “being” which I mentioned in the introduction already.<sup>147</sup>

|  |   |
|--|---|
| <i>Met.</i> IV.2, 1003a33-34: τὸ δὲ ὄν λέγεταμὲν<br>πολλαχῶς, ἀλλὰ πρὸς ἓν καὶ μίαν τινὰ<br>φύσιν καὶ οὐχ ὁμωνύμως | Being is said in many ways, but <it is said<br>so> according to one, i.e. one nature, and not<br>homonymously |
|--|---|

Aristotle does not only tell us here that “the things that are” is said in many ways, he is more specific. He actually tells us three things: (1) that “being” is said in many ways, *and* (2) that every being is called “being” with reference to some one thing, (i.e. a single nature), *and* (3) moreover, he qualifies his statement by saying “being” *is not said homonymously* which almost sounds like a conclusion. One can consider the first καὶ in this passage explicative. The formulations need to be precise at the beginning of book IV where Aristotle begins with his justification of the possibility of the science of being qua being. The first καὶ clearly specifies the ἓν, which otherwise would be completely unspecified. By

<sup>146</sup> All following passages already have been or will be quoted in the following: *Met.* IV.2, 1003a33-34; *Met.* IX.1, 1046b4-7; *GC* I.6, 322b29-32; *Met.* VII.4, 1030a29-b3, and also *Top.* II.3, 110b16-22; homonymy is also denied of some multivocals in *EE* VII.2, 1236a16-22.

<sup>147</sup> The thesis that being is not said homonymously is found again in *Met.* VII.4, 1030a29-b3. Though “πολλαχῶς” is not explicitly mentioned it is clear from the “μήτε ὡσαύτως” (a35) and the “οὔτε καθ’ ἓν” (b3) that “being” also is not said synonymously. Moreover, Aristotle repeats what he said in *Met.* IV.2 that being is said like the healthy and the medical said with relation to one, i.e. πρὸς ἓν.

the addition καὶ οὐχ ὁμωνύμως it is clear multivocity and homonymy cannot be co-extensive but related in a different way.<sup>148</sup>

The denial of co-extension does not guarantee that multivocity contains homonymy as a subcategory. Nevertheless, in the section after the next (2.2.3), two further passages will establish and justify this claim. Before entering the discussion of these passages, the standard interpretation of the present and related passages will be reassessed.

### 2.2.2 Homonymy is *Ἠομοῶνημυ ἀπὸ τύχης*

It has been proposed that Aristotle uses the term “homonymy” ordinarily when there is *no connection* between things with the same name, other than by name.<sup>149</sup> This assumption has been around since Alexander:<sup>150</sup> τὰ κυρίως ὁμώνυμα λεγόμενα, ἃ ἔστι τὰ ἀπὸ τύχης: Aristotle’s *ordinary* – κυρίως use of “homonymy” refers to *accidental homonyms* – τὰ ἀπὸ τύχης (cf. for this label *EN* I.6, 1096b27, similarly in *EE* VII.2, 1236b25). I propose there are two main reasons for this claim. One reason is given by the definition of homonymy in the *Categories* (cf. chapter 3 of this study for a thorough analysis). Yet, the reference to this definition alone is not fully convincing because the text in the definition of homonymy in the *Categories* contains an ambiguity which does not exclude a more comprehensive notion of homonymy. I discuss these problematic aspects of the definition in section 3.4. In addition to the first reason there are passages where Aristotle denies homonymy of some multivocals.<sup>151</sup> In those passages, it is clear that Aristotle applies a narrow notion of homonymy. These two reasons support the DefH-

148 If one disregards this difference one might come to assertions like the following: Brentano (1862: 6) asserts that “Das Seiende ist ein ὁμώνυμον”. This quote is especially careless because Brentano in his work simply does not quote the last three words of the passage – καὶ οὐχ ὁμωνύμως – maybe he abstained from doing so because otherwise his statement would sound conflictual.

149 Cf. Hintikka (1959: 139).

150 Alexander, *In Aristotelis Metaphysica Commentaria* ed. M. Hayduck (1891: 241, page lines 25–26).

151 As mentioned earlier: *Met.* IV.2, 1003a33–34; *Met.* IX.1, 1046b4–7; *GC* I.6, 322b29–32; *Met.* VII.4, 1030a29–b3, and also *Top.* II.3, 110b16–22; homonymy is also denied of some multivocals in *EE* VII.2, 1236a16–22.

view. However, it remains an exegetical assumption that is only partly warranted since there are other passages where Aristotle's notion of homonymy appears not as restricted. This is particularly evident in passages using homonymy and multivocity interchangeably.<sup>152</sup> Many scholars, such as Shields (1999), Ward (2008), Irwin (1981) refer to such passages to justify that Aristotle's notion of homonymy is comprehensive.

I think an assessment of Aristotle doctrine of homonymy on this basis inflates it and threatens its distinctiveness. The applicability of such a comprehensive notion is restricted to select passages and requires scholars who apply it to provide a special rationale for those passages where Aristotle denies homonymy but not multivocity.

The rationale provided is the following: There is an assumption that I call the *standard auxiliary assumption* (SAA). It underlies many interpretations of passages in which Aristotle denies homonymy but not multivocity. The SAA proposes that the denial of homonymy in such passages only covers a specific kind of homonymy, namely *accidental homonymy*, i.e. those cases where the homonyms are not associated by definitional overlap.<sup>153</sup> At the same time, it proposes that homonymy "in general" is not denied.<sup>154</sup> Homonymy is not denied as multivocity is not denied and multivocity warrants non-synonymy, at least according to the InfH-view. This is crucial since the InfH-view contains the assumption that the distinction between homonymy and synonymy is mutually exclusive. Thus, they can infer homonymy from non-synonymy and vice versa. As a consequence, if non-synonymy<sup>155</sup> is true of something, and according to the InfH-view it is true of all things that are multivocal, homonymy also must be true of it as well. If Aristotle then denies homonymy of some multivocals adherents of the InfH-view suggest that Aristotle only denies *accidental homonymy* and not homonymy in

152 Cf. Bonitz *Ind. Arist.*, 514a45-47.

153 For a detailed account of the accidental-non-accidental distinction and its problems see the section 3.4.1.1 below. I doubt that the lack of definitional overlap is sufficient to consider a given homonymy accidental.

154 I agree with Brakas (2011: 157) who claims that he fails to see how one could justifiably infer from the denial of homonymy (simpliciter) that only accidental homonymy is denied. He explicitly refers to Ward's (2008: 107) assessment of *Met. IV.2 1003a33-34*.

155 This is an assumption I do not share, since I acknowledge a case of synonymous multivocals which will be discussed in section 2.3.2.

general and maintain in this way the exhaustive distinction between homonymy and synonymy. Because of this, one could even object that the InfH-view requires two notions of homonymy that are in variance with another: a comprehensive and a narrow.

The example of “being” illustrates this further. It cannot be homonymous and non-homonymous at the same time and in the same sense. Adherents of the InfH-view need the SAA to solve this paradox. Shields (1999), Irwin (1981), Ward (2008), Owens (1978<sup>3</sup>) and others apply the SAA. I assume these scholars consider it desirable that the distinction between homonymous and synonymous cases be mutually exclusive. This might be a key of the reason for their preference of the InfH-view. However, homonymy and synonymy being mutually exclusive can only be maintained if the SAA is added to those passages where homonymy and multivocity do not coincide.

The SAA assumption, however, proves redundant – I will even argue, it is problematic. Through its redundancy, the view on the relation of homonymy, synonymy, and multivocity needs to be revised to the DefH-view, which denies the SAA, i.e. one denies that Aristotle merely denies accidental homonymy in the relevant contexts. I propose that Aristotle denies homonymy without limitation and that this denial implies the application of a deflated notion of homonymy.<sup>156</sup> Because of that, the SAA is not only redundant, but its application would even be problematic and unconvincing.

Ensuing this denial, one has to realise that when scholars speak of homonymy as, e.g. in the philosophically interesting cases such as *being*, *unity*, *potency* or *substance*, they should instead talk about a particular kind of multivocity, i.e. one that is non-homonymous. Instead of *core-dependent homonymy* (Shields (1999)) or *pros hen homonymy* (Hamlyn (1977)) one should not consider those cases homonymous at all. One of the main reasons arguing for the narrow notion of homonymy is that the claim that all multivocals are homonyms comes with restrictions while the opposite, i.e. the claim that all homonyms are multivocals is a truth free from any restrictions and is not violated anywhere in the corpus.

156 It is deflated only from the point of view of scholars who adhere to the InfH-view.

I acknowledge that Aristotle does not always distinguish carefully between homonymy and multivocity and that his use of these terms allows certain flexibility, nevertheless, these uses are restricted to a few contexts. The task of the exegete, in this case, is not showing that there is a correct and a false view on the relation of homonymy and multivocity, but that there is a more central opposed to a more marginal case and that this insight should be used as a starting point to develop theses to interpret every single instance of these notions.

A reassessment of the relationship between homonymy, synonymy, and multivocity is necessary not only for these reasons but also for another: As announced earlier, in *Top.* II.10 there is a hybrid of multivocity (cf. section 2.3.2) and synonymy which is neither covered by InfH nor the tertium quid account.

### 2.2.3 Multivocity Encompasses Homonymy

The denial of co-extension does not determine the relation of multivocity and homonymy positively. This omission will be made up now: It has been suggested, e.g. by Matthews (1995: 235), that multivocity is a notion broader than homonymy. However, one can be more explicit than this. Multivocity is not only broader but also the superordinate notion of homonymy and thus, as indicated earlier, homonymy is a kind of multivocity. As Aristotle does not deal with this question in detail, this thesis attempts a synoptic reconstruction.

The assumption that multivocity is the broader notion presupposes the denial of co-extension. Some scholars accept this view (cf. Matthews (1995), while some deny it (Shields (1999) and for the most part Owens (1979)). Matthews (1995: 235) provides the following assessment: “We need not suppose, that is, that Aristotle supposes any term said in many ways is therefore used homonymously. We are free to suppose that “said in many ways” is a looser classification – one that includes, but is not restricted to, cases of genuine homonymy.” What Matthews calls *genuine homonymy* is often called *accidental homonymy* or simply *homonymy*. Hintikka (1959: 138), as well as Brakas (2011: 158–159), also share this opinion, while they fail to provide a thorough assessment of the relation between these concepts.

The first step in showing that homonymy is a kind of multivocality consists in showing that multivocality is the broader notion, which is not evident from the passage of *Met.* IV.2, 1003a33-34 from above, but from the following passage of *Met.* IX.1:

|   |   |
|---|---|
| <p><i>Met.</i> IX.1, 1046a4-7: ὅτι μὲν οὖν λέγεται πολλαχῶς ἡ δύναμις καὶ τὸ δύνασθαι, διώρισται ἡμῖν ἐν ἄλλοις· τούτων δ' ὅσαι μὲν ὁμωνύμως λέγονται δυνάμεις ἀφείσθωσαν</p> | <p>It has been pointed out by us elsewhere, that <i>potency</i> and <i>to be able to</i> are said in many ways: Of these, we may neglect all the potencies that are so-called homonymously.</p> |
|---|---|

Aristotle is explicit in this passage. He is talking about the term “potency” which is multivocal. By saying this, he wants to neglect those potencies that are potencies only homonymously *from those* – *τούτων*, i.e. other multivocals. It is clear that homonyms are said in many ways as well whereas not everything that is said in many ways is homonymous.<sup>157</sup>

Hence some multivocals are non-homonymous.<sup>158</sup> If it is true that multivocality encompasses homonymy, it needs to be true that there are no homonyms that are not multivocal. The assertion that something can be homonymous without being multivocal is absent from Aristotle’s works. This indirectly supports the claim that multivocality is a notion superordinate to homonymy: Everything that is homonymous is multivocal, but not every multivocal is homonymous.

## 2.3 Non-homonymous Multivocals

If homonymous multivocals constitute one class of multivocals, there has to be at least one other class of multivocals that is different from those. According to the DefH-view, there are two complements to homonymous multivocals, i.e. polysemous multivocals and synonymous multivocals.

<sup>157</sup> Aristotle uses the example of *δύναμις* in geometry. That case is not connected to the cases that are discussed in *Met.* IX. Cf. for this example also *Met.* V.12, 1019b33-34 and further his remark that those cases are not *pros hen* related 1019b34-35.

<sup>158</sup> Shields (1999: 22ff.) devotes a whole section to non-homonymous multivocals. However, he considers their occurrence as a threat to the assumption that the distinction of synonymy and homonymy is exhaustive and basically argues against such a class, since its alleged instances (like *being*, *potency* or *contact*) are only “seemingly” non-homonymous, though they really are homonymous. This attitude is also rest on the standard auxiliary assumption.

### 2.3.1 Polysemous Multivocals

Today one defines polysemy as a grouping of related meanings under a single (word) form.<sup>159</sup> For instance, “chip”: a potato chip, a chip of wood, and a computer chip. Here the things that are called chip are related, unlike savings banks and river banks. According to the semantic approach to multivocity, this label is suitable for those cases of multivocity that are not synonymous and not homonymous.

Aristotle explicitly contrasts *pros hen* cases with homonymous cases of multivocity in two passages. The first one continues from the passage of *Met.* IV.2, 1003a34-b4 as presented above, which stated that being is said in many ways, but not homonymously. This passage determines *pros hen* cases as contrary to homonymous cases. The exact nature of the PHR is investigated in section 6.1.2. Here, the emphasis is on the subdivisions of multivocity.

The other passage is found in the *GC* I.6:

*GC* I.6, 322b29-32: Σχεδὸν μὲν οὖν, ὡσπερ καὶ τῶν ἄλλων ὀνομάτων ἕκαστον λέγεται πολλαχῶς, καὶ τὰ μὲν ὁμωνύμως τὰ δὲ θάτερα ἀπὸ τῶν ἑτέρων καὶ τῶν προτέρων, οὕτως ἔχει καὶ περὶ ἀφῆς.

Similar to those other names which are said in many ways, *of which the ones are said homonymously and the others because of other and prior things*, so it is also with “contact”.

In the context of this passage, Aristotle discusses *contact* – ἀφή. We learn something about the relation of multivocity and its variants only in the short but often quoted parenthesis of this passage (highlighted by the italics).<sup>160</sup> This passage declares two things: (1) that the homonymous use of terms is a subclass of the multivocal use of terms, and (2) that next to homonymous multivocals there are those that are multivocals *because of different and prior things* – ἀπὸ τῶν ἑτέρων καὶ τῶν προτέρων. The phrasing indicates that Aristotle refers to the same alter-

<sup>159</sup> For a detailed account of polysemy cf. section 5.

<sup>160</sup> Actually, this passage is often quoted because Aristotle here explicitly states that *names* are said in many ways and that it is names that are used homonymously. This remark is interesting because it contrasts with the remarks Aristotle makes in the *Categories* about homonymy and synonymy. In the *Categories* homonyms and synonyms are things. Confer the comments about this in the section 3 which is concerned with homonymy and synonymy in the *Categories*.

native to homonymous multivocals as above, i.e. *pros hen* multivocals. This is exemplified by the notion of *contact*.<sup>161</sup>

Beyond *pros hen* cases of polysemous multivocals, there are cases connected by an analogy. This kind of polysemous multivocality is mentioned only in *EN* I.6, 1096b28-29 and it is discussed in section 6.3.

### 2.3.2 Synonymous Multivocals – A Hybrid Class

Synonymous multivocals are another kind of multivocals which differ from homonymous multivocals and polysemous multivocals. This class is neither covered by the InfH-view nor by the tertium quid view.<sup>162</sup>

In *Top.* II.3 Aristotle clearly states that something can be multivocal without being said *according to homonymy* – καθ’ ὁμωνυμίαν. Thus, one could combine this class with the class of polysemous multivocals as they are also not homonymous. This case is, however, also different from these as I assume that it implies synonymy, whereas polysemous multivocals and homonymous multivocals are not synonymous.

*Top.* II.3, 110b16-22: Πάλιν ὅσα μὴ καθ’ ὁμωνυμίαν λέγεται πολλαχῶς ἀλλὰ κατ’ ἄλλον τρόπον, οἷον ἐπιστήμη μία πλειόνων ἢ ὡς τοῦ τέλους καὶ τῶν πρὸς τὸ τέλος, οἷον ἰατρικὴ τοῦ ὑγιειαν ποιῆσαι καὶ τοῦ διαιτῆσαι, ἢ ὡς ἀμφοτέρων τελῶν, καθάπερ τῶν ἐναντιῶν ἢ αὐτὴ λέγεται ἐπιστήμη (οὐδὲν γὰρ μᾶλλον τέλος τὸ ἕτερον τοῦ ἑτέρου), ἢ ὡς τοῦ καθ’ αὐτὸ καὶ τοῦ κατὰ συμβεβηκός

Again, <consider> what is said in many ways, not according to homonymy, but in some other way, as for example one science is of many things, (1) either as the science of the end and what leads to the end, as e.g. medicine is of producing health and <the right> conduct of life, (2) or as the science of both ends, as the science of the opposites is called the same science (for the one contrary is not more an end than the other contrary), (3) or in the sense as a science is of the per se and the accidental

What exactly is the example in this passage? There are three words following οἷον: *ἐπιστήμη μία πλειόνων*. Is it the whole phrase? Is it *μία* or *πλειόνων*? Or is it *ἐπιστήμη*? Shields (1999: 26) assumes that multivocality belongs to the phrase “one science of many things”. This is also suggested by Owen (1965: 72 n. 1). Irwin (1981: 529) assumes that one

<sup>161</sup> For more details on this passage cf. Buchheim (2010: 378–384). Buchheim offers an elucidating comment on the different accounts of *contact* in that passage of the *GC*.

<sup>162</sup> The case of the passage of *Top.* II.3, 110b16-22 which will be considered in the following is not unnoticed by Shields (1999) or Irwin (1981). However, each of the two classify the case differently. Further remarks are given below.

of its constituents, namely “*πλειόνων*”, is said in many ways. He claims that “many” “may refer to means and end, or to two ends, or to intrinsic and accidental object. But “many” is not non-synonymous; it need not be replaced by different definitions in these different uses.” Thus, according to Irwin “many” is a synonymous multivocal. Shields (1999: 26 n. 27) reacts to this by saying that if one component is multivocal, the whole phrase becomes multivocal, but he does not infer from this that the phrase is a synonymous multivocal.

I assume that the whole phrase is said in many ways, but I also think that it is not necessary to replace it with different definitions in different cases. I think in this passage the example is “to be one science of many things”. Thus, I claim that “to be one science of many things” is multivocal. The following three examples given in this passage, which show in how many ways *one science can be of many things* (the numbering corresponds to the marks in the translation):

1. One science can be of many things because the object of study is of both the end or the means: medicine is both, the science of producing health (the end), and (the right) conduct of life.
2. One science can be of many things because the object of study consists of two distinct ends: medicine is the science of health and disease.
3. One science can be of many things because it covers per se and per accident attributes: One science explains that a triangle, per se, has angles equal to two right angles, but it also explains that the equilateral – τὸ ἰσόπλευρον, has angles equal to two right angles. However, we know that the equilateral has angles equal to two right angles because accidentally it is a triangle and therefore has angles equal to two right angles.

The first way medicine is said to be *one science of many things* is different from the second way in which it is said to be *one science of many things*. Thus, medicine is a science of many things in (at least) two ways. Firstly, *because* it studies the end (health) and the means (the right conduct of life). Secondly, *because* it studies health and disease. I assume that “to be one science of many things” is synonymous in these two cases but that it is said in many ways according to the *different reasons account of*

*multivocity*. Thus, the new class of multivocals qualifies as multivocal for a different reason than either homonymous multivocals or polysemous multivocals. While polysemous and homonymous multivocals are ambiguous, the new kind of multivocals is not ambiguous. The list of examples (1, 2, 3) is not supposed to provide exhaustive classificatory alternatives, but rather it illustrates the flexibility of the possible reasons rendering something multivocal.

One could object that synonymous multivocals, such as “to be one science of many things” cannot be classified as a kind of multivocity coordinate to homonymous or polysemous multivocals and that one should modify the DefH diagram from above accordingly. But, as stated above, the DefH-view compensates for the deflation of homonymy with an inflation of multivocity. One may consider this a flaw of DefH, yet, it is also a virtue since only in this form the flexibility of Aristotle’s notion of multivocity is incorporated.

## 2.4 Limitations of the DefH-View

As indicated earlier, Aristotle’s use of the terms “homonymy”, “synonymy” and “being said in many ways” contains certain flexibility. I stated in the beginning of this chapter that one cannot infer from this that the notions behind these terms are flexible in the same way the uses of the terms are flexible. In this section I will make some concessions to this. I address those passages that indicate potential limitations of the DefH-view since they may suggest that there is no doctrinal difference between multivocity and homonymy. I argue that such an alleged identity of these notions is limited to certain contexts.

Bonitz lists a variety of passages allegedly indicating multivocals and homonyms as synonyms.<sup>163</sup> Also, he provides a list of passages where this is not the case.<sup>164</sup> The places where Bonitz does not see a difference between these notions are restricted to the *Topics* (I.15 and VI.2) and

<sup>163</sup> Bonitz *Ind. Arist.*, 514a45-47: *Top.* I.15, 106a21, b4; VI.2, 139b19, 21, 23; *SE* 4, 165b33; 17, 176a5, 15; 22, 178a25-28.

<sup>164</sup> Bonitz *Ind. Arist.*, 514a48-49: *Top.* II.3, 110b16 and 615a45-46; *Top.* II.3, 110b16; *Met.* IV.2, 1003a33; *Met.* XI.3, 1060b32; *GC* I.6, 322b30. I added to this list *Met.* VII.4, 1030a29-b3; *Met.* IX.1, 1046b4-7; homonymy is also denied of some multivocals in *EE* VII.2, 1236a16-22.

the *SE* (4, 17, 22). According to Owens (1978<sup>3</sup>: 115), who also refers to Bonitz's passages, there is no reason to doubt the identity of homonymy and multivocity in the whole *Top.* I.15, as illustrated by the following passage: *πότερον δὲ πολλαχῶς ἢ μοναχῶς τῷ εἶδει λέγεται, διὰ τῶνδε θεωρητέον* – *Whether something is said in many or in one form has to be considered by the following means* (106a9-10). Owens assumes that in this context *μοναχῶς* is equivalent between *synonymous* and *πολλαχῶς* with *homonymous*. If this interpretation is adequate, the DefH-view might be false in this context, since according to the DefH-view there is a difference between asking whether something is *said in many ways* and asking whether something is said *homonymously*.

There are two ways one may mitigate this problem. One possibility is to refer to the close relationship of homonymy and multivocity. I stated earlier that the DefH-view considers homonymy a subcategory of multivocity. Hence, it is not a problem that homonymous cases are sometimes merely called multivocals. Most of the examples in the several tests for multivocity given in *Top.* I.15 actually concern (accidental) homonyms. Moreover, the overall framework, i.e. the assumption that homonymy is embedded into multivocity, is not violated by this chapter. As quoted above, Aristotle states in *Top.* I.15, 106a9-10 that the following means can be used to show whether something is said in *one* or *many ways*. The absence of the term “homonymy” in this context is plausible, knowing that these notions do not coincide entirely. Aristotle's introduction naturally applies the more general notion of multivocity.<sup>165</sup> Moreover, as stated earlier, Aristotle never claims that something is homonymous and not said in many ways while he often claims the opposite. This practice is not violated in *Top.* I.15. Admittedly, this does not prove that these notions do not coincide.

Nevertheless, there are other passages, which *seem* to support the InfH-view rather than the DefH-view.<sup>166</sup> I will call them *closeness-passages*. For instance, Aristotle claims in *EN* V.1, 1129a26-28 that the different uses of *justice* and *injustice* are so *closely* – *σύνεγγυς* connected

<sup>165</sup> As mentioned earlier, even in the *Topics* there is a passage which shows that multivocity is broader than homonymy: *Top.* II.3, 110b16-22, cf. section 2.3.2.

<sup>166</sup> Cf. Shields' (1999: 39ff.).

that their homonymy often *escapes notice* – *λανθάνει*.<sup>167</sup> The example of *key* – *κλεις* is an example of a *distant* – *πόρρω* homonym. The term “κλεις” refers to a collarbone, or clavicle, and an instrument for locking a door. While one might assume an etymological connection between the two terms, there is presumably no overlap in their definitions, and hence these keys are indeed accidental homonyms.

In contrast to this is the close-case: Aristotle first states that “justice” and “injustice” are multivocals and then in the next sentence he merely states that their homonymy *escapes notice* – *λανθάνει*. There is no mention of an overlap in their definitions or any other elucidating remark that tells us what “close” means. Nevertheless, it is often assumed that there is definitional overlap, since Aristotle calls them *close*. Nothing warrants the suggestion that distant homonyms correlate with accidental and close with non-accidental homonyms.<sup>168</sup> Thus, it is plausible that Aristotle calls them “close” or “distant” regardless of the question whether they are accidental or non-accidental, but with regard to the question whether they are either *evident*, as in the case of keys, or *hard to reveal* as in the case of justice and injustice.

There is another passage that often is used to support the InfH-view. In *EE VII.2*, 1236a17 Aristotle tells us that “friendship” is not *wholly said homonymously* – *πάμπαν ὁμωνύμως*. The adherents of the InfH-view claim that if something is not entirely homonymous it must be possible that it is partly, or in an incomplete sense, homonymous, thus still homonymous.<sup>169</sup> These incomplete homonyms are then those that often are called “non-accidental” or “connected”<sup>170</sup> homonyms. If *πάμπαν* is read

<sup>167</sup> Related are also *EE VII.2*, 1236a17; *Phys.* VII.4, 249a23-25.

<sup>168</sup> Irwin (1981: 527) assumes such a correlation while Shields (1999: 39ff.) denies it. Actually, nothing in this passage and its context suggests that *close homonyms* should be equated with *non-accidental homonyms* and that *distant homonyms* with *accidental homonyms*. Aristotle does not specify what is meant by “close” and “distant”. I assume that this distinction concerns solely the difficulty of the revelation of the homonymy in each case and is hence unrelated to the question of the kind of homonymy, i.e. whether it is accidental or non-accidental homonymy. Nevertheless, this passage is used to support a more comprehensive account of homonymy. I agree with Shields (1999: 39f.) who calls close and distant homonyms *seductive* and *non-seductive* while rejecting an identification of this distinction with non-accidental and accidental homonyms.

<sup>169</sup> Cf. Irwin (1981: 525–527).

<sup>170</sup> This is how Irwin calls them.

as “wholly” this passage may support a more comprehensive notion of homonymy, but it also highlights that Aristotle’s strict notion of homonymy is narrow. The DefH-view also may not be violated by this passage if one assumes that it means the following: By stating that the three cases of friendship are not *entirely* homonymously predicated Aristotle emphasises simply that they are not entirely unrelated. In this way, this passage straightforwardly denies homonymy. Alternatively, *πάμπαν* can also be read meaning “altogether” in the sense of “collectively”. Then *πάμπαν* emphasises that *all* the three ways in which “friendship” is said, are said *collectively* not homonymously. Also in this way, this passage does not insinuate a more comprehensive notion of homonymy.

Finally, the majority of the contributions concerning homonymy and multivocity claim that there is no single strict and universal technical use neither of “homonymy” nor of “being said in many ways”. This does not mean that one cannot assess their relation at all, but rather that one has to define the range of the applicability of the hermeneutic models.

A solution to the tension between those passages supporting the DefH-view and those undermining it can be provided by a developmental thesis. Passages which are compatible with a more comprehensive notion of homonymy belong to allegedly earlier works, while all passages in which Aristotle explicitly states that homonymy and multivocity do not coincide belong to allegedly later works. There may be a reason for this difference: As has been claimed by Owen (1960), Aristotle did not know the PHR in earlier works such as the *Topics* and the *SE*, so one could assume that in earlier works homonymy and multivocity seem to coincide not because they are necessarily identical, but because Aristotle lacked the means to draw the difference between accidental and non-accidental cases of homonymy. The terminological specialisation of homonymy which is explicit in the *GC* and *Met.* was not necessary, or at least not possible in earlier works. Because of that, I agree with all these scholars that adhere to the developmental thesis.<sup>171</sup> In addition to the acceptance of the developmental thesis, I consider the DefH-view more appropriate than the InfH-view, since I assume that Aristotle’s allegedly mature, narrow notion of homonymy is identical to the notion of hom-

171 For instance, Brakas (2011), Owens (1978<sup>3</sup>), Owen (1960) or Irwin (1981).

onymy he introduces in the *Categories*.<sup>172</sup> Because of that, I consider the passages that do not support the DefH-view marginal deviations from the original doctrine, which I attempt to depict with the DefH-view.

Another problem of the DefH-view is its implementation of synonymous multivocals. Synonymous multivocals qualify as multivocals according to the different reasons account of multivocality, whereas homonymous and polysemous multivocals qualify as multivocals (primarily) according to the semantic approach. This may create an inhomogeneity in the venn diagrams, however, I do not deem this a serious problem for the DefH-view. It may be an advantage since this inhomogeneity represents Aristotle's terminology more adequately in contrast to the InfH-view.

## 2.5 Conclusions

There are different ways the relationship between homonymy, synonymy and multivocality has been addressed in the literature. I distinguished between three alternatives, the InfH-view, the tertium quid-view and the DefH-view. The currently dominant tenet ascribes the InfH-view to Aristotle. I argued that this assessment blurs the distinction of homonymy and multivocality, which in several contexts is of crucial importance. Because of this, I reassessed the relationship of homonymy, synonymy and multivocality with the result that there are sufficient reasons to consider homonymy a subcategory of multivocality. This dogma is not violated in Aristotle's works. Thus, I proposed that the DefH-view more appropriately represents Aristotle's theory of homonymy, synonymy and multivocality. Furthermore, I gave a preliminary overview about those multivocals that are non-homonymous, i.e. polysemous multivocals and synonymous multivocals and I discussed the limitations of the DefH-view with the result that those occurrences, which seem to support a more comprehensive notion of homonymy, are not central to Aristotle's doctrine.

172 Wedin (2000: 13) and Owens (1978<sup>3</sup>: 117). Wedin, M. V. (2000). *Aristotle's theory of substance: The Categories and Metaphysics Zeta*. Oxford.



### 3 Homonymy and Synonymy in the *Categories*

Aristotle's *Categories* begins with a definition of three *onymies*: homonymy, synonymy and paronymy. As mentioned in chapter 2, it is a common assumption that within the *things with the same name* one finds the group of homonyms and synonyms and that it is a matter of interpretation to either assume that this distinction is exhaustive or not. In contrast to those two allegedly complementary notions, there is paronymy. Paronyms are called those things that have their name derived from another name, as, e.g. the grammarian is derived from grammar. Thus, they do not belong to the class of *things with the same name*. Nevertheless, many scholars assume a close connection between paronymy and the PHR. The discussion of this connection is presented in section 6.1.3.

Many contributions, which reflect the topic of homonymy and synonymy in Aristotle and especially homonymy and synonymy in Aristotle's *Categories* begin with *brief restatements* of their definitions. The following excerpt is found in the most recent monography on this topic: "Put briefly, homonymy refers to things having the same name and different definition; synonymy, to things having both the same name and the same definition" (Ward (2008: 9)). In general, *brief restatements* may be informative and helpful to achieve a preconception of the Aristotelian notions, but at the same time, their imprecision may lead to a wrong picture. The reason for this is that the definitions of homonymy and synonymy still are object of controversy. The difficulties begin with the translation and interpretation of the text.

The following section about homonymy and synonymy in the *Categories* provides a translation, makes introductory remarks about these notions and their interpretations and identifies some problematic aspects that are common to both homonymy and synonymy. There are additional problematic aspects in the definition of homonymy, which are discussed after that in combination with a digression on the distinction of accidental and non-accidental homonymy.

### 3.1 Translations and Introductory Remarks

#### Homonymy in the *Categories*:

*Cat.* 1, 1a1-6: Ὁμώνυμα λέγεται ὧν ὄνομα μόνον κοινόν, ὁ δὲ κατὰ τοῦνομα λόγος τῆς οὐσίας ἕτερος, οἷον ζῶον ὃ τε ἄνθρωπος καὶ τὸ γεγραμμένον· τούτων γὰρ ὄνομα μόνον κοινόν, ὁ δὲ κατὰ τοῦνομα λόγος τῆς οὐσίας ἕτερος·

Homonyms are called those things [H1] which only have the name in common, [H2] and the definition of the subject corresponding to the name is different as <one calls> ζῶον a man and a drawing for these things only have the name in common, and the name-corresponding definition of the subject is different

#### Synonymy in the *Categories*:

*Cat.* 1, 1a6-12: συνώνυμα δὲ λέγεται ὧν τὸ τε ὄνομα κοινόν καὶ ὁ κατὰ τοῦνομα λόγος τῆς οὐσίας ὁ αὐτός, οἷον ζῶον ὃ τε ἄνθρωπος καὶ ὁ βούς·

Synonyms are called those things [S1] which have a common name and [S2] and the definition of the subject corresponding to the name is the same, as, e.g. animal <is said of> man an ox

It has become common understanding to assume that both passages are about those *things* that are *synonyms/homonyms*.<sup>173</sup> One can read the term “synonyms”/“homonyms” also as “synonymous/homonymous things”. One may justifiably wonder what it is that is supposedly not included in the scope of *things*. Usually, Aristotle contrasts *things* with *names*. It often has been assumed that this passage is also about names *and their different senses*, since many passages outside the *Categories* that mention homonymy or synonymy are related to names (cf. *GC* I.6, 322b29; *Top.* v.2, 129b30ff.; *SE* 4, 166a14-16; for synonymy: *Top.* VIII.13, 162b38, *SE* 5, 167a24).<sup>174</sup> Whilst it has been noted that Aristotle

173 “Things” needs to be understood in a very broad sense. Lewis (2004: 4) asserts that the relata of synonymy/homonymy are *universals* such as health in a person or health in a complexion, which is a universal different from the former. He does not explain this notion in detail in his paper, but one can summarise it in the following way: He calls “healthy” a predicate that is common to different things, but that there are different definitions associated with different uses of the same predicate. The underlying entities that are determined by these definitions are different universals.

174 Consider Shields’s (1999: 11 n. 7) summary of the controversy over whether Aristotle intends to determine homonymy as a doctrine about senses of words or about properties/things. See also the distinction between the real-essence and the meaning view below. Many contributions either adhere the one or the other alternative. The truth is that there is no simple answer to the question since Aristotle’s use of “homonymy” varies throughout his works. This does not mean that his doctrine is inconsistent, but it means that one also has to vary the assessment of his doctrine according to these different uses. Focussing on the *Categories* only, one may presumably prefer the view that it is not a doctrine about different

“almost systematically” violates the definitions of homonymy and synonymy in this respect.

Moreover, as a third option, it is noticeable that Aristotle very often does not call the names themselves homonymous, but instead the way in which they are said: As an adverb *ὁμωνύμως* regularly qualifies various forms of *λέγεσθαι*.<sup>175</sup> In many occurrences of this form of homonymy homonymous predication has a devaluating character. If x is F homonymously, or rather if F is said homonymously, one is often right assuming that F is said in an odd, extraordinary way. Often, Aristotle adds that ‘x is not F at all, properly speaking’. His standard examples are those of dead or artificial imitations of real things. The section about *spurious homonyms*<sup>176</sup> pays extra attention to this judgmental application of homonymy. In the *Categories*, this judgmental aspect of homonymy plays no, or if at all, an inferior role.

In the present work, the terminology is regimented in the following way: “Homonym” / “synonym” refers to the homonymous *thing* that is the bearer of a homonymous *name*. Thus, a homonym is not identical with a homonymous name. One is an extra-linguistic entity, the other is a linguistic entity. The terms “synonymy” / “homonymy”, which have been used already, are terms that either refer to the *relationship* between those things, which are called “synonyms” or “homonyms” or to the relationship between the corresponding homonymous terms.

Several contributions provide different interpretations of Aristotle’s notion of homonymy and synonymy. Usually, homonymy receives more scholarly attention. Gail Fine (2004: 144 ff.) summarises different views on homonymy in the following way:

meanings of words (although even this is controversial). Focusing on other works only it is likely to conclude that homonymy is a doctrine about senses of words. This idea is related to the fact that Aristotle is ready to use difference in signification as a test for homonymy (especially in *Top.* I.15). Thus, any assessment of his doctrine regarding the controversy, which Shields summarises comes with qualifications of this kind.

175 GC I.6, 322b29, *Met.* IV.2, 1003a33-34; VII.4, 1030b2-3; VII.10, 1035b1; IX.1, 1046a6 and many more.

176 Cf. chapter 4 of this study.

*the meaning-view* and *the real-essence view*.

The meaning-view proposes that two things *x* and *y* are homonymously *F* just in case the term “*F*”, which is attributed to them has multiple meanings.<sup>177</sup> The *meaning view* conceives the *λόγος* (1a2) as a nominal definition (with reference to *κατὰ τὸ νόμα*). The real-essence view bases on the assumption that the *λόγος* (1a2) is of the essence (with reference to *τῆς οὐσίας*) of that thing which corresponds to the name: Two things *x* and *y* are homonymously *F* only if “they have different real natures of *F*”. Fine favours the real-essence view, which was discussed earlier by Irwin (1981; 1982) and MacDonald (1989)<sup>178</sup> because she assumes that it makes many of Aristotle’s claims more plausible. The example of the good illustrates this. The meaning-view suggests that the term “good” has different meanings in “Socrates is good” and in “this is a good knife”. The real-essence view instead suggests that there is a difference between the nature of a person’s goodness and the nature of a good knife without worrying about the semantics of the term “good” in the two different cases. According to the real essence view, it is sufficient for homonymy that there is a “real” difference in the nature of the two sorts of goodnesses. The real-essence view does not entail claims about the semantics of the terms involved in the relationship of homonymy.

My interpretation of the definitions of homonymy and synonymy is in line with the assumption of the real-essence view, i.e. that claims about the semantics of the term “good” may not be *required explicitly*. Yet, I think there are reasons to believe that whilst the difference in the nature of the goodness of a person and the goodness of the knife may be sufficient to account for their homonymy, the essential difference does not exclude semantic differences between the different applications of the term “good”. I believe it is counter-intuitive to assume no semantic differences are corresponding to different applications of the term “good” if there are essential differences in being good. I think that

177 A variant of the meaning-view has been defended by Woods (1992: 70–74). Woods, M. (1992). *Eudemian Ethics: Books I, II, and VIII*, 2nd edn. Oxford.

178 MacDonald, S. (1989). *Aristotle and the Homonymy of the Good*. *Archiv für Geschichte der Philosophie* 71 (2). He calls the views “the multiple natures interpretation” and the “multiple meanings interpretation”. Proponents of the meaning-view are e.g. Ackrill (1963: 71f.) and Owen (1960). Ackrill, J. L. (1974). *Aristotle’s Categories and De interpretatione*. Oxford.

the real-essence-view is correct, but I also believe that it provides insufficient answers on the question for the semantics. I assume that there is a reciprocal structure between different real-essences and terms that signify them. The real-essence-view claims that if the same term signifies different real-essences, the two things are homonyms. From this point of view, the term “good” is not ambiguous, and Aristotle’s definition of homonymy does not entail any claims about ambiguity. Thus, according to the real-essence-view, homonymy and ambiguity do not necessarily coincide. A supporter of the real-essence-view may agree that ambiguity implies homonymy, but he may reject that homonymy implies ambiguity. According to the claims of the real-essence-view, this is entirely legitimate. However, considering other remarks about homonymy in the corpus, this view is violated almost systematically.<sup>179</sup> Outside the *Categories*, Aristotle often claims that it is *terms* that are homonymous, not *things*. I deem that it is legitimate on this basis to assert that while in the *Categories*, homonymy and ambiguity do not coincide according to the real-essence-view, this is not the case outside the *Categories*. Because of that, I think it is justifiable to assume that although the real-essence-view does not contain any claims about different semantics, if there are essential differences between the goodness of Socrates and the goodness of a knife, these differences may have some influence on the semantics of the term “good” when it is applied to each of the two things. Thus, I believe that the essential differences between the different ways in which something can be good correlate with semantic differences of the term “good”. If that is so, a comparison of the semantics of the terms provides insights about the real differences between the ways of being good and the real-essence view implies difference in meaning even it does not explicitly claim they are necessary.

179 GC I.6, 322b29; *Top.* V.2, 129b30ff.; SE 4, 166a14-16; for synonymy: *Top.* VIII.13, 162b38, SE 5, 167a24. Cf. also Hintikka (1959: 140).

### 3.2 The Two Conditions of Homonymy and Synonymy

In order to establish the relation of homonymy and synonymy, two conditions need to be met. These conditions were mentioned in Ward's brief restatement: "homonymy refers to things [1] having the same name and [2] different definition; synonymy, to things having both [1] the same name and [2] the same definition" (Ward (2008: 9)). The correct understanding of the notions of homonymy and synonymy, as given in the *Categories*, depends on a proper interpretation of those two conditions, with particular focus on the interpretation of the second condition. The interpretation of these conditions also contributes to the assessment of the general view on the relation of multivocity, homonymy and synonymy in Aristotle.

The definition of synonymy is more straightforward in a way since the definition of homonymy contains some elements (see the bold Greek prints in the text) that require a more detailed analysis while these elements are absent from the definition of synonymy. Those aspects in the definition of synonymy that require a thorough analysis are also present in the definition of homonymy allowing to be analysed together. The following reformulation of the definition of synonymy (and homonymy, respectively; see the square brackets) provides a preliminary starting point for the discussion of the definitions of homonymy and synonymy. For further analysis, two necessary conditions can be identified.

Synonymy S1 / [H1]

Two things  $x$  and  $y$  are synonyms [homonyms] *iff*

SC1 two things  $x$  and  $y$  have the name  $z$  in common, and

SC2 the definition of the subject corresponding to the name is the same [is different].

This reformulation reflects strictly what is found in the text, but it needs to be further explained since as such it is not more enlightening than the original text. The second condition is particularly controversial. There are several problematic elements in this condition (see next subsection). In the two cases, the only difference is that *the definition of the*

*subject corresponding to the name* is either *different* – ἕτερος or *the same* – αὐτός. In order to thoroughly understand the second condition, the next section (3.3) addresses several questions about the three problematic elements of that condition: 1) ὁ λόγος αὐτός/ἕτερος; 2) τῆς οὐσίας; 3) κατὰ τοῦνομα. I put the cart before the horse and bring forward the conclusion of these considerations.

Synonymy S2 / [H2]

Two things x and y are synonyms [homonyms] iff

SC1 two things x and y have the name z in common and

SC2\* what it is for x to be z and what it is for y to be z, is the same [is different].

SC2 differs only in the second condition SC2\*. The following section documents the steps that lead to this modified definition. The first condition SC1 is identical in S1 and S2. The first condition requires that a name z, e.g. “horse”, applies to at least two things x and y. Whilst it is not explicitly mentioned in the text, one may add that the kind of terms that are primarily relevant here are terms that apply to a multiplicity of things, i.e. *common names* which denote *sorts* of things,<sup>180</sup> unlike *proper names* such as “Socrates” which denote *individuals*.<sup>181</sup> There are two ways to deal with proper names in this context depending on the way in which proper names are interpreted. (1) One may assume that proper names are neither homonymous nor synonymous as they signify the wrong type of thing, i.e. individuals, and individuals are not definable as such (cf. *Met.* VII.15, 1040a2-7) and if they are not definable one cannot compare the definitions of different cases; or (2) one may suggest even proper names such as “Socrates” or “Kallias” are homonymous or synonymous based on the assumption that Aristotle does not really distinguish between common and proper names. Aristotle’s remarks about

<sup>180</sup> Lewis (2004: 4) suggested that in this context Aristotle talks about “universals”.

<sup>181</sup> Cf. Wedin (2000: 14) who assumes that in “both homonymy and synonymy we may think of the items named as named by a special kind of sortal term.” As others Wedin does not add further remarks on proper names in that context.

proper names are scarce.<sup>182</sup> As this issue is not addressed by Aristotle any attempt to solve it results in speculation. I assume that Aristotle does not really distinguish between proper names and common names since in both cases the names can be substituted by *logoi* which are common/universal (cf. *Met.* VII.15, 1040b1: *κοινὸς ἄρα ὁ λόγος*). From this point of view, a proper name may be considered a common name with a very restricted scope.

### 3.3 The Problematic Elements of the Second Condition

One may assume that the formulation of the second condition of homonymy and synonymy is the result of careful reflections and that every part of it fulfils a certain function, as the formulation occurs three times at the beginning of the *Categories*: twice in the definition of homonymy, and once in that of synonymy. To analyse this condition, it is necessary to consider the following three aspects (here in the order it is dealt with):

1. Ὁ λόγος αὐτός/ἕτερος → What is the relevant definiendum of that λόγος?
2. The role of τῆς οὐσίας
3. The role of κατὰ τοῦνομα

These three aspects are evident in both the definition of homonymy and synonymy. For synonymy, the first piece states that *the definition/account is the same*. The interpretation of λόγος depends on several points. If one regards it as a *definition* in a stricter sense, it may be justified because of its vicinity to τῆς οὐσίας. In several other places, Aristotle uses λόγος τῆς οὐσίας (*An. Post.* II.13, 97a19; *PA* 695b18; *Met.* VII.11, 1037a24) or ὀρισμός (*horismos*) (*Met.* VII.10, 1034b20, VII.12, 1037b12)

<sup>182</sup> Two of the most recent monographs on Aristotle's theory of signification, i.e. Modrak (2001) and Charles (2000), are broadly silent on proper names in Aristotle. Both refer for a general overview on proper names to McDowell, J. (1977). *On the Sense and Reference of a Proper Name*. in *Mind* 86 (342): 159–185.

in a stricter sense of *definition*. It was stated earlier (chapter 1) that not every *logos* is a *definition*.<sup>183</sup> Thus, *logos* is the broader notion in comparison to *horismos*. In the broader sense “logos” means something like “formula” or “account”, which can be given for everything that can be named (*Met.* VII.4, 1030a14-17).

In contrast to that, a *horismos* can be given only for certain kinds of things, i.e. substances. Aristotle believes that not everything is definable in the same way. The reason for this is based on certain metaphysical assumptions. In *Met.* VII.4, Aristotle discusses τὸ τί ἦν εἶναι. This is a phrase that is often translated with “essence”. The phrase is artificial, and it presumably abbreviates a longer, but unknown phrase.<sup>184</sup> Its detailed meaning is debated among several scholars.<sup>185</sup> The phrase is usually used like a substantive. It has been suggested that this phrase originates from the Platonic academy and that it alludes to previous attempts of defining something: “what it *was* to be x”.<sup>186</sup> In this sense, it can be considered the extra-linguistic definiens of something. Thus, the essence is something that determines what something is.<sup>187</sup> In *Met.* VII.4 and 5, Aristotle raises the question for which kinds of things there is an essence and for which there is not. He claims that things lacking an essence are not definable, at least not in the same way things that have an essence are definable. Things that lack an essence are e.g. (accidental) *compounds* – σύνθετα such as the *white man* and generally all things that belong to categories other than the category of substance. Their definition is only possible *by addition* – ἐκ προσθέσεως (*Met.* VII.5, 1030b16) of that *thing* which they belong to. In *Met.* VII.4, 1030b4-6 and VII.5, 1031a13, Aristotle states that *horismos* and *essence primarily and unqualifiedly* – πρώτως καὶ ἀπλῶς belong to substances. But then Aris-

183 I referred to *Met.* VII.4, 1030a6-9.

184 Frede and Patzig (1988/2: 19) assume that the extended phrase could be something like *what it was for a man to be man* – τί ἦν τῷ ἀνθρώπῳ ἀνθρώπῳ εἶναι. Frede, M., and Günther Patzig. (1988). *Aristoteles Metaphysik Z.* München.

185 In this study a detailed discussion of Aristotelian essence is omitted. Cf. for discussions of essence and definition Charles (2000).

186 Cf. Detel (2009: 269). Detel, W. and Wildberger, J. (2009). *Metaphysik, Bücher VII und VIII: [Griechisch-Deutsch]*. Frankfurt am Main.

187 Sometimes, it can be considered as that which *makes* something what it is in the sense of a formal cause.

total also admits that there is (some kind of) essence that belongs to things of the other categories. They have an essence in a *similar* – *ὁμοίως* way (*Met.* VII.4, 1030b6 and *Met.* VII.4, 1030a18-27) and, moreover, he claims that *definition* – *ὀρισμός* is said in many ways (*Met.* VII.5, 1031a9-10: *πολλαχῶς λεκτέον εἶναι τὸν ὀρισμὸν*). Thus, also things other than substances can have a *horismos*, however, not in the same way. Because of that, sometimes it is assumed that when Aristotle speaks of the *definition* of something and one interprets it in the strict sense, then one assumes he must be concerned with substances.<sup>188</sup>

Whether this strict understanding is appropriate or not depends on the way how the following question is answered: What is the relevant definiendum? This question bears the following difficulty: For logical reasons, one could refer to both *τῆς οὐσίας* and *κατὰ τοῦνομα* to answer the question. How can this issue be resolved? There are three options: Either one highlights one of the two and neglects the other (option one and two), or one focuses on a solution *that combines both features* (option three). I will argue that the third option is the desired path. The main question is how a definition can be *κατὰ τοῦνομα* and *τῆς οὐσίας* at the same time. Before this can be answered, it must be determined what each of these attributes (*κατὰ τοῦνομα* and *τῆς οὐσίας*) amounts to precisely, and which role each fulfils in order to identify the relevant *λόγος*.

**188** A slightly different contrast is given by the opposition of *nominal* and *causal definitions* that is presented *An. Post.* II.10, 93b29-39. A causal definition contains the cause of something. The causal definition of thunder is “sound of fire being extinguished in the clouds”. The nominal definition of thunder only states what a name signifies such as “noise in the clouds” and is hence less clarifying. The relationship of causal and nominal definitions is highly controversial. Within this context it shall suffice to point at the complexity of Aristotle’s remarks on “definition”. For a detailed discussion of the relation of causal and nominal definitions I refer to Demoss, D., and Daniel Devereux. (1988). *Essence, Existence, and Nominal Definition in Aristotle’s „Posterior Analytics”* II 8–10. *Phronesis* 33 (2): 133–154. They assume p. 138–141 that there even is a difference between *the account of a name* and *a nominal definition*. The difference mainly concerns the existence-presupposition which they think is needed in the case of nominal definitions, since it presumably states a part of the *τί ἐστι* and there is only a *τί ἐστι* of the things that are. They call this assumption *the no existence no definition thesis* (141). According to this assumption there is no nominal definition of the goat-stag, since there are no goat-stags. But one can give an account of the name of what “goat-stag” signifies, which however is not considered as definition, not even as nominal definition, rather it has to be regarded as a mere description.

### 3.3.1 The Role of *τῆς οὐσίας* and the Issue of the *Ontological Scope*

There is a long-standing debate about the authenticity of *τῆς οὐσίας*.<sup>189</sup> The following considerations do not join this debate. They proceed on the premise that *τῆς οὐσίας* is a genuine part of the text.

As the genitive *τῆς οὐσίας* indicates, the *λόγος* is of an *οὐσία*. This requires clarification. There are several concerns about the function of the attribute in this context. The expression *ὁ λόγος τῆς οὐσίας* has been causing difficulties to translators and commentators, which the following translations of the whole phrase *ὁ δὲ κατὰ τοῦνομα λόγος τῆς οὐσίας* illustrate.<sup>190</sup>

1. O. F. Owen (1889)<sup>191</sup> “[...] the definition (of substance according to name) is different”.
2. Ackrill 1974: “[...] the definition of being which corresponds to the name is different”.
3. Irwin 1981: “[...] but the account of being corresponding to the name is different.”
4. Shields 1999: “[...] the account of being corresponding to the name is different”.
5. Wedin 2000: “[...] the definition of being which corresponds to the name is different.”

**189** There are two reasons that raise concerns about the authenticity of *τῆς οὐσίας*. The first is related to issues about the textual transmission. For further information about this debate confer Waitz (1844: 269–271). Waitz, T. (1844). *Aristotelis Organon Graece*. Leipzig. Cf. also Anton, J. P. (1968). *The Meaning of Ὁ λόγος τῆς οὐσίας in Aristotle's Categories 1a. The Monist* 52 (2): 252–267. Anton states that in most of the translations (that he considered) the *τῆς οὐσίας* is either not available or bracketed. This has to do with the respective textual traditions on which the translations are based. Anton refers to Andronicus and Boethus of Sidonos according to whom the *τῆς οὐσίας* is an unnecessary part of the text. The relevant passages can be found in Dexippus 21, 18–19 and Simplicius *In Arist. Cat.* 29, 30–30,5. For more details confer Anton (1968: 255–258). Cf. also Oehler's (1986: 201f.) analysis of this passage. Oehler, K. (1986). *Aristoteles Kategorien*. Berlin. The second reason, which is related to the first is “Aristotle-internal”: There are two other definitions of homonymy and synonymy that do not contain *τῆς οὐσίας*, cf. *Top.* I.15, 107a20 and *Top.* VI.10, 148a24f.

**190** For some further variants see Anton (1968: 255–256).

**191** Owen, O. F. (1889). *The Organon, or Logical treatises, of Aristotle: With introduction of Porphyry*. London.

6. Fine 2004: “[...] the account of the essence (logos tes ousias) which corresponds to the name is different”
7. Ward 2008: “[...] but a different account of being corresponding to the name”.

Since Ackrill the dominant translation of *ὁ λόγος τῆς οὐσίας* has been *definition/account of being*. There are several difficulties with this translation. Firstly, the translation “of being” could be clarified. One may object that it does not reflect the difference between *ὄν* and *οὐσία*. Another concern is that “of being” may reduce the relevance of the *τῆς οὐσίας*-part or even renders it redundant. One could translate it as “an account/definition of being” even if “*τῆς οὐσίας*” were not part of the text since every account or definition is a definition of the being of something.

I propose that the *τῆς οὐσίας*-part fulfils a specific function in the definition. It contributes to determining the relevant definiendum of the respective *λόγος*. There are several suggestions on the role of the *τῆς οὐσίας*-part that follow this intuition. Anton (1968) put forward the thesis that the *τῆς οὐσίας*-part determines the *λόγος* as *definition* in the sense of the stricter *ὀρισμός*, which is considered necessary because also *λόγος* is said in many ways.<sup>192</sup> By assuming this, the definition of homonymy covers only the things, which are definable in a strict sense, and these are substances only (at least according to Aristotle’s statements in *Met.* VII.4). This assumption connects the role of *τῆς οὐσίας* with conjectures about the *ontological scope*<sup>193</sup> of the definition of homonymy and synonymy, i.e. whether the doctrine ranges only over substances or also over the non-substantial categories. This presumption is shared

<sup>192</sup> It could mean “formula” in this context or “account”, but as Anton assumes it could also mean “definition” in the strict sense which would imply that Aristotle’s doctrine of homonymy and synonymy is restricted to the category of substance.

<sup>193</sup> There are two questions of *scope* that are raised in connection with the definition of homonymy in the *Categories*. The first one is a question that concerns the *ontological scope* as explained here. The second concerns the *conceptual scope*, i.e. whether the notion of homonymy defined is comprehensive or narrow. Cf. section 3.4.

by Anton (1968) and Cohen and Matthews (1991)<sup>194</sup> whilst they reach opposite conclusions.<sup>195</sup>

Anton's (1968: 252) approach is based on the following assumption: "The expression [ὁ λόγος τῆς οὐσίας] has a special doctrinal meaning and is, therefore, free from terminological imprecision." I agree with his thesis. However, I disagree with his conclusion, which is that τῆς οὐσίας in this context refers to the category of substance, or more precisely, to the secondary substance. Anton asserts (p. 264) that the definitions of synonymy and homonymy in the *Categories* are only supposed to cover a "delimited" range of things. As he concludes "He [Aristotle] is primarily concerned with homonymous classes and species of primary things, not the accidental properties of individuals and their names."<sup>196</sup>

This interpretation contrasts with that of Cohen and Matthews (1991). Cohen and Matthews (1991: 23 note 26) notice that if one considers ὁ λόγος τῆς οὐσίας an *account of being*, then οὐσία is taken in a broad sense. They call it a "generic sense of 'being' or 'essence'". Cohen and Matthews use the term "generic" in the sense of "more general" or "more universal" without meaning that there is a genus of being, which could become part of the definition of all things.<sup>197</sup> Ammonius proposes that Aristotle must have used "οὐσία" in the more general sense for a specific reason: If one did not read it that way, the text would suggest that there are only homonyms of substances and not of accidents. However, since this is in conflict with the examples Aristotle uses in the *Topics*, e.g. "sharp" or "white", he rejects this option.

I assume the determination of the ontological scope of the doctrine of homonymy and synonymy, i.e. whether it ranges over substances only or also over accidents, is not the function of the τῆς οὐσίας-part, because it presupposes a distinction that has not been introduced so far (i.e. the distinction between substantial and non-substantial categories). On this basis, my view deviates from Anton's, who restricts the

<sup>194</sup> Cohen, S. M. and Matthews, G. B. (1991). *Ammonius On Aristotle's Categories*. Ithaca, N.Y.

<sup>195</sup> The question of ontological scope is briefly treated by Oehler (1986: 202).

<sup>196</sup> Cf. for textual considerations Anton (1968: 258). Anton refers to Simplicius's (*In Categ.* 30, 3–5) reports that τῆς οὐσίας does not occur in all the copies he has seen.

<sup>197</sup> This is something Aristotle rejects in *Met.* III.3, 998b14–999a24.

scope of the doctrine with reference to this distinction.<sup>198</sup> But my view is in line with the proposition of Ammonius, that the function of the *τῆς οὐσίας*-part is not supposed to draw a contrast to accidents. Yet, one has to modify the way their approach is completed, i.e. by translating *τῆς οὐσίας* with “of being”, and also one has to modify the explanation Ammonius’s commentary offers, which has influenced several subsequent interpretations.

In order to introduce my critique, I need to establish a distinction between different ways Aristotle uses the concept of substance. When Aristotle speaks about substances, he may intend to single out certain *kinds* of entities. In Aristotle (but not only in Aristotle) these are usually macroscopic concrete particular objects such as *this man* and *this horse*, i.e. the primary substances of the *Categories*. In this regard, substances are just one *kind* of entity *among other kinds of entities*. I call this use of the concept of substance taxonomical.

In contrast to this, the concept of substance can also be used in a broader sense meaning “being”, “entity” or “thing”. Related to these broader senses, but more specific, is the sense of “subject” or “underlying thing”, which is one of the main ways “substance” is said.<sup>199</sup> If it is used here in this sense “τῆς οὐσίας” does not refer to the category of substance, taxonomically speaking, which is what has been proposed by Anton (1968). Moreover, the translation “of the subject” clarifies the function of the *τῆς οὐσίας*-part and its combination with the *κατὰ τοῦνομα*-part. This translation emphasises that the relevant definiendum is *of a subject*, in the sense that it is *of* that thing that *corresponds to the name* – *κατὰ τοῦνομα*, which has to be interpreted in the sense that it is *of the thing, the being which underlies or is picked out* by the name. This warrants that also accidents (taxonomically speaking) can be homonyms or synonyms since they can be denominated and thus

**198** So does Oehler (1986: 202) with other ancient commentators.

**199** A note on “subject” as translation for “οὐσία”: This is one of the *two main ways* “οὐσία” is said as it is presented in *Met.* V.8, 1017b23-26. It is the *last subject, that is not said according to something else* – *τό θ' ὑποκείμενον ἔσχατον, ὃ μηκέτι κατ' ἄλλον λέγεται*. Also in *Met.* VII.3, 1028b34-36 Aristotle lists the *subject* – *ὑποκείμενον* as one of the main meanings of “οὐσία”. The exclusion of the subject as a primary notion for substance, which is the result of the discussion in *Met.* VII.3 has no impact on the possibility that Aristotle uses “οὐσία” in this sense also in the line *ὁ λόγος τῆς οὐσίας* of the *Categories*.

be subjects of a name as well. Thus, regarding the question about the ontological scope of the doctrine of homonymy in the *Categories*, my approach is in line with Ammonius's presumptions, albeit it is so for different reasons.<sup>200</sup>

In conclusion, the translation of “τῆς οὐσίας” with “of the subject” clarifies the determination of the relevant definiendum. The translation “the definition of being that corresponds to the name” may not be incorrect but, at least to me, it is obfuscating. As mentioned, one may wonder why Aristotle should have used “τῆς οὐσίας” if “of being” is what was supposed to be meant. He could have used “τοῦ εἶναι” instead. The advantage of “of the subject” over “of being” is that the former formulation determines the definiendum more clearly. One could improve “of being” by inserting a definite article. Then, one would have “the definition of *the being* that corresponds to the name”. This is much closer to my proposal, nevertheless, I prefer “of the subject” since it highlights the connection to the other feature that determines the relevant definiendum, i.e. *κατὰ τοῦνομα*.

### 3.3.2 The Role of *κατὰ τοῦνομα*

“Κατὰ τοῦνομα” in S2/H2 is translated with “corresponding to the name”. This qualification is most important for the understanding of both synonymy and homonymy as they are presented in the *Categories*.<sup>201</sup> The reason for this is that it also contributes to the determination of the relevant definiendum that corresponds to the *λόγος*. According to the position between the article *ὁ* and the substantive *λόγος*, *κατὰ τοῦνομα* is an attribute to *λόγος*. In this respect, there is a parallel to the *τῆς*

<sup>200</sup> In appreciation of Anton's approach, one has to admit that the examples used for homonymy and synonymy in the *Categories* are actually only using substances. Anton assumes that this is sufficient to explain the application of *τῆς οὐσίας* instead of something else as e.g. *αὐτῶν*, which is used in a parallel expression in *Top.* 1.15, 107a2. As argued here, one has to doubt that a restriction of the doctrine follows from the application of *τῆς οὐσίας*, on the one hand because of the flexibility of the concept of substance, and on the other because the limitation to substantial examples as found in the *Categories*, does not guarantee a limitation of the applicability of the doctrine to non-substantial cases.

<sup>201</sup> It is “most” important simply because there are no concerns regarding its textual authenticity.

*οὐσίας*-part. Both attributes contribute to determining the relevant definiendum of the *λόγος*.<sup>202</sup> As outlined already, several interpretations of this passage have problems incorporating both aspects into a coherent reconstruction of the whole account. The problem is this: What does it mean that the *λόγος* corresponds to the name – *κατὰ τοῦνομα*<sup>203</sup> and is of a subject – *τῆς οὐσίας*, at the same time? As indicated above, things and names are usually contrasted. Hence, it is extraordinary that here there might be a definiendum that combines both. One way to approach this difficulty is *disregarding* and thereby *overemphasising* one of the two attributes of the second condition.

It was mentioned above that in the case of the *τῆς οὐσίας*-part, it is possible that it is bracketed or even neglected with reference to certain textual traditions. There are also reconstructions of the second condition that do not incorporate the *κατὰ τοῦνομα*-qualification properly and moreover, there are approaches that have problems with both of these qualifications. Shields (1999: 11) translates and interprets the definition of synonymy as: “Those things are called synonymous of which the name is common, and the account of being corresponding to the name is the same”.

From above it is clear that his translation of *ὁ λόγος τῆς οὐσίας* as *the account of being* is vague. Yet, this is beyond scope here, as there are other things to focus on as well. His paraphrase of this translation is the following:

“x and y are synonymously *F* iff (i) both are *F* and (ii) the definitions corresponding to ‘*F*’ in ‘x is *F*’ and ‘y is *F*’ are the same”

His account contains two conditions, but the formulations of *his* conditions are not as closely related to the formulations given in the text as they should be. First, a small note on his reconstruction of the *first* condition. He suggests that two things need to *be F*, whereby according to the text it requires nothing else than *having a name in common*. One

202 The expression “ὁ κατὰ τοῦνομα λόγος” occurs again only in *Top.* I.15, 107a20 and VI.10, 148b15. Cf. for the notion of synonymy also 148a24-25.

203 In the *Categories* it is not explained what it means that a *λόγος* corresponds to the name – *κατὰ τοῦνομα*, but from several other passages it becomes clear that a *λόγος* can replace a name (sometimes, but not always, without any difference), which does not mean that the definiendum of the *λόγος* is a name. *Top.* I.5, 101b39-a1; V.2, 130a39; VI.4, 142b3; VI, 9, 147b13-15; *Met.* VII.4, 1030a7-9, b7-12.

has to agree that the (extra-linguistic) attribute of *being F* plays a role in the whole definition, but according to its structure, it plays a role only in the second condition, not in the first. Thus, one should not make it part of the first condition in the reconstruction. The first condition may be thought of as a merely linguistic condition. Two things need to have the same name, without drawing any further inferences. Moreover, the textual basis of the first condition is the same in the definition of homonymy, and there it would turn out to be false to assume that the two separate things need to *be F*.

Further, related to the second condition, one cannot accept that it is appropriate to determine the definienda of the definitions that need to be the same as the terms “F” in “x is F” and “F” in “y is F”. This clearly over-emphasises the *κατὰ τοῦνομα*-part of the second condition. Although the distinction of x and y somewhat incorporates the *τῆς οὐσίας*-part, it does not incorporate it as contributing to determining the relevant definiendum since it is determined only by the *κατὰ τοῦνομα*-part.

Moreover, Shields’s reconstructions of the definition of homonymy is not completely in line with his reconstruction of the definition of synonymy. From the outset, Shields (1999: 11) offers two reconstructions of the definition of homonymy because he immediately makes a distinction based on his interpretation of *ἕτερος* as either meaning *completely different* or *partly different*.<sup>204</sup>

- *Discrete Homonymy (DH): x and y are homonymously F iff (i) they have their name in common, but (ii) their definitions have nothing in common and so do not overlap in any way*<sup>205</sup>
- *Comprehensive Homonymy (CH): x and y are homonymously F iff (i) they have their name in common, (ii) their definitions do not completely overlap*

<sup>204</sup> Cf. section 3.4. Characteristic of Shields’s reformulation is that he does not comment on the *μόνον* in *Cat.* 1, 1a1. In my opinion the *μόνον* is a strong indication that the kind of homonymy that is introduced in *the Categories* is what Shields calls *discrete homonymy*. More often it is called *accidental homonymy* or simply homonymy as has been argued above.

<sup>205</sup> Compare also Cameron (2015: 39) who offers a modified version of Shields’s (1999). Cameron, M. A. (2015). *Is Ground Said-in-Many-Ways? Studia Philosophica Estonica* 7 (2): 29–55.

The first condition of these definitions has improved over to the previous critique. Yet, surprisingly, the formulation of the second condition does not incorporate the *κατὰ τοῦνομα*-part properly, neither in DH nor CH. According to his formulation, one could assume that the definitions of x and y need to be different *independently of their name*, while it is clear that this cannot be the case since *κατὰ τοῦνομα* indicates that *they need to be different according to their name*. The term “their” in the second condition refers to x and y without any further qualifications. Put this way the *τῆς οὐσίας*-part becomes the only of the two attributes that determines the relevant definienda. As a result, in this case, it is the *τῆς οὐσίας*-part that is overemphasised. It is not wrong that it plays a role in the determination of the relevant definienda, but it is not entirely sufficient to reproduce the second condition because the definition also needs to correspond to the name and is not merely *τῆς οὐσίας*. Shields deals with the two problematic aspects differently in each of his reconstructions of the second condition, once in the case of synonymy, once in the case of homonymy, whereas there are no clues that require him to treat these differently as the textual basis is identical in the relevant aspects.

### 3.3.3 Incorporating *κατὰ τοῦνομα* and *τῆς οὐσίας* is Necessary

By using well known and established examples for homonymy, it is possible to show that any reformulation of the two conditions that focuses solely on one of the two attributes either becomes too wide or too narrow. As a premise, one has to assume again that the formulation of the second condition is the result of prudent considerations and that every part of it fulfils a specific function. Starting with the tripartite decomposition of the second condition from above it will be shown that there are counter-examples to each of the two re-combinations of *ὁ λόγος ἕτερος* with the attributes *τῆς οὐσίας* and *κατὰ τοῦνομα*.

The first simplified, second condition of homonymy:

HS1 *ὁ λόγος τῆς οὐσίας ἕτερος*

The second, simplified second condition of homonymy:

HS2 *ὁ κατὰ τοῦνομα λόγος ἕτερος*

Combined with the first condition of homonymy, it can be shown that neither of these simplified conditions suffices to cover every case of homonymy (mutatis mutandis this method applies for synonymy as well).

First verification attempt:

HC1 + H2S1: *x and y have the same name + the definition of the being is different*- *ὁ λόγος τῆς οὐσίας ἕτερος*

Is this a sufficient and rigorous definition of homonymy? This is probed with the following examples.

Banks are well-known examples of homonymy:

“Bank,” said of a sandy elevation.

“Bank,” said of a financial institute.

HC1 is fulfilled, H2S1 is fulfilled: The definition of the two subjects is different. The two things are homonyms with respect to the name “bank”. According to this example, one may conclude that the reformulation (H1 + HS21) suffices to explain the definition of homonymy and this is actually the case, however, under a certain constraint: H1 + H2S1 suffice to explain the homonymy between individuals of different genera with the same name. Thus, one has to ask: Is it possible that “κατὰ τοῦνομα” is superfluous? It is not superfluous, since also a man and a horse, being called “animals” would become homonyms, despite them being expected to be synonyms with respect to the name animal.

Example

“Animal,” said of a man

“Animal,” said of an ox

HC1 is fulfilled. H2S1 is fulfilled: The definition of the two subjects is different. Thus, the two things must be homonyms with respect to the name “animal”, which clearly is an undesired result. How is this possible? H2S1 suggests to only consider the definition of the being *independently of the name* “animal”. According to this formulation, the subjects are the man or the horse, whose definitions are not the relevant ones here. Thus, H2S1 is *too wide*. Species of the same genus would become homonyms with regard to the name of their genus. If only a shared name and the definition of the being *independent of the name*, which needs to be the same, was necessary, then one would have to call the ox and man homonyms with respect to their common name “animal”, since the *λόγοι* of ox and men, *considered independently of their*

common name “animal”, are different. Consequently, the attribute “κατὰ τοῦνομα” is not superfluous.

Focussing on *κατὰ τοῦνομα* and the insight that it is necessary, one may go beyond that and enquire whether the *κατὰ τοῦνομα*-part was sufficient to establish homonymy. One can reject this assumption using appropriate examples. In addition, the *κατὰ τοῦνομα*-part only contributes to determining the relevant definienda of the *λόγοι* that need to be compared, while it does not determine them completely.

Second verification attempt:

H1 + H2S2: *x and y have the same name + the name-corresponding definition is different* – ὁ κατὰ τοῦνομα λόγος ἕτερος

Is this sufficient to completely explain homonymy? The following examples show:

“Bank” said of sandy elevation x

“Bank” said of financial institute y

HC1 is fulfilled, and H2S2 is fulfilled: The name-corresponding definition is different. Therefore, x and y are homonyms with respect to the name “bank”. Up to this point, H2S2 is as suitable as H2S1 was. If H2S2 avoids the homonymy in the animal-example, it seems to be the more promising condition:

“Animal” said of a man

“Animal” said of an ox

HC1 is fulfilled, but H2S2 is not fulfilled: The name-corresponding definition of the two does not differ. Thus, ox and man are *not* homonyms with respect to the name “animal”, which is correct, and consequently, H2S2 avoids the previous problem of H2S1. However, does this mean that the *τῆς οὐσίας*-part is unessential? If one thinks so, the decision has been made too hastily. H2S2 only states: *the name corresponding definition is different*. This is only seemingly sufficient. It seems sufficient because intuitively, one adds something into the condition H2S2, which can be called the *necessary indexicality*. What is meant by that? The verbatim H2S2 is:

*the name-corresponding definition is different*

However, one can assume this is elliptical for the following clause:

*the name-corresponding definition <in each case; for each thing> is different*

Thus, one may assume, even if *τῆς οὐσίας* was omitted one could not read H2S2 without at least an implicit *necessary indexicality*. The role of the *τῆς οὐσίας*-part is to make this indexicality explicit. This, however, does not explain the choice of the term “οὐσία” in this context. If it is only about indexicality, Aristotle could have used another term such as *ἐκάστων* or *αὐτῶν*. In *Top.* 1.15, 107a2, Aristotle uses the phrase *the name-corresponding definition of each thing is different* – *ἕτερος γὰρ ὁ κατὰ τοῦνομα λόγος αὐτῶν* to explain an example of homonymy. This formulation emphasises the *necessary indexicality* of the second condition while avoiding the much more complex term “οὐσία”, which is the cause of the concerns about the ontological scope of the definition as explained above. I propose that the role of the “*τῆς οὐσίας*” in the *Categories* is the same as the role of the “*αὐτῶν*” in the *Topics* passage.

This insight, however, does not explain the choice of the term “οὐσία” in *Cat.* 1, but it can be used to reinforce the criticism of the popular translation of “*τῆς οὐσίας*” with “of being” (see above). In this light, translating “*τῆς οὐσίας*” as “of being” seems to suffer from the same problem as H2S2: It lacks the *necessary indexicality*. If the comment about the *necessary indexicality* is justified, then it applies also to any translation that translates “the name-corresponding definition of being is different.” The choice of “of being” renders the *τῆς οὐσίας*-part redundant in terms of its function of indicating the relevant subjects. Thus, one could apply the same to

“the name-corresponding definition of *being* is different” which has been applied to H2S2, i.e.

“the name-corresponding definition of being <in each case; for each thing> is different.”

From this, it emerges that the way the popular translation represents the second condition faces the same problem as the H2S2.

### 3.3.4 Identifying the Relevant Definiendum

All that is left to do is to identify the relevant definiendum. The present proposal is based on the assumption that the relevant definiendum is determined by a combination of the two attributes, *κατὰ τοῦνομα* and *τῆς οὐσίας*. It has been shown in the previous sections that it is

not possible to obtain the desired result by disregarding or overemphasising one of these aspects. The results are either too narrow or too wide. This can be regarded as further evidence of the adequacy of the assumption that the two attributes **together** determine the relevant definiendum. It was proposed that on the one hand the *τῆς οὐσίας*-part is added because one is not supposed to compare the definition of a name<sup>206</sup> *independently of its subject*. On the other hand, it was shown that *κατὰ τοῦνομα* is added because one is not supposed to compare the definition of some subject *independently of its name*, i.e. one is not supposed to compare the definition of the ox or the man as it is *four-footed animal* and *two-footed animal*.<sup>207</sup>

From this approach, one can devise a positive proposal about the relevant definienda. According to what has been said, one has to assume that “οὐσία” needs to be interpreted in the sense of “subject” and it needs to be taken into account because it contributes to determining the relevant definiendum. The proposal starts with the following translation of *ὁ δὲ κατὰ τοῦνομα λόγος τῆς οὐσίας [...]*:

*The definition of the being that corresponds to the name [...]*

This translation is deliberately neutral concerning the question of the ontological scope of the doctrines of homonymy or synonymy, which was raised by Anton and Ammonius. Substances and accidents, taxonomically speaking, may both meet this condition. The reason is that a name can denominate both. This translation supposedly lays open the relevant definienda which need to be compared. In the sentence after the definition of synonymy (*Cat.* 1a10-12) there is an example given: *if someone is supposed to provide a definition for each, i.e. what being an animal is for each, one will give the same definition – ἐὰν γὰρ ἀποδιδῶ τις τὸν ἑκατέρου λόγον τί ἐστὶν αὐτῶν ἑκατέρῳ τὸ ζῶν εἶναι, τὸν αὐτὸν λόγον ἀποδώσει*. The relevant definiendum is *τὸ ζῶν εἶναι* in each case. Thus, it is not the name “animal”, (though the definiendum has a name),

<sup>206</sup> One may wonder whether definitions of names are actually a real alternative, since it is not clear whether it is possible to define names at all. Nevertheless, in this context one needs to consider this option at least on grammatical grounds. One might think of that, what sometimes is called *nominal definitions*, which can be given also in cases where real knowledge of the defined thing is impossible as it is the case of the goat-stag.

<sup>207</sup> This case was not excluded by *Shields's* homonymy reformulations.

but it is something extra-linguistic, namely what is denominated by the name, which in this sense is subject of the name, i.e. τὸ ζῷον εἶναι – *being an animal*. This approach also works for accidents. For example, *sharpness*: There is the extra-linguistic *sharpness\**, e.g. a sharpness that inheres in a knife, and there is *sharpness\*\**, e.g. a sharpness that inheres in a tone. *Sharpness\** and *sharpness\*\** are homonyms. Both are called sharp, and the definition of the being that corresponds to the name is different. The subjects of the names are *sharpness\** and *sharpness\*\** which indeed are defined differently.<sup>208</sup> Thus, the relevant definienda *sharpness\** and *sharpness\*\** are determined by a combination of name and corresponding subject.

The formal reconstructions of the definitions of homonymy and synonymy H2 and S2 from above, result from the improved translation of the second condition: *the definition of the subject that corresponds to the name is the same [different]*.

Synonymy S2 / [H2]

Two things x and y are synonyms [homonyms] iff

SC1 two things x and y have the name z in common and

SC2\* what it is for x to be z and what it is for y to be z, is the same [is different].

This reconstruction mentions the relevant definienda directly, i.e. *to be z* in the one, i.e. the x-case and *to be z* in the other case, i.e. the y-case. This reformulation is construed to mirror the example Aristotle presented (1a10-12) where he refers to τὸ ζῷον εἶναι as that which is the same in two different cases x and y, e.g. man and ox.

<sup>208</sup> One may object the following: What prevents us from thinking that the subjects of “sharp” in the first and “sharp” in the second are simply the knife and the tone themselves? Of course, there is a sense of being a subject in which the knife and the tone are the subjects of the names, but in this context, one has to distinguish this sense of *being a subject* from the sense as it has been present in the example of the animal Aristotle used to explain the relevant definienda in the case of synonymy. The relevant subjects in this context are what Lewis (2004: 4) calls “universals”, i.e. non-substantial universals in the case of accidents and substantial universals (τὸ ζῷον εἶναι) in the case of substances.

### 3.4 The Problematic Elements of the Definition of Homonymy – The Conceptual Scope

In addition to those three problematic aspects that are common to both homonymy and synonymy (1. ὁ λόγος, 2. τῆς οὐσίας 3. κατὰ τοῦνομα), as announced earlier, there are three further elements in the definition of homonymy that need to be discussed. See the underlined words in the translation form above:

1. *μόνον*
2. *ἕτερος*
3. *τὸ γεγραμμένον*

*Cat.* 1, 1a1-4: Ὅμωνυμα λέγεται ὧν ὄνομα **μόνον** κοινόν, ὁ δὲ κατὰ τοῦνομα λόγος τῆς οὐσίας **ἕτερος**, οἷον ζῶον ὃ τε ἄνθρωπος καὶ **τὸ γεγραμμένον**. τούτων γὰρ ὄνομα **μόνον** κοινόν, ὁ δὲ κατὰ τοῦνομα λόγος τῆς οὐσίας **ἕτερος**

Homonyms are called those things [H1] which **only** have the name in common, [H2] and the definition of the subject corresponding to the name is **different** as <one calls> ζῶον a man and a **drawing** for these things **only** have the name in common, and the name-corresponding definition of the subject is **different**

Interestingly, these three aspects have a certain connection and far-reaching influence on the character of the alleged doctrine of homonymy in Aristotle. Similar to the discussion above, the interpretation of these three elements also concerns the scope of the doctrine of homonymy. However, this time “scope” does not encompass the question whether the definition of homonymy covers substances or also non-substances, but instead, it concerns something that may be called the *conceptual scope* of homonymy. The question for the conceptual scope is closely linked to the interpretation of the three additional problematic aspects that are part of the definition of homonymy. Depending on their interpretation, one either makes use of them as textual evidence for the thesis that Aristotle’s standard use of homonymy amounts to *accidental homonymy* and thus is more restricted in its conceptual scope (this option supports the DefH-view). The other interpretation allows using these elements in such a way as to use them **against** that thesis. Then one argues that this definition is broader in scope and also covers cases of so-called *non-accidental homonymy* (this option supports the InfH-view).

Indeed, one cannot ground a proposal about Aristotle's alleged standard view of homonymy merely by focusing on these two definitions and ignoring what is said in the rest of the corpus. However, the interpretation of these two definitions plays a crucial role in the reconstruction of the Aristotelian terminology particularly for the best possible view on the relation of multivocity, homonymy and synonymy.

### 3.4.1 *Μόνον* and *ἕτερος*

“μόνον” occurs in the first condition of homonymy in Ὅμωνυμα λέγεται ὧν ὄνομα μόνον κοινόν and two lines later in τούτων γὰρ ὄνομα μόνον κοινόν. *μόνον* – *only, alone, solitary* has to be taken as the opposite of *together with something*, i.e. *not together with something else* or even *exclusively* or *solely*.<sup>209</sup> If “μόνον” means “not together with something else” and one assumes that the only thing that can plausibly be meant in this context by “something else” is the *λόγος*, then one may deduce that two things need to have *a name in common and not their account* on the basis of “μόνον”, (even without reference to “ἕτερος”). In this regard, *μόνον* indicates non-identity of the logoi. The postposed “ἕτερος” picks this aspect up again. Non-identity is sufficient for *difference*. Nevertheless, there is room for interpretation. Even if “μόνον” means “exclusively”, i.e. that two things *exclusively* have their name in common and not their definition, it does not tell whether the related accounts are

- 1 *completely different* or
- 2 *partly different*.

It is widely accepted to distinguish these two different possibilities regarding *ἕτερος* – *different*.<sup>210</sup> Unfortunately, the definition only provides “ἕτερος”, whilst we want to know whether it is to be understood as *ἕτερος completely* or *ἕτερος partly*. As said, something qualifies as *different* already if it is not *completely* identical. Hence, one cannot decide which option is preferable only by considering “ἕτερος” or “μόνον”.

<sup>209</sup> Irwin (1981: 524) acknowledges the importance of this adjective.

<sup>210</sup> Cf. Shields (1999), Irwin (1981), Ward (2008), Wedin (2000), Brakas (2011).

As a consequence of these options, it is a regular practice to distinguish two exhaustive kinds of homonymy, namely those where the definitions are not entirely different, i.e. those in which there is definitional overlap, and those which are completely different, with no overlap. The labels of these kinds are usually given with reference to *EN* I.6, 1096b27. If there is no definitional overlap, one speaks of *accidental homonymy*; if there is overlap one may call it *non-accidental homonymy*, although sometimes this distinction bears other names.<sup>211</sup> In the following, this will be called the accidental / non-accidental distinction (ANAD). There are reasons to regard this distinction not as the best way to depict the terminological complexity connected with the topic of homonymy in Aristotle since it inflates the notion of homonymy. Nevertheless, this distinction has become quite popular. Because of this, I will discuss it in greater detail.

The next subsection interrupts the discussion of the three additional problematic elements of the definition of homonymy and takes a look at the ANAD and its origin, and considers some difficulties that are connected with it.

#### 3.4.1.1 Digression: The accidental-non-accidental distinction

The challenge for adherents of the ANAD is to provide theses on the way in which the ANAD is drawn. There are different ways in which the ANAD can be drawn. It has been mentioned earlier that the distinction is connected to the *ἕτερος*-discussion from the *Categories*. As there either is an overlap, or there is none, this is a clear criterion. The labels “accidental” and “non-accidental” trace back primarily<sup>212</sup> to *EN* I.6, 1096b26-27: *how is <the good> said? For it does not look like it belongs to the by-accident-homonyms – ἀλλὰ πῶς δὴ λέγεται; οὐ γὰρ ἔοικε τοῖς γε ἀπὸ τύχης ὁμωνύμοις*. It is not surprising that this passage is often considered separating one species from another of the same genus because one could easily imagine that this passage continued in the following way: *For it*

<sup>211</sup> Such as *discrete* and *comprehensive* homonymy as suggested by Shields (1999) which is cited above section The Role of *κατὰ τοῦνομα* 3.3.2.

<sup>212</sup> Also, a reference to *EE* VII.2, 1236b23-26 is common. However, it is questionable whether this reference argues for or against the ANAD. Cf. the section 3.4.1.2.

*does not look like it (the good) belongs to the by-accident-homonyms → but they belong to the not-by-accident-homonyms.*<sup>213</sup>

The ANAD is part of the InfH-view. The difficulties that are connected with the way the ANAD is drawn are the reason for the inflation of the notion of homonymy in this approach. If there was only definitional priority as the sole criterion that qualifies a homonym as non-accidental, the situation would be simple, but there is an extensive set of cases of homonymy that barely fit into the ANAD if it is construed only relying on definitional overlap. In this work, they are called *spurious homonyms* as, e.g. all living things and their dead counterparts or real and artificial things. Spurious homonyms are discussed in a separate section below (chapter 4). They play an important role in the overall understanding of Aristotle's standard notion of homonymy. For spurious homonyms, it is a matter of interpretation whether there is definitional overlap or not. There is evidence to deny definitional overlap without denying some sort of association.<sup>214</sup> Shields (1999: 29ff.) also acknowledges the importance of spurious homonyms. He expands his terminology, which is based on the ANAD with yet another sort of non-accidental homonymy besides the ones that are covered by the strong approach (i.e. analogical and *pros hen* cases). He calls this account of non-accidental homonymy *discrete, non-accidental homonymy*. He denies definitional overlap in those cases, but he does not deny *association*.

The problem of the ANAD is that *οὐ ἀπὸ τύχης* – *not by accident* allows various interpretations. If one solely considers the passage of *EN* I.6, 1096b26-28 one may notice that *not by accident* – *οὐ ἀπὸ τύχης* is not further explained by Aristotle. One may assume that this means that for non-accidental homonyms there is *some reason* or *explanation* for the fact that two different things share the same name, which is absent in accidental homonyms and that this is sufficient to classify them. However, “some explanation” does not mean that merely any explanation is sufficient, since also in synonymy there is *some kind of explanation* for the fact that two different things share the same name. There

<sup>213</sup> This is suggested, e.g. by Owens (1978<sup>3</sup>: 117).

<sup>214</sup> The application of the ANAD needs to deal with the problems connected with the SAA, which already is a strong argument against the adequacy of the ANAD. Cf. section 2.2.2.

are certain restrictions. But from this passage alone, it is not entirely clear, which sort of restrictions apply here. One approach is given by definitional overlap and the reference to the *Categories* emphasising that the interpretation of ἔτερος allows, or at least does not explicitly exclude, the possibility of definitional overlap. Let us call this *strong non-accidental homonymy*:

*Strong non-accidental homonymy*: A strong approach of non-accidental homonymy would probably aim at *definitional overlap*: *homonyms qualify as non-accidental, only if their definitions overlap*.

The other way to distinguish accidental from non-accidental cases is the following:

*Weak non-accidental homonymy*: A broader, more permissive approach would presumably allow any kind of explanatory relation, without demanding definitional overlap: *homonyms qualify as non-accidental if there is a satisfying explanation for the fact that two different things share the same name*.

This can be illustrated by the following example: “With a single click of his mouse, John ordered food for his mouse.” The names of the two things, the animal and the device, are associated by more than mere lexicographic identity. There is a common etymology for the words. Yet, one may imagine that it is possible to define the *electronic pointing device* without referring to the fact that it has its name “mouse” derived from a rodent. According to the strong approach, this case would not qualify as non-accidental homonymy, but it does so according to the weak. The example demonstrates that there are different ways to classify “mouse”, which depend on assumptions on the appropriate forms of their definitions.

There is a similar example in *EN* I,5, 1129a26-31. Aristotle calls this a homonymy that is remote (πόρρω). The term *key* – κλεις, which either refers to the collarbone or to the instrument that opens doors is homonymous. How should one classify this example according to the distinction above? Irwin (1981: 527f.) assumes that in cases like this, Aristotle does not need to assume that it is a “complete accident” that two things bear the same name “key”. Nevertheless, the nature of the two keys “is so different that the definitions include no common element, and we can understand one definition without needing to understand any

part of the other.” Since Irwin does not assume definitional overlap but instead considers this example not “completely” accidental, we can infer that he would adopt the weak approach to non-accidental homonymy.

Also, with accidental homonymy, it is possible to know one without but not the other. The only difference between them would then be the admission or denial of another explanation. If one allows a distinction between weak and strong cases in the non-accidental homonymy, a parallel distinction for accidental homonymy will create a conceptual overlap between accidental and non-accidental homonymy. The weak approach of accidental homonymy would then coincide with the weak approach to non-accidental homonymy, i.e. denying definitional overlap, but allowing some other kind of explanation. The strong approach to accidental homonymy would deny definitional overlap *and* any other kind of relation.<sup>215</sup> This distinction shows that the ANAD has problems accommodating a certain set of prevalent examples for homonymy. The severe cases are those without definitional overlap, but some other kind of relation between them, i.e. spurious homonyms. There are cases, which can be regarded as both, accidental and non-accidental without implying a contradiction. Given that there is an alternative that avoids this vagueness, i.e. the DefH-view, it is difficult to identify the strengths of any approach that admits a form of the ANAD.

#### 3.4.1.2 Discussion: An appropriate distinction?

The difficulties of non-accidental and accidental cases only arise if one agrees that in *EN*. I.6, 1096b27-28 the *ἀπὸ τύχης* enables us to mark-off one species from another species of the same genus (i.e. the problems only arise if one agrees with the ANAD). The remark about homonyms *ἀπὸ τύχης* is the only occurrence of its kind, and I doubt it is sufficient to justify the inflation of Aristotle’s notion of homonymy in the way the ANAD requires it. It is possible to argue that *ἀπὸ τύχης* instead has to be understood as a clarificatory remark about the character of *homonymy*

215 Cf. the following passages contain an example that explicitly state that two things can have the same name without seeing anything common in them: *Met.* I.9, 991a5-8; *Met.* XIII.4, 1079b1-3 as if someone would call “a man” Kallias and the wood, though one does not see any communality of them – εἴ τις καλοῖ ἄνθρωπον τὸν τε Καλλίαν καὶ τὸ ξύλον, μηδεμίαν κοινωνίαν ἐπιβλέψας αὐτῶν. Cf. for a discussion of these passages Ward (2008: 36ff.).

*simpliciter* without assuming that Aristotle's presupposes or proposes a comprehensive notion of homonymy in this passage. This assumption can be supported by a parallel passage of the *EE* which is sometimes used to support the adequacy of the ANAD.

|   |   |
|---|---|
| <p><i>EE</i> VII.2, 1236b23-26: λείπεται τοίνυν οὕτως, ὅτι ἔστι μὲν ὡς μόνῃ &lt;ή&gt; πρώτη φιλία, ἔστι δὲ ὡς πάσαι, οὕτε ὡς ὁμώνυμοι καὶ ὡς ἔτυχον ἔχουσαι πρὸς ἑαυτάς, οὕτε καθ' ἓν εἶδος, ἀλλὰ μᾶλλον πρὸς ἓν.</p> | <p>The only remaining alternative is that the primary friendship is the only one, because it is somehow all, neither as homonyms, i.e. as being related to each other by chance, neither according to one species, but rather in relation to one.</p> |
|---|---|

This translation does not insinuate the ANAD. If one considers the *καὶ ὡς ἔτυχον* as an explanatory phrase to *οὕτε ὡς ὁμώνυμοι*, then it emphasises the idea that homonyms primarily are those things that are accidentally related. Moreover, it is said that friendship is said synonymously, for the *καθ' ἓν εἶδος* alludes to synonymy. Finally, the conclusion is that neither of the two is the case, but that *friendship* instead is said *pros hen*. This explanation is entirely consistent with the DefH-view and also with the tertium quid view, but without any support for the InfH-view.

Another limitation connected to the ANAD concerns the justification of the ANAD by referring to the *Categories*. It is not possible to exclude the possibility that in the *Categories* 1 a comprehensive notion of homonymy is introduced, but some hints support the thesis that the definition concerns a narrow notion of homonymy. How can this be justified? The three problematic pieces *μόνον*, *ἕτερος* and *τὸ γεγραμμένον* play an influential role in this regard.<sup>216</sup> One indication that supports the thesis that the definition of homonymy in *Cat.* 1 is concerned with a narrow notion of homonymy is given by *μόνον* – *only* (it occurs twice). If the definition were about non-accidental homonymy, the function of the “μόνον” would become mysteriously restricted. Why should Aristotle assert that two things *only* have their name in common, if he also thinks that parts of their definitions overlap? Further, how could “μόνον” be read less restricted, if it means something akin to “exclusively”? There are no comparatives for this adjective. If Aristotle had this option in mind, the point would have become much clearer if “μόνον” was not part of the text. It is much more likely, since “μόνον” is part of the text, that

216 Cf. Wedin (2000: 13) who, by and large, shares my assessment.

the “μόνον” fulfils a proper function and has an unlimited scope. Nevertheless, one has to accept that this argument does not guarantee what it is supposed to show. It is still imaginable that “μόνον” has a restricted scope. Intertwined with this is the problem of the notion of *ἕτερος* – *different* in this context. If Aristotle concedes to call *different* – *ἕτερος* anything that is *not completely identical*, then “μόνον” has a restricted scope. Then, the definition covers also the so-called non-accidental cases such as the healthy (although, in the relevant passages exactly these are said not to be homonymous). Yet, if Aristotle in this context only calls *different* what is *completely unidentical*, then this definition only covers those accidental cases. Since the “μόνον” can be taken as an indication to conceive of *difference* in this context what is *completely unidentical*, whereas it is not an indication for the alternative, one has to conclude that the reasons to assume that the definition of homonymy in the *Categories* focusses only on accidental homonymy prevail.

### 3.4.2 Τὸ γεγραμμένον

The interpretation of τὸ γεγραμμένον can be used to argue for the adequacy of the ANAD. To illustrate homonymy Aristotle uses the following example: οἶον ζῶον ὃ τε ἄνθρωπος καὶ τὸ γεγραμμένον. There are two ways to interpret this example.<sup>217</sup>

1. Linguistic incident: “ζῶον” signifies an animal and a drawing (of anything → accidental homonymy)
2. Paradigm & image: “ζῶον” signifies an animal and a painted animal → non-accidental homonymy

<sup>217</sup> Cf. for this distinction also Irwin (1981: 525 n. 3). Recently, it has been argued by Brakas (2011: 145–148) that there are not two alternatives but only one. Brakas rejects the first option that I mention here as a real option. He even claims that the example given in the definition shows that the PHR was “embedded in Aristotle’s thought from the very beginning.” (p. 147). I do not see real evidence for such a claim within this passage, although I would not claim that it is impossible. I agree with Wedin (2000: 13) that this passage presents a definition of a narrow notion of homonymy. (Wedin calls this kind of homonymy “strong”).

As indicated, dependent on these two ways is the assessment of the ζῶον-example either as an example of accidental homonymy or non-accidental homonymy. Scholars are not in unison on this.<sup>218</sup>

To consider this an example of non-accidental homonymy the lines need to be interpreted the following way: οἶον ζῶον ὃ τε ἄνθρωπος καὶ τὸ γεγραμμένον – for example “ζῶον” <designates> a man and the painted <animal>. This assumes that the participle τὸ γεγραμμένον belongs to ζῶον. Then, ζῶον does not amount to two entirely unrelated things, but to related things. The painted animal is not a genuine animal, since it lacks, e.g. self-locomotion, but it may be called animal, because of its physical resemblance to a real animal. Its definition could amount to “semblance of an animal” and thus include a reference to the real animal, although nowhere Aristotle concedes this dependence in definition.<sup>219</sup> It is possible to assume that Aristotle here talks in the same fashion as he talks in *DA* II.1, 412b19ff. and other places about a stone or painted and a real eye of which he explicitly says that they are homonyms.<sup>220</sup> These examples have a unique role within Aristotle’s examples of homonymy. Often, examples of this kind are called *spurious homonyms*, as discussed in the next section.

Shields (1999: 14–15) prefers the paradigm & image interpretation of the example. He states that “Aristotle’s example here evidently lends

218 There are opposing translations that basically follow either take of the example as illustrating a case of accidental homonymy or as a case of non-accidental homonymy, cf. Rath (2012: 7) “Zum Beispiel ist sowohl der Mensch als auch der auf einem Bild gezeichnete Mensch ein Lebewesen.” Rath, I. W. ed. (2012). *Die Kategorien: Griechisch/deutsch*. Stuttgart. Cf. also Rolfes, E. (1925<sup>2</sup>: 43) „So wird z. B. der Name Sinnenwesen (ζῶον) sowohl von einem (wirklichen) Menschen wie von einem gemalten Menschen oder Tier gebraucht.“ Rolfes, E. ed. (1925). *Aristoteles Organon*, 2nd edn. Leipzig [u.a.]. In contrast to that, cf. Oehler (1986: 9) „So wird zum Beispiel der Name ‚Lebewesen‘ sowohl in bezug auf den Menschen als auch in bezug auf das Bild gebraucht.“ In accordance to that Ackrill (1986: 10) “Thus, for example, both a man and a picture are animals” which is identical to Barnes (1984: 2). Owens (1978<sup>3</sup>: 117) and Wedin (2000: 13) assume that the *Categories*’s example is accidental.

219 In section 4, I discuss the topic of so-called spurious homonyms. These reflect the homonymy between two things of which one is a genuine F whereas the other is only a spurious F, as in the case of the picture of the animal which is not genuine animal, but only spuriously so. In that section, I argue that there is no reason to believe that there is definitional overlap between these cases.

220 Actually, the example of real thing and its copy is found in many works: *PA* 640b29–641a6, *Meteor.* 390a10–13, *GA* 726b22–4, *Pol.* 1253a20–5, and similar to the *Categories* phrasing: *De Motu.* 450b20–24.

support to a kind of homonymy which recognises definitional overlap”. However, several pages later Shields proposes a convincing argument about the way Aristotle defines things. He speaks of *functional determination*.<sup>221</sup> Under this principle, the definitional overlap between copies and originals is denied. Yet, surprisingly, he does not apply this insight to his assessment of the example of the *Categories*.

To consider the example *οἶον ζῶον ὃ τε ἄνθρωπος καὶ τὸ γεγραμμένον* an example for accidental homonymy one needs to interpret it the following way: as “ζῶον” <signifies> a man and a drawing, regardless of whether the drawing is of an animal, a man or anything else. Here, “τὸ γεγραμμένον” is conceived as a substantivised participle meaning “drawing” or “painting”, which are literal meanings of the ambiguous term “ζῶον”. Although it is possible that there is a common etymological background to both meanings, as the objects of many paintings were animals, this possibility does not seem to be of interest in this context, and it is certainly not more than an ad hoc explanation to establish an association between these things.<sup>222</sup> It is pivotal for the “linguist incident approach” that the linguistic ambiguity of the term “ζῶον” is fully recognised as otherwise, Aristotle’s choice of terms would demand the backreference of “τὸ γεγραμμένον” to “ζῶον” as mentioned above. On the one hand, one may oppose that the fact he uses *τὸ γεγραμμένον* and not a proper substantive for “painting” or “image” such as “εἰκῶν” or “εἶδωλον”, and actually indicates and calls for the backreference of “τὸ γεγραμμένον.” But, on the other hand, if this were true, the choice of “ζῶον” as example would be perplexing, *because* of its ambiguity.

221 This notion will be picked up again in the next section. Shields (1999: 33) defines this in the following way: “FD: An individual *x* will belong to a kind or class *F* iff: *x* can perform the function of that kind or class.”

222 The example of ζῶον is not clearer than the example of ὄνος – mule in *Top.* I.15, 107a18–22: *οἶον ὄνος τό τε ζῶον καὶ τὸ σκεῦος· ἕτερος γὰρ ὁ κατὰ τοῦνομα λόγος αὐτῶν· τὸ μὲν γὰρ ζῶον ποιόν τι ῥηθήσεται, τὸ δὲ σκεῦος ποιόν τι – as e.g. in the case of the animal and the vessel: for the definition of the things that correspond to the name is different, it is said that one is an animal of some kind and the other a vessel of some kind.* It is not obvious, whether there is no dependency between the two different meanings. In the case of the mule and the machine one could at least assume a historical connection.

The interpretation of the ζῶον-example influences the interpretation of “ἕτερος”. The image & paradigm account demands that “ἕτερος” is read meaning “partially different” the linguistic-incident approach needs to read it meaning “completely different”.

verdict: According to the room for interpretation it is not entirely clear which intentions Aristotle has. Either, he introduces only one of the two kinds of homonymy, or he introduces both and is aware of the ambiguity between these two types of homonymy. It seems unlikely that Aristotle chose the term “ζῶον” as an example and used it in the way the image & paradigm account suggests it in the awareness that at the same time “ζῶον” is a term which by linguistic incident refers to two completely different things. This, the occurrence of “μόνον” and the absence of problems connected with the SAA convincingly speak in favour of the assumption that this passage is about what has been called accidental homonymy.

The only way one still could adhere to the image & paradigm account and still consider ζῶον-example illustrating accidental homonymy, is to assume that there is no overlap in definition between image and paradigm, which is something that has also been proposed by Shields (1999: 29ff.) albeit he does not apply this theory to the *Categories*.

### 3.5 Conclusions

I agreed with the real-essence-view on homonymy as it was formulated by Fine (2004). According to this view, homonymy and ambiguity do not coincide. I pointed out that there are reasons to believe that although the real-essence-view is appropriate, it actually does not exclude that there are semantic differences between the different applications of the terms. I claimed that the semantic differences are based on essential differences. Because of that, I believe that the disagreement between the meaning and the real essence view is not as strong as one may think.

Moreover, I argued that the main difficulties of the definitions of homonymy and synonymy are related to the three elements of their second condition. There is the meaning of ὁ λόγος αὐτόσι ἕτερος and the role of its attributes τῆς οὐσίας and κατὰ τοῦνομα. My proposal is

that *τῆς οὐσίας* and *κατὰ τοῦνομα* are crucial elements of that condition since they contribute *both* to the determination of the relevant definiendum of the *logos*, which is supposed to be the same (*αὐτός*) in the case of synonymy and different (*ἕτερος*) in the case of homonymy.

One of my theses on the *τῆς οὐσίας*-part of the second condition is that the *τῆς οὐσίας*-part is not primarily concerned with an issue about the ontological scope of the doctrine of homonymy and synonymy, whilst some scholars assumed this.<sup>223</sup> Moreover, I criticise the translation of “*τῆς οὐσίας*” with “of being” since it is not enlightening the function of the *τῆς οὐσίας*-part of the second condition clearly. I suggest a better understanding can be obtained if one assumes that the term “*οὐσία*” is used in the sense of *subject*. This interpretation attempts to clarify the function of *τῆς οὐσίας*-part given that it needs to be considered together with the *κατὰ τοῦνομα*-part. I argue that the challenge of the second condition is the determination of the relevant definiendum. My discussion shows that both elements, i.e. the *κατὰ τοῦνομα*-part and the *τῆς οὐσίας*-part, are indispensable parts of the definition as the elimination of one of the two has absurd consequences.

Finally, I discussed those problematic elements that only belong to the definition of homonymy, i.e. “*μόνον*”, “*ἕτερος*” and “*τὸ γεγραμμένον*”. Connected with the interpretation of these elements are assumptions about the conceptual scope of the definition of homonymy in the *Categories*, i.e. whether it defines what usually is called accidental homonymy or whether the definition allows a more comprehensive interpretation. My conclusion is that one cannot rule out the interpretation that renders the notion of homonymy comprehensive, however, I argue (in the digression) that the reasons to believe that Aristotle intended to define a narrower notion of homonymy prevail.

In the following chapter, I discuss and assess spurious homonyms. I discuss the impact of this class of examples on the assessment of Aristotle’s doctrine of homonymy. The chapter after next then discusses those cases of multivocity that are said non-homonymously, i.e. those that I baptised polysemous multivocals.

223 Anton (1968) and Cohen’s and Matthews’s Ammonius (1991).



## 4 Spurious Homonyms – Living and Dead – Copies and Originals

Spurious homonyms are best illustrated by these two examples: the pair of the *painted/sculpted and their prototype F* and the pair of the *living and dead F*.

Often, the latter is explained with reference to the former since Aristotle apparently assumes that in the former case, the homonymy is more visible and easier to reveal (cf. *DA* II.1, 412b17-22, *Meteor.* IV.12, 389b20-390b2). The label “spurious homonyms” has been introduced by Irwin (1981: 527ff.):<sup>224</sup>

“Aristotle also recognizes “spurious homonyms,” homonymous Fs that are not genuine Fs, but spurious Fs, called Fs simply because they resemble genuine Fs. Boxes and breasts are both called chests because they resemble each other, but neither sort of chest is defined simply as a resemblance of the other; some are defined as a type of box; others as a part of an animal, and they are all genuine chests. In spurious Fs the resemblance to real Fs is all that there is to their being F.”

First, a small technical note: The addressees of the label “spurious homonyms” are not entirely clear. Either a spurious homonym is only the spurious F (insofar as it is a relatum in a homonymy) or one calls the pair of picture and paradigm taken together spurious homonyms and qualifies the relation of homonymy as spurious, in spite of one of the homonyms, the paradigm, indeed being a genuine F.<sup>225</sup> In addition, although he does not speak of genuine homonyms, only of genuine Fs, one can imagine that it is in his sense to admit a complementary class of *genuine homonyms*. Let us call *spurious homonyms* the spurious Fs and not both of the relata of the homonymy as e.g. the painted man who is a spurious man. Accordingly, *genuine homonyms* are called those

<sup>224</sup> It also was picked up by Shields (1999: 31ff.).

<sup>225</sup> The difference following from these options is that one may either think that “spurious” devaluates the homonymy or that it devaluates the homonym.

homonymous Fs, which are altogether genuine Fs as e.g. *keys* are (like all other accidental homonyms).<sup>226</sup>

There are further questions to answer. Questions of particular interest are: What is the difference between a genuine and a spurious F? And connected to this: Is a reference to the genuine F necessary to define the spurious F, or not?<sup>227</sup>

The main difference between the genuine and the spurious F, as described by Irwin, is that the spurious F merely *resembles* the genuine F. But often at the same time,<sup>228</sup> Aristotle denies that the spurious F is an F at all. Things can resemble each other in many ways, but in this context, the outer shape seems to be of particular importance:

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| <p>PA I.1, 640b33-35: Καίτοι καὶ ὁ τεθνεὼς ἔχει τὴν αὐτὴν τοῦ σχήματος μορφήν, ἀλλ' ὁμως οὐκ ἔστιν ἄνθρωπος.</p> | <p>Yet, a dead body has exactly the same outward shape as a living one, but still, it is not a man.</p> |
|--|---|

|  |  |
|--|--|
| <p>641a18-21: ἀπελθούσης γοῦν οὐκέτι ζῶόν ἐστιν, οὐδὲ τῶν μορίων οὐδὲν τὸ αὐτὸ λείπεται, πλὴν τῷ σχήματι μόνον, καθάπερ τὰ μυθεύμενα λιθοῦσθαι</p> | <p>What is left is no longer an animal, neither are the left-behind parts the same, except only in shape, like those &lt;animals&gt; that turned into stone according to the fable</p> |
|--|--|

After death, i.e. after having lost the soul, a dead body only shares its outer shape with a living. If one continues to call the dead body “man” or “animal”, one commits a serious mistake, since the dead man or animal is not a man or an animal, at least not unqualifiedly. If one asserts of the genuine man “this is a man”, the “man” can be replaced by its definition “rational animal” and the assertion would still be true. This is not possible in the case of the spurious man, because the spurious man is not a rational animal, not even an animal at all. This leads to another remarkable difference between genuine and spurious Fs. For instance, spurious hands are not genuine specimens of hands, while this is the case for many other homonyms such as *chests*. This is the exam-

<sup>226</sup> This distinction is not analogous to the former distinction of accidental and non-accidental homonyms, since it cuts across the former distinction. All accidental homonyms qualify as genuine homonyms since their accounts do not overlap, but, also some non-accidental homonyms (both weak, e.g. *keys* and strong, e.g. healthy things, or friendship) qualify as genuine homonyms. The example of *key* – *κλεις* is taken from *EN* I.5, 1129a26-31.

<sup>227</sup> If this question were answered positively spurious cases would qualify as *pros hen* cases. All pictures of animals would contain a reference to the living animal in their definition.

<sup>228</sup> See also *Pol.* I.2, 1253a23-25 and *DA* II.1, 412b17-22 below.

ple Irwin (1981: 527–528) uses to show that in some cases, two homonymous things can be considered a genuine specimen of the same “kind”. The example is parallel to the example of “key”. Both the bone and the tool, in this sense, are genuine keys. This is not the case for spurious Fs.

Now, unravelling question (2) regarding their definitions, shows this question has no simple answer. Accepting that the definitions of the spurious and the genuine F are not identical, there are two options: either there is definitional overlap, or there is none. In the literature, one finds both options. Shields and Irwin answer the question for the definitional overlap differently. Since both scholars deny that this is a case of accidental homonymy, the two options to which they adhere comply with what I called *weak* and *strong* non-accidental homonymy in the digression of the last chapter. Shields’s view may be deemed equivalent to weak non-accidental homonymy and Irwin’s view with strong. Irwin (1981: 528) presupposes that one needs to define the picture of a man as “semblance of a biped animal.”<sup>229</sup> Hence, the definition of the spurious F contains the definition of the genuine F. This can be called the *usual reaction*<sup>230</sup> regarding the question of their definitions. The usual reaction supports the InfH-view of homonymy since it qualifies a particular class of common standard examples for homonymy (namely all those spurious homonymies) as *strong non-accidental homonymies* (cf. also Irwin 1981: 529).

Shields’s (1999: 31) view deviates from this one, but he also supports the InfH-view.<sup>231</sup> Interestingly, Shields denies definitional overlap between the two things.<sup>232</sup> He assumes that Aristotle wanted to express by locu-

229 Surprisingly, Irwin admits this kind of definition, but denies focal connection in cases that are based on *similarity* with reference to *Met.* IX.1, 1046a6.

230 Apart from Irwin (1981), this reaction is also found in Hintikka (1959: 144); carefully also Fine (2004: 145) assumes that they *might* have “connected definitions”. Lewis (2004: 4 n. 6 and 24 n. 56) also opts for this option and criticises Shields’s view of this, which is presented below.

231 Ward (2008: 102) agrees with Shields on this: “Shields correctly points out, what appears to be a case of core-dependent homonymy [the spurious cases] is not a genuine case insofar as one of the requisite conditions for being a causal, core-dependent homonym is not satisfied.”

232 This view is also shared by Owen (1960: 188): “An eye or a doctor, a hand or a flute, is defined by what it does; but an eye or a doctor in a painting cannot see or heal, a stone hand or flute cannot grasp or play. So, when they are used in the latter way, ‘eye’ and the other nouns must be used homonymously. And Aristotle, who allows that ambiguity is a matter of

tions such as *some x is no F*, or *some x is no longer an F*, πλὴν ὁμωνύμως<sup>233</sup> – *except homonymously* that there is no definitional overlap:

“In so speaking, he means that the Fs in question have nothing definitionally in common with genuine Fs, and are called Fs only by custom or courtesy. These are discrete homonyms which nevertheless form a class worthy of our attention; unlike the puns mentioned at *Sophistici Elenchi* 33, they will not be ‘clear to just anyone.’”

According to Shields, this does not mean that those homonyms are accidental. He assumes that spurious Fs are associated *by custom or courtesy*.<sup>234</sup> This complies with the approach of weak non-accidental homonymy: There is a particular explanatory relation between the two homonyms, but no definitional overlap.

Shields’s position is connected to the following thoughts on the determination of things: Aristotle has suitable means to explain why those sculpted or dead things are not genuine Fs. It is a well-known practice of Aristotle to define things, especially body parts, by their *function and power* – *ἔργον and δύναμις*.<sup>235</sup> In the following passage, this principle is testified combined with a remark about the loss of the defining function and power:

degree (*Phys.* 249a23-5, *EN* 1129a26-31), nowhere suggests that this homonymy is redeemed and brought nearer to synonymy by the sensible resemblance, which in his view, forms the sole connexion between the eye or doctor in the painting and its fleshly counterpart.”

233 *PA* 640b36; *DA* II.1, 412b2; similarly, *GA* 734b25-27 and 735a8; *Meteor.* 389b20-390a16; *Pol.* I.2, 1253a20-25.

234 On the one hand, in this context Shields could have referred to *Met.* IX.1, 1046a6. (and *Met.* V.12, 1019b33-35). Instead of speaking about *custom and courtesy* he could have spoken about *similarity*. Similarity between things is apparently not sufficient for a PHR. Whether it is reason enough to deny logical priority is discussed in the aftermath of this section. On the other hand, Shields’s thesis about *custom and courtesy* might actually comply with Aristotle’s estimation of these cases. Cf. the last paragraph of this section.

235 E.g. *Meteor.* 390a10-13: *Everything is defined by its function a thing truly is itself if it can perform its function, e.g. the eye when it can see, if it is not capable to do so it is that thing homonymously, like a dead or stony eye, just as a wooden saw is no more a saw than one in a picture* – ἅπαντα δ’ ἐστὶν ὀρισμένα τῷ ἔργῳ τὰ μὲν γὰρ δυνάμενα ποιεῖν τὸ αὐτῶν ἔργον ἀληθῶς ἐστὶν ἕκαστον, οἷον ὀφθαλμὸς εἰ ὄρα, τὸ δὲ μὴ δυνάμενον ὁμωνύμως, οἷον ὁ τεθνεὺς ἢ ὁ λίθινος· οὐδὲ γὰρ πρίων ὁ ξύλινος, ἀλλ’ ἢ ὡς εἰκῶν.

*Pol.* I.2, 1253a23-25: πάντα δὲ τῷ ἔργῳ ὠρισται καὶ τῇ δυνάμει, ὥστε μηκέτι τοιαῦτα ὄντα οὐ λεκτέον τὰ αὐτὰ εἶναι ἀλλ' ὁμώνυμα

All things are defined by their function and power, and we should not call them the same, but homonyms, when they are such beings not anymore.

This passage shows that Aristotle is aware of the well-established habit that things are often still called by the same name despite really not being what they have been. Further, from this passage it emerges that Aristotle does not suppose that referring to them with the same name is a “good custom” since he explicitly says *οὐ λεκτέον* – *we should not call them the same*.<sup>236</sup> In the following passage, this kind of defining things is applied:

*DA* II.1, 412b17-22: θεωρεῖν δὲ καὶ ἐπὶ τῶν μερῶν δεῖ τὸ λεχθέν. εἰ γὰρ ἦν ὁ ὀφθαλμὸς ζῶον, ψυχὴ ἂν ἦν αὐτοῦ ἢ ὄψις· αὕτη γὰρ οὐσία ὀφθαλμοῦ ἢ κατὰ τὸν λόγον (ὁ δ' ὀφθαλμὸς ὕλη ὄψεως), ἧς ἀπολείπουσιν οὐκέτ' ὀφθαλμὸς, πλὴν ὁμώνυμος, καθάπερ ὁ λιθίνος καὶ ὁ γεγραμμένος.

One has to consider what has also been said concerning the parts. For if the eye was an animal, then sight would be its soul: for this is the substance of the eye according to its account (the eye is the matter of sight), which, if having fallen short of it [sight] is not an eye anymore, except homonymously, just like the stony and the painted <eye>.

Aristotle compares the role the sight plays in connection to the eye with the role the soul plays concerning the body. The fundamental function of the eye is to see; this is the essence<sup>237</sup> of the eye. If the eye loses the ability to see, e.g. when it becomes blind or dies, it loses its defining function, (or rather its essence or its soul). If the eye has lost its essence, it cannot be an eye anymore, at least not strictly speaking, which is why Aristotle says *πλὴν ὁμώνυμος* – *except homonymously*. In this context Shields (1999: 31ff.) speaks of “functional determination.”<sup>238</sup> By this approach, we know under which conditions *x* falls into a certain class *F*. While Shields interprets this approach quite stringently by assuming Aristotle denies a connection between these homonyms reaching the

<sup>236</sup> This conforms with Aristotle's general remark that one should follow the crowd regarding the denomination of things, but one should not follow them regarding the question what things are of certain kinds and what not (cf. *Top.* II.2, 110a16-20).

<sup>237</sup> In the sense of *τὸ τί ἦν εἶναι*, cf. *DA* II.1.

<sup>238</sup> Shields (1999:33) defines this in the following way: “FD: An individual *x* will belong to a kind or class *F* iff: *x* can perform the function of that kind or class.”

level of their definitions,<sup>239</sup> Irwin does not see the need to deny definitional overlap. I deem Shields's view more plausible since he provides an explanation for the lack of definitional overlap while Irwin's view is based on mere presupposition.

The disagreement between Irwin and Shields is related to the question “*what is the spurious F?*” since they have different views about their definitions. According to Irwin's approach to “spurious”, it is sufficient for definitional overlap that something is *similar* to a genuine F in its appearance but lacks some fundamental function of the genuine F: *some x is a spurious F iff x lacks an essential feature of genuine Fs, but outwardly resembles genuine Fs*. This account refers to genuine Fs and hence creates a definitional overlap. Shields's view on spurious Fs rather diminishes the relationship to the genuine F, when he says that the “Fs in question have nothing definitionally in common with genuine Fs, and are called Fs only by custom or courtesy.”<sup>240</sup>

We may then summarise two available options regarding the question of definitional overlap: (1) The *usual reaction* admits definitional overlap right away and supports the InfH-view. Thus, the definition of the spurious eye as “semblance of a genuine eye” sounds perfectly adequate, and hence, those examples may be considered examples for strong non-accidental homonymy. (2) Furthermore, the denial of definitional overlap has justification.<sup>241</sup> The denial qualifies those examples as weak non-accidental cases of homonymy. Thus, the lack of overlap does not imply that the spurious eye is called “eye” by a mere linguistic chance. As the distinction between weak and strong non-accidental homonymy has shown, the lack of definitional overlap does not necessarily qualify a homonym as accidental homonym.

239 Shields (1999: 30 n. 32): “It is natural to suppose that an account of an axe, which cannot chop will make reference to an account of an ‘axe’, that is that an axe and an ex-axe will be related. Here Aristotle seems to disagree, by relying on the thought that the essences of things are functionally specified, so that an ex-axe, which cannot cut — which does not fulfil the function of axes — will not qualify as an axe at all.”

240 Shields (1999: 31).

241 In Shields's terminology, spurious homonyms are called *discrete, non-accidental homonyms*, cf. Shields (1999:29ff.). It is actually surprising that a scholar who follows the InfH-view denies that there is definitional overlap in the so-called spurious cases. To propose definitional overlap in those cases would actually support his view.

The difference between these two views primarily rests on Shields's assumption that *definitional overlap is not the only way*, which can establish a connection between homonyms. Yet, the question for the definition of spurious Fs remains vague within his account. Shields does not tell us how their definition can be accomplished. Still, one should not consider this a flaw of his theory, since Aristotle is silent in this regard as well. One can justifiably wonder about Irwin's suggestion that the definition of spurious homonyms is dependent on their genuine counter-parts. At least, there is no textual basis for this thesis.

A possible classification of spurious homonyms, which applies to Aristotle's own means might be the following: In *SE* 4, 166a14ff. Aristotle distinguishes three *ways* – *τρόποι*, which are connected with homonymy and amphiboly. The second of these ways explicitly mentions habitual uses (166a16-17: *εἷς δὲ ὅταν εἰωθότες ἄμεν οὕτω λέγειν*). Shields's suggestion about *custom and courtesy* could be supported with a hint to this passage. In addition, it connects spurious cases with (unassociated) homonymy. The examples given immediately prior to the second *way* are clearly examples of *accidental homonymy*: *ἄετὸς*<sup>242</sup> and *κύων*<sup>243</sup> (*when either the account or the name signifies a multiplicity as in the case of ἄετὸς or κύων – ὅταν ἢ ὁ λόγος ἢ τοῦνομα κυρίως σημαίνει πλείω, οἷον ἄετὸς καὶ κύων*).

## 4.1 Aftermath: The Relevance of Spurious Homonyms to the Question of the Relation of Multivocality, Homonymy and Synonymy

Irwin (1981: 529) uses the case of spurious homonyms to argue for his preferred view on homonymy in Aristotle, i.e. the “moderate view”. This view resembles the InfH-view in many ways.<sup>244</sup> As argued above, spuri-

242 “Ἄετὸς” can mean “eagle”, “omen” or the “iron part of spoke of wheel”.

243 “Κύων” can mean “shark”, “the ace” i.e. the worst throw at dice and other things.

244 Initially, the InfH-view was called the moderate view. But since within Irwin's approach there are no distinctions regarding the different kinds of “association” that is implied by the ANAD (as e.g. strong and weak non-accidental homonymy) I use here a different name.

ous homonyms allow for different interpretations regarding the question of definitional overlap, none of which supports the assumption that “homonymy” as used in those contexts amounts to accidental homonymy, which would be desirable for adherents of the DefH-view. Since these examples of spurious homonyms are so frequent, the case of spurious homonyms plays a crucial role concerning the question of the most adequate overall assessment of Aristotle’s notion of homonymy. To preserve the appeal of the DefH-view, a thorough discussion of this kind of example is necessary. I will show that the alleged support those examples for the adequacy of the InfH-view can be weakened. Although the case of spurious homonyms is admittedly challenging the general adequacy of the DefH-view, the impact is not strong enough to disqualify the DefH-view as the most appropriate approach. None of the views presented in this work are without flaws regarding the question of the relation of homonymy, synonymy and multivocity. Both the InfH- and DefH-view (alongside the tertium-quid-view) have serious difficulties that need to be addressed. According to my analysis of spurious homonymy, it poses a serious difficulty for the DefH-view only if one assumes definitional overlap in these cases.<sup>245</sup> To support the DefH-view, I will address several difficulties in the following subsections. This will demonstrate that most of the problems one may assign to the DefH-view can be defused.

#### 4.1.1 First Argument – The usual reaction

The first argument addresses the usual reaction: The *usual reaction* is convincing since it meets our intuitions about the alleged definitions of spurious Fs. Yet, the adequacy of the usual reaction is spurious itself because Aristotle states nowhere that the copy or the dead counterpart is defined with reference to the original. Each time the *usual reaction* is proposed, it is based on the mere assumption that Aristotle *would define* the spurious F in that way, when in fact, he is silent in this regard.<sup>246</sup>

<sup>245</sup> The difficulties of the InfH-view are all those occurrences in which Aristotle states that something is said in many ways but not homonymously, i.e. all cases in which they would apply the SAA.

<sup>246</sup> Because of that, I appreciate that Shields is silent as well in this regard.

He also does not express that it is impossible to know what the dead body, body-part or artwork is without knowing the original. He states instead that the dead eye is no actual eye, it is just a chunk of matter (cf. *Met.* VII.16, 1040b5-8: Aristotle asserts that no part of an animal can exist separately from the animal. If they are separated they merely exist as *matter* – ὡς ὕλη).

In the same way, the painted eye neither is an eye; it is just a spread of paint, which is not a genuine eye. The question for definitional overlap is not raised by Aristotle in those contexts and does not seem to be of interest for him. It is carried into this context by several scholars who try to solve the question for Aristotle to be able to delineate his notion of homonymy accordingly. There are reasons to reject definitional overlap as given by Aristotle's principle of functional determination, while there are no reasons to assume the opposite. Thus, the *usual reaction* is not a tenable interpretation as it cannot be supported by textual evidence.

#### 4.1.2 Second Argument – Distinction of technical and non-technical applications of “homonymous”

Another strategy to minimise the impact of spurious homonyms is by referring to the distinction of technical and non-technical applications of “homonymous”.<sup>247</sup> There are reasons to assume that the *πλήν ὁμωνύμως-locution* is used in a non-technical sense, which is a simple, literal way, i.e. a way it was (allegedly) used before Aristotle, which presumably amounts to nothing more than “having the same name”.<sup>248</sup> The *πλήν ὁμωνύμως-locution* is indicative for those cases that were called spurious homonyms. For this argument, one needs to recapitulate Aristotle's background in the Academy. The examples of genuine and spurious F strongly resemble the relation between *forms*<sup>249</sup> and *sensibles*<sup>250</sup> in

247 Cf. section 2.1.

248 Fine (2004: 144) claims “Plato uses ‘homonymy’ in this simple, literal sense.” I called this use *non-technical* in section 2.1.

249 What in Plato is called ἡ ιδέα, τὸ εἶδος or sometimes οὐσία.

250 Overall, this refers to *particulars* – καθ' ἕκαστα, which often are described as *μιμήματα* – *imitations*, *εἰδᾶλα* – *images* or *ὁμοιώματα* – *likenesses*, because of their relationship to forms, which is called *μέθεξις* – *participation*.

Plato's metaphysical theory. In Plato, the sensibles and their forms bear the same name. Often Plato adds an "itself" to the name of the form as, e.g. in *αὐτο-ἄνθρωπος* – *the man itself* (EN I.6, 1096a35) to keep them apart. Aristotle is explicitly sceptical about what the "itself" supposedly means since he assumes that for the man and the man-itself there is just *one and the same definition* – *εἷς καὶ ὁ αὐτὸς λόγος ἐστίν* (EN I.6, 1096b1, also *Met.* XIII.4, 1079a33-b3 = *Met.* I.9, 991a2-8). Thus, according to Aristotle's analysis, sensibles and forms must be synonyms in Aristotle's technical sense, although Aristotle sometimes refers to them as homonyms when they are not "homonymous" in his technical sense.<sup>251</sup> Because of that, I assume that in this context, a sense of homonymy is applied that is non-technical and does not indicate anything beyond "having the same name". Since the examples of spurious and genuine Fs strongly resemble the Platonic examples of sensible and form, one can assume that the *πλήν ὁμωνύμως-locution*, which regularly occurs together with these examples also applies a non-technical notion of homonymy. If this is the case, definitional overlap is not part of the notion of homonymy that is applied in that locution.

The relation between spurious and genuine Fs is almost systematically qualified by remarks given in the context of the applications of the *πλήν ὁμωνύμως-locution*, which further supports this idea. Aristotle repeatedly states that the spurious F is not an F at all. By saying this, he

251 Cf. *Met.* I.6, 987b9-10: *for the multiplicity of things which are homonyms with the forms exists by participation in them* – *κατὰ μέθεξιν γὰρ εἶναι τὰ πολλὰ ὁμώνυμα τοῖς εἰδεσιν*. Further, cf. *Met.* VII.16, 1040b32-34: ideas and particulars are the same *in form* – *τῷ εἶδει*. Similarly, *Met.* I.10, 1059a13-14 (and 1086b10-11: the universals (*καθόλου*) and the particulars (*καθ' ἕκαστον*) have the same nature). Owen (1960: 181ff.) rightly remarks that from considering the forms and the sensibles as synonymous, notoriously, the third man regress follows and that this assumption is part of Aristotle's polemic against the Platonists: "the Form 'Man' and the individual man can now be treated as a single class whose existence entails that of a further Form 'Man', and so *ad infinitum*." The regress would disappear if Aristotle allowed the Platonists to apply the *pros hen* relation in this context. By doing so there would be a way in which one could deny synonymy, but also deny (accidental) homonymy of the form and the sensible, which would stop the regress. Owen assumes that Aristotle's omission of this solution proves his (Owen's) developmental thesis, which claims that Aristotle simply did not have the solution available at the time he wrote the polemic against the Academy. For more details of the relation of Aristotle's and Plato's use of homonymy and synonymy cf. also Fine (2004: 144 and n. 10) and Cherniss (1944: 178 n. 102). Cherniss's view has been picked up and revised again by Ward (2008: 12ff.).

emphasises that the relation between spurious and genuine F cannot be synonymy. Furthermore, in the light of these statements, there is no reason to insist on definitional overlap either.

### 4.1.3 Third Argument – Spurious homonyms are based on similarity only

There is no definitional overlap in spurious homonyms since they are based on mere *similarity* – *ὁμοιότητα*. In *Met.* IX.1, 1046a8 Aristotle uses the example of *δυνατὰ καὶ ἀδύνατα* in geometry to explain what is homonymous by mere *similarity* and he explains that this kind of potencies do not belong to those he is interested in that chapter, namely those that are *pros hen* related. The same train of thought is essentially stated in *Met.* V.12, 1019b33-35. This, of course, does not a fortiori exclude the possibility of logical priority, as not every case of logical priority implies a PHR, but what reason other than that could there be to dismiss those cases explicitly from the *pros hen* related cases of potency? Since all standard examples of spurious homonyms are also based on *similarity*, they equally disqualify as cases for the PHR.

### 4.1.4 Fourth Argument – A different source of priority

The cases of spurious homonyms disqualify from being relevant for the PHR, because even if one admitted logical priority in those cases, the reason for this priority is different from the reasons for the logical priority that is found in *pros hen* cases. In the following, I will apply a distinction that I call a *de re* and a *de dicto cause of association*.<sup>252</sup>

Let us assume that the dead hand is defined with reference to a real hand (even though Aristotle nowhere states anything like that). The difference between this case and the case of a healthy banana is that the banana *contains* a form of healthiness. The cause of the association between the banana and health is *about the thing*, i.e. *de re*. If such a

252 Here *de re* is to be understood in the neutral sense of “about the thing” and *de dicto* in the sense of “about what is said”.

cause is responsible for the definitional dependence between two multi-vocals nothing prevents to assume also a PHR. In contrast, the case of the dead hand is dissimilar. In this case, the dead hand is called a hand merely by convention. The logical priority here is *about what is said*, i.e. *de dicto*. The definition of the dead hand contains the definition of the living hand because the definition concerns the name only. This *de dicto* cause of association is merely linguistic, it does not concern the nature of the dead hand, moreover, the convention could be different in a different language or at a different time. There is no *de re cause of association*, i.e. there is nothing in the dead hand that is analogous to the healthiness that inheres within the healthy banana. There is no ontological basis but only a conventional basis.

This argument mainly rests on the assumption that even if there is definitional overlap in spurious homonyms, the reasons for that overlap are genuinely different from the reasons of definitional overlap in genuine cases of the PHR. This argument alludes to what Shields (1999: 31) called *custom and courtesy* as mentioned above. Ward (2008: 102) agrees with Shields on this: “Shields correctly points out, what appears to be a case of core-dependent homonymy [the spurious cases] is not a genuine case insofar as one of the requisite conditions for being a causal, core-dependent homonym is not satisfied.”

The distinction of *de re* and *de dicto* kinds of association may be helpful in cases where we already know the result. The problem of this approach is that we do not know how to distinguish *de re* from the *de dicto* cases reliably. Shields (1999) and Ward (2008) both suggest a kind of causal analysis that is supposed to deliver the required criteria, cf. section 6.1.1.5 for a detailed discussion of Shields’s argument.

#### 4.1.5 Last Argument – Single science assumption

The last argument of this list rests on the oddity that definitional overlap in spurious homonyms would imply that there is a single science in which they would have to be considered together, cf. section 8.4.3.

## 5 Polysemy

The distinction between homonymy and polysemy has received much attention within contemporary studies on these topics. As stated before, the present study proposes that the terminology of this distinction represents Aristotle's doctrine of the relation of homonymy, synonymy and multivocity more appropriately than the terminology of approaches that follow the InfH-view. The acknowledgement of the distinction between different kinds of homonymies as, e.g. realised by the accidental /non-accidental distinction, does not conform to the modern terminology of the same concepts.<sup>253</sup> Today, one broadly agrees to regard the cases, which were labelled *non-accidental homonyms*, as neither weak nor strong, not as cases of *homonymy*, but one would instead address them with the notion of *polysemy*. Usually, *polysemy* is not considered a *kind* of homonymy but a different and, in some sense, complementary class to it. Today, *homonymy* is widely accepted to cope with what above was called *accidental homonymy*. In this regard, the terminological restriction of Aristotle's notion of homonymy to accidental homonymy that has been proposed is largely consistent with the modern notion of the term. According to *The Concise Oxford Dictionary of Linguistics* (2007: 178), homonymy is the "relation between words whose forms are the same but whose meanings are different and cannot be connected: e.g. between *pen* 'writing instrument' and *pen* 'enclosure'."<sup>254</sup> It is immediately obvious that the modern notion of homonymy is described as a relation between words. As discussed already above, this might deviate

253 For an introduction of the distinction of homonymy and polysemy and further references see Brown (2006 vol. 9: 742–744).

254 Continued: "distinguished from \*polysemy in that the meanings cannot be connected: therefore, the words are treated as different lexical units. Also distinguished from cases of \*conversion: e.g. for either of these homonyms, that of *pen* (noun) to *pen* (verb). Also from \*syncretism, which is between forms of the same paradigm. [...]" A similar approach is found in Murphy (2010: 84). There are two types of lexical ambiguity in homonymy and polysemy: "If two form–meaning pairings involve two different lexemes that just happen to have the same spoken and/or written form, then it is a case of homonymy – that is, there are two lexemes that are each other's homonym. For instance, the noun kind meaning 'type' and the adjective kind meaning 'considerate' are two different words that just happen to have the same spelling and pronunciation."

from the *Categories*' account of homonymy but, as reported, this view is not at all alien to Aristotle.

Polysemy is a notion that was first introduced by Michel Bréal (1897). It can be described as a *grouping of related meanings under a single (word) form*.<sup>255</sup> A word has two or more related but distinguishable meanings, e.g. a chip: a potato chip, a chip of wood, and a computer chip. They are connected because they are all small pieces, and this is part of their meaning.<sup>256</sup> Nowadays, the difference between homonymous and polysemous words can be found in dictionaries. Usually, homonymous words are given at least two main entries in a dictionary, while the different variants of a polysemous word are listed under a single main heading. The reason for this is that often one considers polysemy the phenomenon that a single word may have more than one (and moreover connected) meaning and that homonymy is the phenomenon that two or more words have the same form, but unconnected meanings.<sup>257</sup> Of course, this description is problematic. How should one know whether in a given case, two "different" words are applied or whether there is a single word, which is used in different ways? What makes a word "different" if not its form? Accounting for the pairing of word and meaning does not help much either since both homonymous and polysemous words have different meanings while their forms are identical.

The problem contemporary linguists are dealing with is to find proper ways to distinguish homonymy from polysemy.<sup>258</sup> This usually

255 What is meant here by the single word-form is a *lexeme*: a unit of the vocabulary of a given language that is often also called a *lexical item*. Murphy (2010: 84) defines polysemy in the following way: "If a single lexeme has two distinguishable senses associated with it, then we say that it is a polyseme or it is polysemous. The 'bound pages' and 'information' meanings of book are related to one another, so we would not want to conclude that we have two completely different words when we use the 'text' and 'tome' senses of book."

256 Being a small piece belongs to them all, but is specific to none of them. This is similar to the problem Aristotle describes regarding the most common definition of soul in *DA II.1, 412a6: κοινότατος λόγος*.

257 Cf. Murphy (2010: 84, 90, 91); Panman (1982: 107). Panman, O. (1982). *Homonymy and polysemy*. *Lingua* 58 (1-2): 105-136.

258 For adherents of the ANAD their task is to find criteria to distinguish accidental from non-accidental homonymy. As discussed above, the most dominant strategy is to compare the definitions and search for overlap.

amounts to formulating criteria that describe the relationship of polysemes. Several criteria have been suggested in the literature, e.g. conceptual or historical, i.e. etymological criteria. On the one hand, one may argue to determine a case of polysemy in the following way: if a single expression whose meanings for historical reasons diverge into different ones, while related meanings stay formally the same, it is a case of polysemy. On the other hand, in those cases where etymologically different words converge to a single form (which can be studied in the phonetic history of the words), we do not speak of polysemy, but homonymy. Another approach focuses on *semantic similarity*: one needs to compare the *closeness* of the relationship between the related meanings. Homonymous are considered those meanings, which are further apart or even *unrelated*, and polysemous are those that are closely related. The challenge is to provide robust criteria that enable us to determine when meanings are closely related and when meanings are unrelated or remotely related. Definitional overlap offers itself as a criterion, such that the definitions of the polysemes overlap, and those of homonyms do not. In general, the difference between homonymy and polysemy is just as precise as the criteria available.

The difference between these notions is apparent in many of Aristotle's works. He is aware of the problem of independence and association connected to homonymy and polysemy. One reason to appreciate the polysemy-homonymy distinction rests upon the fact that Aristotle quite precisely describes the difference between these concepts by phrases such as "F is said in many ways, but not homonymously". In those cases, it is clear that Aristotle applies a notion of homonymy identical to the contemporary one (which presumably is not a mere coincidence).<sup>259</sup> The whole debate on the so-called (Aristotelian) *non-accidental homonyms* and the questions about appropriate criteria as, e.g. *definitional overlap* are questions that from the point of view of a contemporary linguist deal with criteria for the distinction of homonymy and polysemy and not with a distinction within homonymy.

259 Adherents of the InfH-view reach the same conclusion only by applying and relying on the SA assumption to explain Aristotle's manner of expression in all those cases.

In this context, I do not introduce the notion of polysemy to enter the contemporary debate but to provide a terminological alternative to the InffH-view and the way it fuses the different sorts of relations between things with the same name under a single concept. Speaking of *polysemy* instead of *non-accidental homonymy* is not primarily supposed to import doctrinal differences. Yet, the advantage of this terminology essentially lies in the improved representation of Aristotle's doctrine. A side effect of this terminology is that it reveals the close connection of the problems Aristotle deals with regarding the question of the relation between different kinds of health or different sorts of beings with the contemporary debate on the difference between homonymy and polysemy, and moreover, the debate on different kinds of polysemy.<sup>260</sup> It is also clear that Aristotle knows at least two kinds of polysemous connections, namely analogy and the PHR.

Although the notion of polysemy has not been applied by Shields (1999: 35 n. 40), he found a way to integrate a notion of polysemy into his terminology, which Aristotle does not discuss. He notices that there is "logical space for non-core dependent associated homonyms". The idea is that there may be polysemous cases that are neither analogical nor *pros hen* but associated nevertheless.<sup>261</sup> Shields's idea is appealing, albeit deviating from the terminology preferred here. Whether there

**260** There are various ways in which one draws distinctions within polysemy. The most prominent ones are the so-called regular or systematic polysemy and the non-systematic polysemy. Cf. on this Apresjan, J. D. (1974). *Regular Polysemy. Linguistics* 12 (142). The former "refers to word senses that are distinct, but which follow a general pattern or rule in the language. For example, words for containers can generally refer to both a kind of container and the contents of the container, as can be seen in (19): 'container' sense: I put some sand into a box/bottle/tin/canister. 'contents' sense: I dumped the whole box/bottle/tin/canister onto the floor. The relation between the 'container' and 'contents' senses is completely regular, which is to say it is entirely predictable. If we invent a new kind of container, we can be certain that the name of the container will also be able to denote its contents in some situations." Murphy (2010: 89–90 emphasis in original). In the case of non-systematic polysemy one assumes that "the word's two senses are semantically related, but are not part of a larger pattern, as for *arm* of government versus human *arm*." (Brown 2006 vol. 9, p. 742).

**261** This idea is similar to *weak non-accidental homonymy*, but it allows definitional overlap, however, without an analogy or a *pros hen* relation.

are Aristotelian examples to fill this logical space is debatable.<sup>262</sup> In the following, those cases are addressed as *non-focal polysemes*.

The notion of polysemy is an essential part of the terminology of the DefH-view. In the terminology of the DefH-view, the polysemes are a subclass of *multivocals*, which contains (at least) two further subclasses, namely *pros hen* polysemes and analogical polysemes (although, as stated above it is debatable whether there is logical space for other kinds of associations, i.e. the distinction of analogical and *pros hen* cases is not exhaustive). The origin of these two subclasses of polysemous multivocals is the topic of the next section.

<sup>262</sup> Walker (1979) discusses whether the Aristotelian example of *friendship* is a case that is neither analogical nor *pros hen* related but a “third and little noticed form of homonymy”. Walker, A.D.M. (1979). *Aristotle’s account of Friendship in the Nicomachean Ethics*. *Phronesis* 24 (2): 180–196.



## 6 Polysemous Multivocals

Many philosophically relevant concepts are *said in many ways*, e.g. *cause, principle, nature, necessity, substance, friendship*<sup>263</sup>, *part, whole, priority* and many more. The *Met. v* contains more examples. This book of the *Metaphysics* is about those things that are said in many ways, i.e. multivocals. One may call this book “Aristotle’s philosophical lexicon”. Despite the book lacking an introduction, Aristotle sometimes refers to a book with *ἐν τοῖς περὶ τοῦ ποσαχῶς* (*Met. vi*, 1028a5; *Met. vii*, 1028a10-11 and *x*, 1052a16) where “περὶ τοῦ ποσαχῶς” could be considered the title of his philosophical lexicon.<sup>264</sup> The multivocals collected and disambiguated in *Met. v* book are not entirely homogenous.<sup>265</sup> There are many, which are focally related<sup>266</sup> (e.g. *v.1 principle*, *v.5, necessity* and *v.7 being*) but also many where a focal reference is not determined (e.g. *v.2 cause*; *v.4 nature* and *v.28 genus*). Because of this, it is a philosophically important task to reveal the differences behind any single common name. According to the DefH-view, multivocity divides into three different main chunks, i.e. *homonymous multivocals*, *synonymous multivocals* and *polysemous multivocals*. The latter kind of multivocals covers those cases that are most interesting for most philosophers, i.e. *pros hen* and analogical cases. This division is notoriously based on the following passage. Unfortunately, this passage does not explain the options listed, except briefly the analogical case.

**263** The friendship-example is special in a certain way. From the *EE* to the *EN* Aristotle seems to have changed his mind concerning this case. In the *EN* friendship does not seem to be *pros hen* related anymore. In the *EN*, the different kinds of friendship are related only by resemblance, which is different from a *PHR*. For a detailed discussion and further hints to literature concerning this example see Ward (2008: 149–156).

**264** Cf. for more speculation Menn (2008: 40 appendix vii).

**265** A complete investigation of the chapters of *Met. V* concerning the kind of multivocity is not intended in the present study. However, it is likely that an investigation of that kind could support the classificatory approach of DefH proposed in this study.

**266** Homonymous uses of those terms are not excluded by this thesis, since a single term might exhibit homonymous and polysemous uses at the same time. A clear example for this possibility is the case of *δύναμις*. One can find it in *Met. ix.1*, 1046a4-9 and *Met. v.12*, 1019b33-34.

EN I.6, 1096b26-28: ἀλλὰ πῶς δὴ λέγεται; οὐ γὰρ ἔοικε τοῖς γε ἀπὸ τύχης ὁμωνύμοις. ἀλλ' ἄρα γε τῷ ἀφ' ἑνὸς εἶναι ἢ πρὸς ἓν ἅπαντα συντελεῖν, ἢ μᾶλλον κατ' ἀναλογία;

However, how are <they (i.e. the good things)> said? [1] For it seems, that they do not belong to the homonyms by accident. [2] But <does it seem, that they> are <good> by being from one <good> [3] or by bringing all towards one <good>, [4] or rather by analogy?

As argued in section 3.4.1.1, this passage (especially [1]) is the basis of the ANAD (accidental / non-accidental distinction), which is an interpretation that cannot be categorically rejected. Yet, if this interpretation is used to constitute a terminological framework such as the InfH-view with the aim to be valid to the whole corpus, it is based on a weak foundation, since the way homonymy is divided up in this passage is *exceptional rather than canonical*.

In the following, I focus on the alternatives [2], [3] and [4]. The group of these alternatives constitutes the class of multivocals in which homonymy is denied in many passages.<sup>267</sup> In the context of the quoted passage (EN I.6, 1096b26-28), Aristotle argues against the Platonic assumption of there being a (single) idea of the Good.<sup>268</sup> Aristotle discusses why everything that is called “good” is not good in the same way as it differs for *honour*, *pleasure* or *wisdom*.<sup>269</sup> From Aristotle’s remark 1096b21-23 that “good” is not said in the way some things are said to be white, e.g. “white” applied on snow and “white” applied on lead it is clear that it is not said synonymously, which would be desirable for the Platonic assumption that there is a *single* idea of the good. Thus, he concludes that *the good is nothing common that falls under a single idea – οὐκ ἔστιν ἄρα τὸ ἀγαθὸν κοινόν τι κατὰ μίαν ιδέαν* (EN I.6, 1096b25-26). Then Aristotle proceeds stating that “good” is not a homonym by accident at [1], which is tantamount to claiming that not everything that is

267 *Met.* IV.2, 1003a33-34; *Met.* IX.1, 1046b4-7; *GC* I.6, 322b29-32; *Met.* VII.4, 1030a29-b3, and also *Top.* II.3, 110b16-22; homonymy is also denied in *EE* VII.2, 1236a16-22. If one accepts that the current passage does not imply that there are several species of homonymy beside accidental homonymy, one has to count this passage also to the list of passages where homonymy is denied of something that is said in many ways.

268 For further details about this passage and Aristotle’s set of arguments against this cf. Brüllmann, P. (2011). *Die Theorie des Guten in Aristoteles’ „Nikomachischer Ethik“*. Berlin, New York.

269 EN I.6, 1096b24-25: *The accounts [of honour, pleasure and wisdom] insofar they are goods are various and different – ἕτεροι καὶ διαφέροντες οἱ λόγοι ταύτη ἢ ἀγαθά.*

good bears the same name by accident. Then he asks *but how is <the good> said?* – ἀλλὰ πῶς δὴ λέγεται; I assume that this question asks for the relation of the different ways the good is said. The rest of the passage [2], [3] and [4] lists different possible ways the commonality of the different things that are called good could be explained. I think a definite answer concerning the good is not Aristotle's intention in this passage. The ἄρα particle in indicates this. Nevertheless, this passage is a key point of reference concerning the question of the various kinds of association between things with the same name.

At first sight, this passage seems to suggest three possibilities: at [2] the ἀφ' ἐνός-, at [3] the πρὸς ἓν-, at [4] the κατ' ἀναλογίαν-case. All these three cases fall into polysemous multivocality.<sup>270</sup> Analysing this further reveals that although the disjunction in that sentence lists three candidates, there are reasons to prefer summarising them in the following way:

- a. the πρὸς ἓν- and the ἀφ' ἐνός-case
- b. the κατ' ἀναλογίαν-case

I list the πρὸς ἓν- and the ἀφ' ἐνός-case together, but they are not supposed to be identified, at least not without explanation. While “ἀφ' ἐνός” means “from one”, “πρὸς ἓν” means “in relation to one” or “towards one”. It is not clear whether there is a doctrinal difference related to the linguistic/prepositional difference since there is no further explanation given in that context. One could refer to other passages. Unfortunately, the exact same locution is not found anywhere else. Some passages are similar: cf. *Met.* XI.3, 1060b37-a7; *EE* VII.2, 1236b20-21 (ἀπ' ἐκείνης) and more remotely also in *GC* I.6, 322b31f. There has been the thesis that the πρὸς ἓν- and the ἀφ' ἐνός-case describe the same relation under a different aspect.<sup>271</sup> I accept this thesis as correct as there is no reason to believe that these cases genuinely differ. There is even a passage where Aristotle apparently uses these phrases interchangeably.

<sup>270</sup> Although this list is not necessarily exhaustive, cf. footnote 262.

<sup>271</sup> This has been suggested by Krämer (1967: 339 n. 86) and by Joachim, H. H. (1951, *Aristotle: The Nicomachean ethics*, Oxford, (p. 46 n. 6). Also Owens (1963: 117–118) identifies the two cases. They are identical in as much the way to Rome and the way from Rome is identical.

*Met.* XI.3, 1061a1-5: λέγεται δὲ τοῦτον τὸν τρόπον ἕκαστον τῷ τὸ μὲν πρὸς τὴν ἰατρικὴν ἐπιστήμην ἀνάγεσθαι πῶς τὸ δὲ πρὸς ὑγίειαν τὸ δ' ἄλλως, πρὸς ταῦτ' ὁ δὲ ἕκαστον. ἰατρικὸς γὰρ λόγος καὶ μαχαίριον λέγεται τῷ τὸ μὲν ἀπὸ τῆς ἰατρικῆς ἐπιστήμης εἶναι τὸ δὲ ταύτην χρήσιμον.

One calls <“medical” or “healthy”> each thing because it either leads towards (πρὸς) the medical science or to health or in a different way, but everything to the same thing. One calls “medical” a term and a knife because the is from (ἀπὸ) the medical science and the other because it is useful for the medical science.

Nothing in this passage suggest that the ἀφ' ἐνὸς-case is crucially different from other ways of being related to one thing. The lack of applications of the ἀφ' ἐνὸς-locution and the fact that identical examples reduce the need to differentiate between these cases in such a way that this distinction as it is drawn in the passage of *EN* I.6, 1096b26-28 can be neglected in the following discussions. Hence, we continue with the premise that the disjunction in this passage concerns two cases, i.e. the ἀφ' ἐνὸς- / πρὸς ἕν-*case* and the *analogical case*.<sup>272</sup>

The question raised in *EN* I.6, 1096b26-28: *How is the good said?* – ἀλλὰ πῶς δὴ λέγεται; has received various answers. Different scholars have favoured each of the possibilities, though strictly speaking, he does not propose this answer.<sup>273</sup>

## 6.1 Polysemous Multivocality by *Pros Hen* Relation

Unfortunately, in Aristotle's works, there is no strict definition of the PHR, even though one could expect one since it plays a very important role in Aristotle's philosophy. Many contributions about this notion tie it narrowly to its role for the possibility of a general metaphysics.<sup>274</sup>

272 It is actually up to debate whether the analogical case is really on a par with the *pros hen* case. Shields (1999: 10 n. 3) does not discuss the analogy as a candidate that explains how multivocals can be related. Cf. section 6.4.

273 For a discussion of this topic consider Brüllmann (2011: 88ff.) and Höffe (1996: 148–156) who prefer the analogy. The PHR as favoured option has been suggested by Wolf (2002: 33) and Mirus, C. V. (2004). Aristotle's "Agathon". *The Review of Metaphysics* 57 (3): 515–536. Wolf, U. (2002). *Aristoteles' 'Nikomachische Ethik'*. Darmstadt.

274 Cf. Senfrin-Weis (2009: 261): "Its sole purpose is to establish the possibility of a systematic inquiry into being". Senfrin-Weis, Heike. 2009. *Pros hen* and the Foundations of Aristotelian Metaphysics. *Proceedings of the Boston Area Colloquium in Ancient Philosophy*, 24 (2008), ed. Gary M. Gurtler, John J. Cleary, J. J. Cleary and Gurtler, 261–285. Leiden.

Aristotle primarily works with examples without providing a detailed list of criteria. Because of this, this notion is controversial. To approach the PHR, the next section begins with an overview of the literature on this topic. This overview contains only a selection of contributions to this topic and does not claim to represent each position in the detail it may deserve. Within this section, I express criticisms of the presented views that prepare my assessment of the PHR. I address in this section the important relationship of logical priority ( $\tau\tilde{\omega}$   $\lambda\acute{o}\gamma\omega$ ) and priority in being ( $\tau\tilde{\eta}$   $\acute{o}\upsilon\sigma\iota\alpha$ ) which both have been claimed to be essential to the PHR.<sup>275</sup> Within this overview, I show that only logical priority is essential to the PHR.

### 6.1.1 On the Literature about the *Pros Hen* Relation

In this section, I present and evaluate several seminal contributions on the notion of *pros hen* in Aristotle. I discuss their main theses and highlight their most important findings on the PHR.

In the first subsection 6.1.1.1, I compare Owen (1960), Bostock (1994) and Yu (2001). These scholars assume that there is a philosophical development in Aristotle's thought from allegedly earlier to later works. They agree on that fact that there is a development, but they disagree on what exactly this development comprises.

In the second subsection 6.1.1.2, I discuss Hamlyn's contribution. Primarily, I argue against his thesis that the focal reference is prior in existence to the focally related entities.

The third subsection, 6.1.1.3, concerns Ferejohn (1980). I evaluate Ferejohn's definition of the PHR arguing that it is too narrow as it is not suitable to cover all examples of the PHR in Aristotle.

The fourth subsection, 6.1.1.4, is concerned with the contribution of Senfrin-Weis (2009). Largely, her paper deals with the role of the PHR for the possibility of a unified science of being. I consider her paper valuable because it attracts attention to the question whether it is possible to distinguish distinct kinds of logical priority.

275 Primarily by Hamlyn (1977) and in a different way also by Shields (1999).

Finally, in 6.1.1.5, I analyse Shield's attempt to define the PHR. I deal in detail with three of his successive attempts to define the PHR. I discuss his propositions and express several serious concerns connected with the arguments that support his final definition of the PHR.

#### 6.1.1.1 On Owen (1960), Bostock (1994) and Yu (2001)

Owen's seminal papers still dominate the subject area of the PHR. Primarily relevant are the views of Owen (1960; 1965; 1966). Owen coined the term *focal meaning* (1960: 169), which has become the standard to refer to the PHR. Although his interpretation was often challenged, it still dominates the scholarship concerned with the PHR.<sup>276</sup> The most influential article is Owen's (1960) *Logic and Metaphysics in Some Earlier Works of Aristotle* in which he predominantly argues for a developmental thesis of Aristotle's thought. He is notoriously quoted for his thesis of *reductive translation*, which claims that "being' is an expression with focal meaning is a claim that statements about non-substances can be reduced to – translated into – statements about substances", Owen (1960: 180). He claims that the reason for this is that all the *senses* in which "being" is said, "have one focus, one common element" (1960: 167). The emphasis on "senses" was often held to misrepresent the nature of Aristotle's doctrine of the PHR.<sup>277</sup> I assume that although Owen's *reductive translation* is elucidating in a way, but it is not sufficient to define the PHR.<sup>278</sup> The problem is that the *reductive*

<sup>276</sup> Owen's views are mentioned, discussed or criticised in the following, selected works (in chronological order) Leszl (1970); Hamlyn (1977); Ferejohn (1980); Irwin (1981); Bostock (1994); Shields (1999: 57); Yu (1999; 2001); Ward (2006); Senfrin-Weis (2009). One of the most regular complaints concerns the choice of Owen's label "focal meaning". It is often criticised that this label implies that Aristotle's doctrine of the PHR is primarily concerned with *meaning* or *sense* although Aristotle is actually more concerned with the ontological relations of different beings. Instead of "meaning" many scholars suggest calling it focal – "relation", "connection", "reference" or "association". But since the label had such an impact on the following scholarship, the label is sometimes kept and adopted despite of the connotations that are usually held to be misleading. In contrast to that, Owen's developmental thesis often is agreed upon or not addressed at all. For instance, Ferejohn (1980: 117) clearly agrees with it stating that this "matter is put beyond serious dispute by the relatively plain structure of *Metaphysics* IV.2". Yu (2001) provides an alternative explanation of the tension between the alleged earlier and later works of Aristotle, see the remarks below.

<sup>277</sup> E.g. Irwin (1981), Hamlyn (1977) and Leszl (1970).

<sup>278</sup> Cf. on this Senfrin-Weis (2009: 262ff.).

*translation* also applies to non-focally connected entities. For instance, statements about snow can be reduced to statements about water, statements about men can be reduced to statements about animals. By this, the reductive translation is inapt to account for the difference between generically unified classes (i.e. synonymous classes) such as the class of animals and focally unified classes, such as healthy things.

It is also noteworthy that Owen's investigation of the PHR is almost inseparably tied to the most prominent application of the PHR, i.e. its application to being, and the role of the PHR for the possibility of a unified science of being. He is not primarily interested in characterising the PHR independently of its various applications, i.e. to determine what is common in all applications of the PHR. As indicated earlier, Owen's seminal paper of 1960 is guided by a developmental thesis. Owen claims one has to distinguish between *early* (*Organon*), *intermediate* (*EE VII*) and *mature stages* (*Met. IV.2*) of Aristotle's works. This order primarily orientates towards the different ways Aristotle dealt with the ambiguity of "being" and with the possibility of a science of being. Owen makes three claims connected the three developmental stages. The first claim is that in the early works Aristotle was convinced that the verb "to be" and its cognates were ambiguous expressions, i.e. expressions without any association.<sup>279</sup> Consequently, a single science of being was held impossible. The second claim proposes that in the intermediate stage, which according to his remarks is essentially restricted to *EE VII.2*, the *pros hen* relation was available to Aristotle (in the sense of a systematic ambiguity) but not applied to being. The third claim proposes that in the mature stage of Aristotle's writings, i.e. in the *Metaphysics*, Aristotle discovered that also *being* has focal meaning, which allowed Aristotle to revise his denial of a single science of being, stemming from *EE I.8* and *EN I.6*. Owen considers the application of *focal meaning* to being a revolutionary project which was realised by Aristotle in the *Metaphysics IV*. The application of the PHR to being allows Aristotle to "convert a special science of substance into the universal science of being" (Owen 1960: 169). In addition, Owen recognises similarities of the project described

279 I.e. there was a time in which Aristotle did not assume definitional overlap or even a PHR.

in *Met.* IV as the Platonic programme of universal science, and therefore, sometimes calls this project Aristotle's Platonism.<sup>280</sup>

The developmental thesis is based on the doctrinal tension between the works of the *Organon/Ethics* and the *Metaphysics* regarding the treatment of being and the possibility of its scientific investigation. Owen states that the "argument of *Metaphysics* IV, VI seems to record a new departure" (Owen: 1960: 168–169). This possibility contradicts Aristotle's prior view that (unified) sciences of things that are said in many ways such as "good" are not possible.<sup>281</sup> I deem Owen's developmental thesis a means to release the tension between the different works.<sup>282</sup>

David Bostock (1994) follows Owen in this regard in his commentary on *Met.* Z and H. Also, Bostock is primarily interested in the development of the treatment of the verb "to be". He distinguishes two different approaches within Aristotle that are related to different works. He calls them the accounts "A" and "B". A: Being applies to all things, but primarily to (first) substances and derivatively to the rest. B: Being applies to all kind of things, but each application has its sense. Approach B explains why there are as many kinds of being as there are categories. A cannot explain this, but A can explain the priority of substance. Bostock agrees with Owen that there are two conflicting doctrines in those works. To release the tension Bostock uses the developmental idea of Owen. He states (1994: 67) that Account B belongs to an earlier stage and that things from distinct categories do not definitionally depend on some common element. In the *Metaphysics*, Aristotle has come to the view that there is some common element after all. With this common

<sup>280</sup> Cf. Owen, G.E.L. (1966). *The Platonism of Aristotle. Proceedings of the British Academy* 51: 125–150.

<sup>281</sup> Aristotle concludes in the passages *EE* I.8, 1217b27–18a1 and the parallel *EN* I.6, 1096a24–33 that it is hardly possible, that the good-itself will be considered in the leisure of one i.e. in one single science – ὥστε σχολῇ αὐτό γε τὸ ἀγαθὸν θεωρησθαι μιᾶς (cf. also 1218a40–b1; compare also lines 1217b33–35).

<sup>282</sup> As stated in section 2.4 I assume that Owen's developmental thesis provides some insight about Aristotle's distinction of homonymy and multivocity. The absence of the PHR in earlier works corresponds to Aristotle's loose distinction of homonymy and multivocity while the presence of the PHR in later works also sharpens the distinction of homonymy and multivocity.

element, the definitory dependence between all beings enables Aristotle to investigate being (qua being) within a single science.

Since the developmental views of Owen (1960) and Bostock (1994) are very closely related, Yu (2001) felt encouraged to reassess their approaches and to offer an alternative. He denies the assumption that a radical development is the core of the tension between the different views in the works. Instead, he suggests that the views are not incompatible, but making different points.<sup>283</sup> Yu's interesting claim against Owen and Bostock will be called the *expansion of science-claim* in the following. Yu denies that Aristotle changed his mind regarding the question of what being is, but instead, he suggests that he changed his mind on the question of what science is. Yu's approach is promising since Aristotle indeed creates a new, non-generic kind of *science* within *Met.* IV.2, 1003b12-16. According to these remarks, two different kinds of domains can be investigated by a single science, i.e. generically unified domains as it is the case in *zoology* and *botany* and those that are unified by a PHR, e.g. *medicine* and *ontology*. For further remarks on this cf. the section 8.4 about  $\kappa\alpha\theta' \ \acute{\epsilon}\nu$  vs  $\pi\rho\acute{o}\varsigma \ \acute{\epsilon}\nu$  sciences and section 8.2, which concerns the "real" innovation of *Met.* IV.2.

#### 6.1.1.2 On Hamlyn (1977)

Already the first page of Hamlyn (1977) contains a small parenthesis supposed to improve Owen's label "focal meaning". He states: "or as Aristotle calls it, *pros hen* homonymy". Aristotle never uses a phrase one could translate with "*pros hen* homonymy". From these remarks, it is obvious that he disagrees with Owen's (focal) meaning-label on Aristotle's doctrine. I agree with Hamlyn that, as he states, Aristotle's remarks at the beginning of *Met.* IV.2 do "not in itself to embrace any thesis about meaning or the place of homonymy in such a thesis" (1977: 2). I also agree that the different uses of "healthy" might well be regarded as constituting ambiguity, but that the *pros hen homonymy*, as he calls it, is not a relation that primarily holds between the senses or meanings, but

<sup>283</sup> Cf. Yu (2001: 207). Presumably in order to indicate the similarity of Owen's and Bostock's views Yu calls the "Account A" the "focal meaning account" and "B" the "multiplicity account".

between things. One of his major worries is that an analysis of the *proshen homonymy* in terms of a *semantic analysis* of the terms under consideration does not do justice to the doctrine Aristotle has in mind. He worries that the distinction between focally related and primary cases of *being F*, which are at the heart of any *proshen homonymy* if described in terms of secondary and primary *senses of a term "F"*, is controversial because it *depends* upon a theory of *primary and secondary meanings*. For this reason, a long part of his paper concerns the question: *what are secondary and derivative senses or meanings?* To illustrate the difficulties of this approach he introduces the example of the term "chair". The term is ambiguous as "chair" can refer to a *seating possibility* and a *professorial chair*. The *prof. chair* is used in a derivative sense because "it has clearly arisen since and from the ordinary use of 'chair'", Hamlyn (1977: 6). Although he claims that not all cases with a primary and a derivative, secondary sense of a term have a focal connection, he does not tell under which circumstances this is not the case. Hamlyn's best point against the interpretation of the PHR as a thesis on primary and secondary meaning is mentioned in a parenthesis (p. 6). Some of Aristotle's examples are not concerned with primary and secondary meaning of the same word as it is the case in "healthy" and its focal reference "health".<sup>284</sup> He rightly infers that in those cases, a theory based on the distinction of primary and secondary senses of the same words must fail to do its job. I fully agree with him in this respect as I will claim in section 6.1.2 that there are two kinds of examples for the PHR. One involves paronymy, and one does not. If *health* is the focal reference of all healthy things, it is not necessary to try to distinguish primary and secondary senses of "healthy". One has to determine the relation between them differently, namely by focussing on the relevant kind of priority between the *things* that are healthy. Unfortunately, Hamlyn revokes his best point when he assumes (p. 8 and 10) that "Aristotle claims, or seems to claim, that health is the primary application for the predicate 'healthy' in such a way that to call

<sup>284</sup> Hamlyn does not explicitly address the variety within Aristotle's examples for the PHR. There are two kinds of cases that need to be distinguished. Below they are called *friendship* and *health-examples*. The latter involve paronymy while the former do not.

it healthy is to use the predicate in its primary meaning.”<sup>285</sup> I think this assumption is redundant and not supported by the text. Unfortunately, it influences large parts of the rest of the paper. Hamlyn could have taken the lack of evidence as an argument against the theory that the PHR is a thesis about primary and secondary meaning, but instead, he continues focussing on other alleged problems of the PHR. It seems his “best point” as I called it above was just the result of a happenstance.

I highly disagree with the following claims of Hamlyn (1977: 8). He seems to infer that non-substances existentially depend upon substances that also healthy things depend for their existence on health. Existential dependence is not explained in detail in that context. I propose the following operational definition based on *Met.* V.11, 1019a1-4:

Existential priority: *x is existentially prior to y iff x can exist without y, but y cannot exist without x.*

Hamlyn assumes that there “is an obvious sense in which there could not be healthy things of any kind unless there was health” (p. 8). I think this thesis is not in line with some of Aristotle’s remarks I mention within the following attempts to explain Hamlyn’s strategy.

(1) *The transfer thesis*: Apparently, Hamlyn did not worry about the transfer of the existential priority of one application of the PHR (i.e. *being*) to all other applications of the PHR. While it is true that this kind of priority belongs to substance, none of Aristotle’s remarks requires that this priority is an essential part of the PHR. In the case of health and healthy things quite the opposite is the case, i.e. that the existence of health depends on the existence of healthy things. In *Met.* XII.3, 1070a22-24, Aristotle explains the relation of *health* and the *healthy man*. He claims that when the man is healthy *then* also health exists.<sup>286</sup>

<sup>285</sup> Cf. Hamlyn (1977: 10). The more common suggestion is that *animal* is the primary application for the predicate “healthy”, which actually makes more sense, however, the PHR is not a relation between prior or posterior senses of words, in spite of some cases of the PHR, i.e. in friendship-examples, where one could construe the PHR with reference to prior and posterior senses of words. However, the possibility of this construction can be considered as an accidental feature of those cases, since the relation primarily holds between the different kinds of friendship, not their names.

<sup>286</sup> Yu (2001: 219) also suggests that the things related to medicine do not ontologically depend on it, but he does not justify this claim. I think one should say they are neither prior nor posterior in being as it is suggested in *Met.* XII.3.

Thus, not in every case with a PHR the focal reference is prior in existence and hence this cannot be an essential feature of the PHR.

(2) *The implication thesis*: Another way I may explain Hamlyn's strategy is to assume Hamlyn attempts to infer existential priority from logical priority, cf. p. 8–9. He assumes that the dependence of the meaning of “healthy” on “health” “is of a particular and important kind” (p. 9).<sup>287</sup> Because of this, “the existential dependence rests upon a dependence of meaning” (p. 9). Furthermore, “there is both an existential, because meaning, dependence and also place for speaking of primary and secondary meaning. Aristotle claims, or seems to claim, that health is the primary application for the predicate ‘healthy’ in such a way that to call it healthy is to use the predicate in its primary meaning.” (p.10).

I disagree with Hamlyn because Aristotle clearly claims that existential priority and priority in definition are not dependent on another. They do not necessarily occur together (*ταῦτα δὲ οὐχ ἅμα ὑπάρχει*; *Met.* XIII.2, 1077b4).<sup>288</sup> There are many cases in which what is prior in definition (*τῶ λόγῳ*) is posterior in being (*τῇ οὐσίᾳ*).<sup>289</sup> Aristotle unmistakably reveals this in *Met.* XIII.2, 1077b1–7. The point is prior in definition to the line but posterior in being. This kind of relationship is most evident in the case of accidental compounds as, e.g. the white man.<sup>290</sup> Since an accident such as *the white* cannot exist separately from the white man, *the white* is posterior in being – *τῇ οὐσίᾳ*. At the same time, *the white* is prior in definition (*τῶ λόγῳ*) to the white man. In addition, implied by this is that not everything that is prior in being is prior in definition. The example just confirmed it. The compound “the white man” that is prior in being is posterior in definition. There are no reasons to doubt that the same also pertains to focally related cases like healthy things. The healthy man is prior in being but posterior in defi-

287 I assume that his “meaning dependence” is on the whole equivalent with definitional dependence.

288 For further remarks on this passage see Cleary (1988: 89–90).

289 Assuming that priority in being (*τῇ οὐσίᾳ*) identifies with “existential priority”.

290 cf. also *Met.* V.11, 1018b34–35: *The accident is prior in definition to the whole, as the musical is prior to the musical man; for without the part there will be no account of the whole – και κατὰ τὸν λόγον δὲ τὸ συμβεβηκὸς τοῦ ὅλου πρότερον, οἷον τὸ μουσικὸν τοῦ μουσικοῦ ἀνθρώπου· οὐ γὰρ ἔσται ὁ λόγος ὅλος ἄνευ τοῦ μέρους.*

nition to health. This is also confirmed in *Met.* XII.3, 1070a22-24. When the man is healthy, then also health exists.<sup>291</sup>

To conclude, the major problems of Hamlyn's investigation are the deficit of textual references and his omission of a clear distinction between existential and logical priority. He does not mention logical priority or dependence in definition at all in his article. Moreover, he does not see that there is no necessity assuming that the focal reference bears the same name as the focally related entities. Hamlyn's contribution nevertheless has a positive influence on the present work. Although I disagree with his assessments, he brought my attention to a critical issue: the independence of logical and existential priority.

#### 6.1.1.3 On Ferejohn (1980)

Ferejohn (1980: 118) claims that Owen's reading of the PHR infuses an *intensional* character into Aristotle's doctrine of the PHR because Owen's (1960: 167) claims, paraphrasing Aristotle, that the *senses* or *meanings* of a *pros hen* term "have one focus, one common element". Ferejohn suggests there is no need to assume that Aristotle theorised about intensional entities such as *senses* or *meanings*. Instead, he claims that Aristotle usually theorises about language without reference to entities such as *meanings* and *senses*, but instead his analysis contains nothing more than "pieces of language" and those extra-linguist entities they signify. Ferejohn shows in an endnote (no. 4) that he is aware of the fact that *signification* is a controversial topic in the scholarly debate, however, he does not enter this debate. For this reason, an interpretation of Aristotle's notion of *pros hen* will be "truer to Aristotle" if it eschews Owen's intensional reading. Thus, Ferejohn joins the ranks of those scholars that criticise Owen's focus on meaning. Nevertheless, he does not abstain from applying Owen's terminology, i.e. *focal meaning*.

<sup>291</sup> Yu (2001: 219) also suggests that the things related to medicine do not ontologically depend on it, but he does not justify this claim. I think one should say they are neither prior nor posterior in being as it is suggested in *Met.* XII.3.

Further, one has to appreciate that Ferejohn assesses the importance of *EE VII.2* as the most informative source regarding the PHR in Aristotle – a view that the present work shares.<sup>292</sup> Based on his analysis of that passage, Ferejohn defines what he calls *the πρὸς ἕν ambiguity*:

“(FM) A term T has focal meaning iff (i) T is “said in many ways”; and (ii) one of T’s many logoi is non-reciprocally contained in T’s remaining logoi (i.e. its significata are logically prior to theirs).” Ferejohn (1980: 120)

I appreciate that Ferejohn does not determine the PHR as a certain kind of homonymy. I also agree with his definition since it rests upon the *plurality of logoi-view on multivocality* that I discussed in chapter 1. However, in his further clarificatory remarks on this definition, he states that the things *most properly* called “medical” are logically prior to every other thing that is medical as well. In this regard, the present study disagrees with Ferejohn (and his explanation that follows on p. 121). In the case of medical things, it is not true that the focal reference, which is medicine or the medic, respectively<sup>293</sup>, must be what is primarily medical.<sup>294</sup> According to Ferejohn, the doctor who is the focal reference of all medical things needs to be himself *medical*, however, in a primary way. Besides the fact that one can barely imagine what it means to call the doctor medical, Aristotle merely states that the focal reference is the *medic* without any further qualifications, i.e. without claiming that the medic is primarily medical. The same pertains to analogous examples like the healthy things, for they are all related to *health*, cf. *ἅπαν πρὸς ὑγίειαν* in *Met.* IV.2, 1003a35. In the case of “being” also the focal reference itself is a being although it is usually addressed with the term “οὐσία” – “substance”. The mere possibility that the focal reference and the focally related entities may bear the same name does not entitle us to determine it a general feature of the PHR.

In the third (of four) part of his paper, Ferejohn discusses the application of the PHR to being. Although I do not agree with some of his

<sup>292</sup> This passage is analysed thoroughly below.

<sup>293</sup> Aristotle suggests the medic in *EE VII.2*, 1236a16-22 and the medical science in *Met.* XI.3, 1061a1-5. Cf. also footnote 325.

<sup>294</sup> Cf. the distinction of *friendship-* and *health-*examples in section 6.1.2.

assessments of the last two parts of the paper, I will omit a discussion of it as I try to discuss the PHR without a focus on its application to being.

To conclude, Ferejohn does not recognise that there is no necessity that the focal reference and the focally related entities bear the exact same name. Because of this, his definition is too narrow. Anticipating my assessments in section 6.1.2, his definition only covers cases I call friendship-examples but not the more common case of healthy-examples.

#### 6.1.1.4 On Senfrin-Weis (2009)

The paper of Senfrin-Weis (2009), published with extensive commentary of Devereux, takes a quite narrow perspective on the notion of *pros hen* in Aristotle. Although she states that she wants to clarify what Aristotle means by *pros hen* (without qualification), she is primarily interested in its application to being and its role for the possibility of a science of being. Because of this, she focuses only on *Met.* IV.2 trying to determine what Aristotle means by *pros hen*, in spite of there being other more elucidating passages on *pros hen* in the corpus. In her paper, she presents several theses, many of which are directed against Owen (1960) and especially against his thesis of *reductive translation* (as mentioned above). Her most interesting claim is that about “pure, content-neutral referentiality in *pros hen*” (p. 263).<sup>295</sup> This claim demands a little bit of interpretation. The following remarks are intended to be kept short: The rewarding performance of her paper is to lay the grounds for a distinction of different kinds of logical priority, yet this does not seem to be her primary target. Her main worry is that Owen’s claim that *pros hen* is closely related to synonymy in connection with his thesis of *reductive*

<sup>295</sup> This is an approximate list of some of the claims she makes: 1. *Pros hen* is not adequately represented by Owen’s reductive translation. 2. *Pros hen* is not an extension of synonymy (also against Owen (1960)). 3. She claims that *pros hen* is “content-neutral” in a way synonymy is not. What is meant by “content-neutral” is discussed in Devereux’s review. 4. *Pros hen* as applied to being does not involve logical priority. 5. She claims that the senses of “being” are not reducible to or derivable from substance. 6. “Its sole purpose is to establish the possibility of a systematic inquiry into being” (p. 261). 7. “It is not a device or actual tool to be used within metaphysics for analysis and argument, because it denotes the non-analyzable substructure of all discourse, and not a type or actual part of discourse.” (p. 261).

*translation*,<sup>296</sup> which involves logical priority misrepresents the notion of *pros hen*, in the following way: Qualities become *substances of some kind*<sup>297</sup>, just as men are animals of some kind. However, this cannot be Aristotle's proposal since he spends much effort on distinguishing *pros hen* and *kath hen/generic* unification in *Met.* IV.2. Senfrin-Weis tries to elucidate the difference between these two kinds of unification in the following way: she calls the *kath hen* unification "content-based" (p. 264) and "two-way": towards the primary item and from it" (p. 276).

In contrast to that, she claims that the proper interpretation of the *pros hen* unification is *not content-based* and only "one-directional: towards the focal item, not back from it" (p. 276). Unfortunately, it is not straightforwardly clear what this means. One may assume that the (logical) dependency of man to animal can be called *content-based* in the way Senfrin-Weis thinks about it because the animal plays the role of the genus in the definition of man and hence "animal" is an appropriate (though not complete) answer to the question *what* a man is. In contrast to that the (logical) dependence of quality to substance cannot be called *content-based*, because the substance does not play the role of the genus in the definition of the quality, i.e. "a substance" is not an appropriate answer to the question what quality is. If this reconstruction of her thesis is correct, the present study completely agrees with her claims.<sup>298</sup>

Still, one has to disagree with the claim of the denial of logical priority of substance to other beings and the claim that the "content" of the focal item is "irrelevant" for *pros hen* relations (cf. p. 274 and also 273, 263, 264). It is true that it is not stated by Aristotle *how* the content of the focal reference (e.g. health) influences or determines the content of the related items (e.g. a healthy item), but this does not make the

296 Cf. my remarks about Owen's reductive translation at the end of the first paragraph of 6.1.1.1.

297 Cf. especially p. 275. She assumes that Owen's reductive translation implies that entities which belong to one of the non-substantial categories must be defined as having *substance* as their genus.

298 She is seriously worried about the reduction of non-substantial categories to the category of substance, which she ascribes to Owen (I doubt that this is Owen's proposal, however, I agree that Owen's thesis of reductive translation might be misleading especially if one focuses (as she does) on his statement that "non-substances are no more than the logical shadows of substances" Owen (1960: 180)).

content e.g. the definition of health *irrelevant* for the *pros hen* relations. To understand the definition of something healthy one needs to understand the definition of health and to understand the definition of a non-substance, one must understand the definition of the kind of substance it belongs to.

She does discuss the different ways in which things can be defined. Her distinction between content-neutral and content-based definitions appears to be analogous to the distinction between genus – differentia definitions and those of things that are defined by *addition* – ἐκ προσθέσεως (cf. *Met.* VII.4 and 5, 1031a1-4). Non-substances (e.g. healthy things) are defined not by genus and differentia but by *addition* – ἐκ προσθέσεως. This kind of definition, if, as Aristotle argues, it should be considered a definition at all, is different from the genus-and-differentia-mode of definition. So far, it is not evident how they differ. As stated above, the former could be considered content-neutral while the latter needs to be considered content-based. However, since in both definitions, there is logical priority of some sort, one cannot determine anything that is part of that definition as *irrelevant*. The mere fact that there is a difference in the way species depend on their genera and the way focally related items depend on the focal reference does not disqualify the latter cases from involving logical priority or posteriority at all. Senfrin-Weis's distinction between *content-based*, i.e. *kath hen* and *non-content-based*, i.e. *pros hen* unification lays the ground for a distinction of two different kinds of logical priority even though she does not draw the distinction. This has also been noticed by Devereux (p. 292) who suggests one could call them “intra-generic” and “inter-generic” logical dependence. Within normal genus-species relations, the logical priority of the genus to the species is hence called intra-generic, whereas this is not possible for the focal reference of *pros hen* relation. Although Devereux rejects that the definitional dependence of a non-substance to substance cannot be *content-free*, one can admit a certain kind of “content freedom”, i.e. assuming that “content-free” here means nothing but being *free of unification by a specific genus*. This presumably deviates from Senfrin-Weis's notion of “content” in this context. For a thorough discussion of the various ways *content* figures in the different examples of the PHR please be referred to Devereux's commentary p. 292ff.

#### 6.1.1.5 On Shields's CDH2-4

As Aristotle does not provide a rigorous theory or a detailed list of criteria, scholars attempt to supplement “missing” criteria. In the following, I discuss Shields's approach in detail, which attempts to aid in specifically this respect.

Discarding improper *pros hen* cases from proper cases: Aristotle states in *Met.* IV.2, 1003a34-b1 that *all* healthy things are related to health. I agree with Shields (1999: 107) that, although Aristotle does not discuss this matter, there may be borderline cases of “healthy”, i.e. cases which are hard to classify. Shields offers the examples of “healthy salary” and “healthy appetite”. He suggests that although one could construct an awkward relation to health, those attempts would establish an artificial and unintended connection. I think Shields associates one apparent difficulty with these cases, and it is one Aristotle is aware of.<sup>299</sup> It is unwarranted to assume that focal connection ranges over *all* ways of using the same term. Of the entirety of ways in which a single term may be used, there may be a partial multiplicity that is focally connected, while there may be other uses lacking this connection. Even if there was *some* kind of association between the groups of the focally connected and other uses, as it is the case in the examples of healthy salary and healthy appetite, it is not necessary that a PHR underlies this association. Instead, these cases may be connected analogically. Moreover, these cases could be spurious homonyms or those that were addressed as *weak non-accidental* cases in section 3.4.1.1.

In order to distinguish *proper* cases of focal connection from *improper* cases, Shields intends to find appropriate criteria that enable us to discard improper cases. Unfortunately, Aristotle primarily works with examples to convey which cases have a PHR and which do not.

Shields discusses the PHR in the first part of his book called “homonymy as such”. One of the varieties of homonymy he distinguishes he calls “core-dependent homonymy” (CDH). Under this heading, he discusses polysemous multivocality cases connected by a PHR. In his efforts to define CDH, he presents *four* definitions, which improve successively. His main efforts concern the adequacy of the sought definition. Let us

299 Aristotle's example of *δύναμις* in geometry applies to Shields's worry.

consider his second definition CDH2 since this one is the key element of his discussion:

“CDH2:  $x$  and  $y$  are homonymously in a core-dependent way  $F$  iff: (i) they have their name in common, (ii) their definitions do not completely overlap, and (iii) there is a single source to which they are related.” Shields (1999: 106)

All of Shields’s definitions are based on the assumption that the core itself is one of the  $F$ s although this is not the case in the standard examples for the PHR, i.e. the healthy-things, which are related to health. There is no primary application of the term “healthy” in the same way there is one for the term “friendship”.<sup>300</sup> In general, the PHR is not a theory about primary and secondary applications of terms.<sup>301</sup> Although the friendship-example allows a distinction of primary and secondary applications this must not become a condition in the definition of the PHR as in some cases there is no primary application.<sup>302</sup>

Shields calls his CDH2 “profligate” since it is open towards “dummy relations”, which necessarily need to be avoided.<sup>303</sup> In addition, he is aware that everything is related to everything in some way and thus any homonym will stand in some relation to a core homonym. Because of this, Shields assumes that the appropriate account of CDH will depend on how the third condition, i.e. CDH2 (iii) unfolds.

**300** Healthy things are related to health, beings to substance, medical things to medicine (or the medic). In those examples, the focal reference itself is not one of the  $F$ s. Shields (1999: 125 n. 150) notices that his approaches are all based on this assumption and states that this is not a problem as such and offers a reformulation. However, the third condition within the reformulation he offers appears to become irrelevant since the causal relationship is not supposed to hold between focally related entities, but between the focal reference and the focally related entities. Thus, his definitions work well only for those examples that I will call friendship-examples. This is a kind of example I will define in the section 6.1.2. In those cases the focal reference itself is one of the  $F$ s.

**301** A claim that is similar but not identical to the view proposed by Hamlyn (1977).

**302** Because of that, basically all of Shields accounts that start with “(i) there is some core instance of being  $F$ ” address only examples that exhibit the friendship-structure. In the case of health-examples, there is no core instance of being  $F$ , because the core of the  $F$ s is not necessarily privileged way of being  $F$ .

**303** He refers to the case of the healthy salary. Cf. Shields (1999: 107) for other examples.

He suggests defining a relation  $R$  to unfold CDH2 (iii) properly.  $R$  is a relation that all focally related entities bear to the focal reference in addition to focally related entities (i) bearing the same name and (ii) overlapping in their definition.  $R$  is supposed to be asymmetrical and open-ended.<sup>304</sup> His specification of  $R$  results in a causal analysis of the relation between the focal reference and the focally related entities.<sup>305</sup> In the most general way, he calls it “four-causal core primacy” (FCCP).<sup>306</sup> FCCP claims that each focally related entity stands in one of the four causal relations to the focal reference. In contrast to Shields, I do not see how the text justifies such a causal analysis. I think the causal analysis is a good neo-Aristotelian theory but not Aristotle’s. Shields tries to justify this approach by *showing* that the focal connection in standard examples of the PHR all exhibit one or the other of the four causal relations. Shields “rewrites” or “translates” Aristotle’s examples into a form making the specific *cause* becomes more obvious. He claims what is “productive of health” is “standing in an efficient causal relation to health”. Thus “the scalpel counts as ‘medical’ not because it is related by an efficient cause to medicine, but because its function is given by the role it plays in medical practice” (Shields (1999: 111)).

FCCP (four-causal-core-primacy) apparently works fine with these two examples. Shields admits that often it is not evident in which of the four causal relations something stands, e.g. in the case of “being a sign of health”, or “preserving health”. This may be considered a flaw of the theory, but Shields faces this challenge and is convinced that also these examples are compatible with his explanatory pattern. Though the approach of FCCP works fine for final and efficient causes, it falters in the case of the material cause<sup>307</sup> and even more in the case of formal causation. The reason is that formal causation seems to require, or be

304 “Open-ended” means here that  $R$  must admit new instances of non-core homonyms.

305 A causal analysis of the PHR is a common suggestion. Shields refers for this to Cajetan. Ward (2008) adopts Shields’s approach of causal analysis.

306 Shields (1999: 111ff.) provides a reformulation of a claim made by Cajetan and calls it “Cajetan’s proposal” “FCCP: Necessarily, if (i)  $a$  is  $F$  and  $b$  is  $F$ , (ii)  $F$ -ness is associatively homonymous in these applications, and (iii)  $a$  is a core instance of  $F$ -ness, then  $b$ ’s being  $F$  stands in one of the four causal relations to  $a$ ’s being  $F$ ”. Shields agrees with the aim of this approach and tries to defend this claim in the following pages.

307 Cf. Shields (1999: 114).

the basis of synonymy since in the case of formal causation  $x$ 's being  $F$  is the cause of  $y$ 's being  $F$  only if both are synonymously  $F$ . Thus, no multivocity could be explained by the formal causal relation. Nevertheless, Shields tries to rescue the case of formal causation. He assumes that formal causation as described above is too narrow. His strategy is to show that *not every* case of formal causation implies synonymy. In that way, he wants to show that FCCP also works for these cases.

For his explanation, he needs to go far afield. It is based on an interpretation of the way in which Aristotle describes the perception of form without its matter as described in the *DA* II.12. In the case of perception, Aristotle adheres to a thesis, I will call the *assimilation thesis*. It is a thesis about the organs of perception and their relation to the objects of perception. The organs of perception *acquire* or *assimilate* to the qualities of the perceived objects. According to Aristotle's theory of sense perception, the sensory faculties can receive the form of the perceived object without their matter (Shields refers to *DA* II.12, 424a18-24, 424a32-b3, III.2, 425b23, III.8, 431b28-432a2). It is a matter of a longstanding debate what this means exactly. There are dozens of views on this, but here a distinction of two might suffice:

Highly simplified, there are *literal interpretations* and *allegorical interpretations*.<sup>308</sup> The literal view assumes that the eye that perceives a colour "literally" becomes red. In that case, it has often been proposed that the eye *exemplifies* redness just like the perceived object *exemplifies* redness. The allegorical view assumes that there is "some other kind" of affection involved, i.e. the eye acquires the form of redness without itself literally becoming red, i.e. without *exemplifying* redness. In order

**308** Usually, the alternatives are called *literalism* and *spiritualism*. For an overview on that debate see Caston, V. (2004). *The Spirit and the Letter: Aristotle on Perception*. In *Metaphysics, Soul and Ethics: Themes From the Work of Richard Sorabji*, ed. Ricardo Salles, 245–320. Moreover, Caston proposes an alternative called "the analogical reading" (p. 299). The main participants in this debate are Sorabji, R. (1974). *Body and Soul in Aristotle*. In *Philosophy* 49 (187): 63–89 and Burnyeat, M. (1992). *Is an Aristotelian Philosophy of Mind Still Credible? (A Draft)*. In *Essays on Aristotle's de Anima*, ed. Martha C. Nussbaum and Amelie Oksenberg Rorty, 15–26. Caston's interpretation is also picked up by Johnstone, M. A. (2012). *Aristotle on Odour and Smell*. *Oxford Studies in Ancient Philosophy* 43: 143–183. A similar view is found in Bolton, R. (2005). *Perception Naturalized in Aristotle's de Anima*. In *Metaphysics, Soul, and Ethics in Ancient Thought: Themes From the Work of Richard Sorabji*, ed. Ricardo Salles.

to denominate what the eye does instead, it has become quite usual to speak of *encoding*. In that case, the eye *encodes* redness *without exemplifying* it.<sup>309</sup>

With this explanation in the background, Shields claims to have found a way to deny that formal causation *always* implies synonymy. One has to assume therefore, that the red object and the eye that perceives it are not synonymously red. According to Shields's approach to the relation of synonymy and homonymy, the denial of synonymy implies homonymy.<sup>310</sup> This distinction in the background enables Shields to suggest that in Aristotle's theory of perception, there is a sort of formal causation according to which the red eye and the red object are homonyms. Since the eye *encodes* but does not *exemplify* redness whereas the red object *exemplifies* and *encodes* redness, he infers, they are homonymously red (and thus formal causation itself is said in many ways<sup>311</sup>). He concludes that "It is, consequently, possible for a's being F to be a formal cause of b's being F, even while a and b are homonymously F" Shields (1999: 117).

There are several things to be criticised. Firstly, Shields admits that no textual evidence confirms this thesis, i.e. that the object of perception and the perceiver are homonymously F which would support his theory. Secondly, and this is a vital error, he concludes that some non-core homonyms (focally related entities) stand in formal causal relationship to core homonyms (focal references), even though he has not shown why the homonymy of "red" in the given example qualifies as core-dependent homonymy at all. He does not address the issue of logically priority between these cases, which is required by the PHR. However, this step is crucial since even in Shields own terminology there is not just one sort of associated homonymy, there are *non-core, associated homonymy* and the *analogical cases of associated homonymy*, moreover

309 Cf. for *exemplifying* and *encoding* Shields, C. (1995). *Intentionality and Isomorphism in Aristotle. Proceedings of the Boston Area Colloquium of Ancient Philosophy* 11: 307–330. There are several reasons to prefer the latter option as there are exceptions to the assimilation thesis. Most obvious this is in the case of haptics. The flesh, which is the sensory organ in that case does not acquire the sensory qualities literally speaking, i.e. it does not become soft or solid.

310 This is not the case in the DeffH-view, or the tertium quid-view.

311 Cf. Shields (1999: 116 n. 140; 117).

*discrete, non-accidental homonyms*, i.e. those that were called spurious homonyms above. Shields does not explain why the example of the red object and the red in the eye disqualifies from falling into one of these cases. Nothing prevents to determine this case as different from the man in the mirror image and the real man or the dead and the living thing.

To show that formal causation is not sufficient for synonymy, Shields could also refer to the *DA* II.12. There is the example of the golden seal and the wax to illustrate how the form is transferred. Although one would call the imprint in the wax “golden seal”, it is clear that the imprint is not synonymously the “golden seal”, but homonymously. This example avoids the difficulties connected with Shields’s reference to the theory of perception and its complications. Nevertheless, showing that this case of formal causation does not imply synonymy is one task, and it is yet another task to show that the homonymy, in that case, is core-dependent homonymy, even if synonymy and homonymy are mutually exclusive, as Shields proposes. The case of the wax and the seal may also qualify as a spurious homonym, even according to Shields’s own description, i.e. that sometimes by *custom or courtesy* things bear the same name. Another explanation of their non-core dependence could be given by Shields’s account of *functional determination* (FD).<sup>312</sup> Since the golden seal can be used to seal things, it is clear that the imprint is not a golden seal in the same sense since it cannot seal things. It might not be a golden seal at all, just like the dead man is not a man at all. If that is true, then Shields’s account of functional determination demonstrates that the kind of formal causation that does not imply synonymy implies (discrete/ accidental) homonymy. The sort of formal causation here disqualifies this case from core-dependence, despite its intention to qualify it. I consider this a serious flaw of the adequacy of FCCP.

Because of all this, I disagree with Shields’s (1999: 118) assessment that “FCCP grows naturally out of Aristotle’s own illustrations of core-dependent homonymy”. The endorsement of this claim is tied to a complicated string of additional hermeneutic assumptions, not all of which can be accepted. In general, one can criticise this approach since Aris-

<sup>312</sup> As quoted earlier: “FD: An individual *x* will belong to a kind or class *F* iff: *x* can perform the function of that kind or class.” Shields (1999: 33).

totle's theory of causality itself is too opaque to be effectively illuminating in this context.

As a next step, Shields improves CDH2 by integrating the allegedly successful FCCP. It is added to determine the relevant *R*. With this step, Shields intends to screen unwanted relations. His third definition CDH3<sup>313</sup> can explain with reference to FCCP why river banks and saving banks are no core-dependent homonyms: "even if all savings banks stand in the non-contingent relation 'being within five hundred miles of' a river. For though a genuine relation, 'being within five hundred miles of' is not an instance of any one of the four causes."<sup>314</sup> Another example that can be rejected is the *healthy salary* or the *healthy appetite*.<sup>315</sup> He asserts that neither of these stands in one of the four causal relations to health, and thus, they do not qualify as core-dependent homonyms.

The latter example also reveals how open-endedness is a "virtue"<sup>316</sup> If it turns out that a particular healthy appetite is somehow causally related to health, then it is a core-dependent homonym. Whilst Shields calls this a virtue, it also is a vice. The open-endedness of FCCP reopens the doors for sham relations. If we find a way in which the healthy appetite indeed is causally related to the health of our body, it will reenter the class of things that are *pros hen* related. As we have seen that a certain difficulty may be attributed to assigning one of the four causes to the examples given by Aristotle, the open-endedness of FCCP obstructs its initial intention, i.e. to determine *R*. Some of Aristotle's examples seem to fit this pattern only by shoehorning them through very creative translation processes that emphasise the causal relation to the core.<sup>317</sup>

313 "CDH3: a and b are homonymously F in a core-dependent way iff: (i) they have their name in common, (ii) their definitions do not completely overlap, and (iii) necessarily, if a is a core instance of F-ness, then b's being F stands in one of the four causal relations to a's being F." Shields (1999: 119).

314 Shields (1999: 119).

315 Shields (1999: 107; 119).

316 Cf. Shields (1999: 119).

317 "being a sign of health" has been mentioned by Shields as one of the cases that at least not obviously fits into the scheme of FCCP, but nevertheless is supposed to fit. The problem in this case is that FCCP fails to do its job, i.e. to clarify *R*.

I think FCCP tries to systematise an area, which in this way was not systematised by Aristotle.

The last step of Shields's attempt to define the PHR contains a further problem. Shields improves CDH3 by adding a *principle of ordering*. He refers to *Cat.* 12 and the distinction between the five kinds of priority in that chapter. He assumes that the fifth kind of priority (*Cat.* 12, 14b11ff.) is relevant for CDH. This type of priority holds between two things, which reciprocate as regards implications of existence, wherein the existence of one of them is caused by the other. The example Aristotle uses is of the true proposition that Socrates is white and Socrates's actual being white. Those two things reciprocate as regards implication of existence, but it is clear that Socrates's being white is the cause of the truth of the proposition, whereas the truth of the proposition is not the cause of Aristotle being white.<sup>318</sup> Shields proposes that this type of priority also holds between the core and non-core instances. He states that "Core and non-core homonyms may reciprocate as regards implication of existence, even though core homonyms are responsible for the existence of non-core homonyms in a way that non-core homonyms are not responsible for the existence of the core cases." Shields (1999: 124). This insight leads to his fourth and final account of CDH:

"CDH4: a and b are homonymously F in a core-dependent way iff: (i) they have their name in common, (ii) their definitions do not completely overlap, (iii) necessarily, if a is a core instance of F-ness, then b's being F stands in one of the four causal relations to a's being F, and (iv) a's being F is asymmetrically responsible for the existence of b's being F" Shields (1999: 124).

No textual evidence explicitly draws the connection of the fifth sort of priority of *Cat.* 12. In light of the following passage, the direction of the asymmetrical relation appears to be opposed to Shields's suggestion. I referred to this passage earlier, i.e. within the discussion of Hamlyn's proposal.

*Met.* XII.3, 1070a22-24: ὅτε γὰρ ὑγιαίνει ὁ ἄνθρωπος, τότε καὶ ἡ ὑγίεια ἔστιν exists  
for when the man is healthy, then also health exists

318 Cf. also *Met.* IX.10, 1051b6-8.

According to this passage, health does not exist prior to the healthy man. On the contrary, the combination of ὅτε and τότε usually has a temporal but no conditional connotation. Accordingly, one should expect that health exists posterior to the healthy man. The context of this passage is found suggests that they exist simultaneously. Nevertheless, the formulation indicates that a healthy man is the cause of there being health. If this is true, the fourth condition of CDH4 would not determine *health* as the core instance but the *healthy man*, which clearly contradicts Shields's assessments.

This could have been avoided if Shields's approach focused on the asymmetry given by the logical priority of the focal reference, which is well-documented in many passages. This type of priority yields the asymmetry Shields sought. Thus, it is not necessary to introduce a sense of priority into the definition of CDH, i.e. the fifth sense of *Cat. 12* that seems unrelated to any of the passages where Aristotle provides information on the PHR. Even if the priority of *Cat. 12* actually applies to each relation of core and non-core instances in a core-dependent homonymy relation, the priority of CDH4 (iv) is not on target in any of Aristotle's remarks on the relationship of these cases. Because of this, this condition is not Aristotle's. As stated earlier, one may consider it a neo-Aristotelian extension of the PHR, i.e. a condition that requires further metaphysical assumptions such as explicit assumptions about an existential priority order. But no textual evidence urges to integrate this notion of priority into a reconstruction of Aristotle's notion of the PHR. In addition, Shields proposes the existential priority order in the wrong direction, at least when it comes to examples other than substances and non-substances.

Shields's whole approach of CDH4 (iv) is remarkably similar to Hamlyn's proposition to showing that the focal reference is prior in existence to the focally related entities. I think both attempts fail as they were assuming that existential priority is an essential feature of the PHR as such. In the case of "being", the focal reference is prior in existence to the focally related entities, but this priority has to be scrutinised separate from the PHR.

To conclude, Shields's FCCP does not hold for formal causes. Moreover, a causal analysis of the relation between focal reference and focally

related entities is not based on textual evidence. In addition, the sort of priority (*Cat.* 12, 14b11ff.) he integrates into the definition of the CDH works only properly for a single application of the PHR, namely its application to “being”. It seems that Shields disregards that logical priority does not imply any sort of existential priority. As stated earlier<sup>319</sup>, according to *Met.* XIII.2, 1077b1-7 it is not necessary that they occur together.

### 6.1.2 The *Pros Hen* Relation – An Analysis of *EE VII.2*

In Aristotle, there is no rigorous definition of the PHR. In an attempt to understand this notion and its impact, one has to choose a synoptic approach to collect information about it. Its most important application, i.e. to being, is found in the *Metaphysics* IV. In that book, the PHR also unfolds its most significant impact, i.e. its role for the foundation of a science of being. Nevertheless, there is a more elucidating passage about the nature of the PHR in *EE VII.2*. We have seen that many contributions on the notion of *pros hen* are coined by an intense focus on *Met.* IV.2, its application to being, and the role of the PHR for the establishment of non-generic sciences. But, although the PHR is most prominent for its role as a principle of unity for the science of being, I doubt the PHR “was created” solely for that purpose (as Senfrin-Weis (2009) suggests it). Aristotle presents it, presumably the first time,<sup>320</sup> in the context of a discussion on different kinds of friendship in *EE VII.2*:

319 In the discussion of Hamlyn (1977).

320 According to Owen’s (1960) developmental approach. Cf. also Brakas (2011).

EE VII.2, 1236a16-22: ἀνάγκη ἄρα τρία φιλίας εἶδη εἶναι, καὶ [1] μήτε καθ' ἓν ἀπάσας μηδ' ὡς εἶδη ἐνός γένους, [2] μήτε πάμπαν λέγεσθαι ὁμωνύμως. [3] πρὸς μίαν γάρ τινα λέγονται καὶ πρώτην, [4] ὡσπερ τὸ ἱατρικόν. καὶ <γάρ> ψυχὴν ἱατρικὴν καὶ σῶμα λέγομεν καὶ ὄργανον καὶ ἔργον, ἀλλὰ κυρίως τὸ πρῶτον. [5] πρῶτον δ' οὐδ' ὁ λόγος ἐν πᾶσιν ὑπάρχει. [6] οἷον ὄργανον ἱατρικόν, ᾧ ἂν ὁ ἱατρὸς χρήσαιο· [7] ἐν δὲ τῷ τοῦ ἱατροῦ λόγῳ οὐκ ἔστιν ὁ τοῦ ὄργανου.

Necessarily there are three kinds of friendship, [1] neither they are all <synonymously> one, i.e. (μηδ' explicative) they are not species of one genus, [2] nor are they said altogether homonymously. [3] For they are said related to one particular <kind of friendship> that is primary, [4] like <what is called> medical. For we call a medical soul and a <medical> body a <medical> instrument and operation, but ordinarily (κυρίως) the first. [5] The primary <is that> of which the definition is contained in all. [6] As the instrument is medical in consequence of the use of a medic: [7] in the definition of the medic <the definition of> the instrument is not included.

EE VII.2, 1237b9 αὕτη μὲν οὖν ἡ πρώτη φιλία, ἣν πάντες ὁμολογοῦσιν· αἱ δ' ἄλλαι δι' αὐτὴν καὶ δοκοῦσι καὶ ἀμφισβητοῦνται.

[8] This, then, is the primary friendship, the one everybody agrees upon. The other <kinds> are considered and questioned <as kinds of friendship> based on it.

EE VII.2, 1238a30-31 ἡ μὲν οὖν πρώτη φιλία, καὶ δι' ἣν αἱ ἄλλαι λέγονται, ἡ κατ' ἀρετὴν ἐστὶ.

[9] The primary friendship, i.e. the one in virtue of which the others are called <friendship>, is the one that corresponds to virtue.

These passages contain lots of information on the notion of *pros hen*.<sup>321</sup> The example in these passages is *friendship*. Aristotle assumes three kinds (*εἶδη*) of friendship<sup>322</sup>, which are *somehow* related. The explanation of their relationship is made in three clear assertions [1], [2], [3] followed by an example analogous to the friendship example at [4], from which we can gather important characteristics given in [5], [6] and [7] about the PHR:

[1] The kinds of *friendship* are *not* said all *according to one* – καθ' ἓν.<sup>323</sup> In this context “καθ' ἓν” means “synonymously”.<sup>324</sup> Here, “καθ' ἓν” re-

321 Cf. also EE VII.2, 1236b20-27 to this passage. The same example including *ὕγιενόν* can be found in *Met.* VI.2, 1003a33-b10. Cf. for the *ἱατρικόν* and similar examples also *Met.* VII.4, 1030a34-b3, XI.3, 1060b36-a6, also *MM* II.11.15.6ff.

322 EE VII.2, 1236a13-14: One based on virtue, one on utility, one on pleasure.

323 A similar occurrence of καθ' ἓν is also found in EE VII.2, 1236b23.

324 For the assumption of the identity of καθ' ἓν and *synonymy* cf. *Top.* VI.10, 148a29-33: ἡ δὲ ζωὴ οὐ καθ' ἓν εἶδος δοκεῖ λέγεσθαι, ἀλλ' ἑτέρα μὲν τοῖς ζῴοις ἑτέρα δὲ τοῖς φυτοῖς ὑπάρχειν. ἐνδέχεται μὲν οὖν καὶ κατὰ προαίρεσιν οὕτως ἀποδοῦναι τὸν ὄρον ὡς *συνωνύμου καὶ καθ' ἓν εἶδος* πάσης τῆς ζωῆς λεγομένης – It seems, also “life” is not said in *accordance with one form*, but that there are different <forms of life> for animals and different for plants. It is possible, however, to assign *on purpose* – κατὰ προαίρεσιν the definition of all so-called animals in such a way, as of <something> *synonymous and [or: 'i.e.'] according to one form*.

ceives the additional qualification by the explicative *μηδ'*, which adds that the three kinds of friendship are *not* species of one common genus. If they were species of a common genus, it would turn out that the three kinds of friendship are *synonymously* called friendship. This is explicitly denied here. There is no common genus for the different kinds of friendship as there was the genus *birds* for the different species of birds.

[2] I addressed this passage and the relevance of *πάμπαν* already in section 2.4, where I suggested that *πάμπαν* can be interpreted not as meaning “wholly” or “entirely” but as meaning “altogether” in the sense of “collectively”. In this way, *πάμπαν* does not insinuate a more comprehensive notion of homonymy. Then, this passage only states that in combination with [1] friendship is neither said synonymously nor homonymously. I take this remark to be on par with the interpretation of *EE VII.2*, 1236b23-26 as given above in section 3.4.1.2.

[3] The particle *γάρ* indicates that an explanation follows: Aristotle qualifies the relationship between the different kinds of friendship by pointing out that they are related to a *primary* -*πρώτην* kind of friendship. By [1], it is clear that this relationship is different from a genus-species relation. The exact difference remains unclear.

[4] In order to explain the relation of the primary to the derivative with a more familiar example, Aristotle refers to *the medical* – *τὸ ἰατρικόν*. A knife may be medical because it can be used in a medical operation or simply by a *medic* – *ἰατρός*, who in this passage can be identified as the focal reference for all medical things.<sup>325</sup> Still, it is not clear (i) whether the medic is *primary* because it is itself *medical* and that in a primary way, or (ii) whether it is sufficient that the medic is primary because the definition *belongs* – *ὑπάρχει* to the definitions of all medical things, which are paronymously called like the primary, or (iii) whether both are necessary. There are reasons arguing for both

325 In other places, the focal reference of medical-things seems to be *medicine* – *ἰατρική* and not the medic. Cf. *Met. XI.3*, 1061a1-5 and *Met. IV.2*, 1003b1: *τὸ ἰατρικὸν πρὸς ἰατρικὴν*. In English, it may seem that according to these passages there is a primary application of “medical” just as there is a primary application of “friendship”, but as the passage of *Met. IV.2* shows the names are paronymously related also in that case. The flexibility of the focal reference in the medical-example does not violate the difference of friendship- and health-examples which I describe in the following lines.

being possible but not for both being necessary. Some other examples do require a distinction. In the case of the medical things, the focal reference is the medic, since it is the medic that is addressed in the definition of the other things, but it does not seem necessary that the medic itself is medical in some primary way. This is different in the case of friendship. The primary friendship is also contained in the definition of the other friendships, but the primary friendship is also called “friendship” in a primary way. In the case of “being”, both are possible. The focal reference is not called “being” but “substance”, yet it is also what is called “being” primarily and simply without qualification (*Met.* VII.1, 1028a31-32: ὥστε τὸ πρῶτως ὄν καὶ οὐ τι ὄν ἀλλ’ ὄν ἀπλῶς ἢ οὐσία ἂν εἴη). Hence, these three different cases need to be distinguished. I pick this up again later in this section.

[5] This part tells us something about the focal reference, i.e. how it is connected to the dependent cases: [5] *Primary is that thing of which the definition exists in all – πρῶτον δ’ οὗ ὁ λόγος ἐν πᾶσιν ὑπάρχει.*<sup>326</sup> In a way, this is a response to the question raised in [4], opting for (ii), but thereby not excluding (i). Unfortunately, it is not entirely clear what is meant by “ὑπάρχει”: Also, the definition of a genus ὑπάρχει – *belongs to or is exists in all of its species* (*Cat.* 2a16-17; *An. Pr.* 25a13). In related passages, instead of ὑπάρχειν, one also finds the related terms ἐνυπάρχειν and ἔχειν. The occurrences of these terms are connected to the *pros hen* application to being in *Met.* VII.1, 1028a35-36: ἀνάγκη γὰρ ἐν τῷ ἐκάστου λόγῳ τὸν τῆς οὐσίας ἐνυπάρχειν – *it is necessary that in the definition of each <being> the definition of the substance is included.* Similarly, in *Met.* IX.1, 1045b31: πάντα γὰρ ἔξει τὸν τῆς οὐσίας λόγον – *for all things have/contain the definition of the substance.* Also for potency 1046a15-16: *for in all those definitions the definition of the first potency is included – ἐν γὰρ τούτοις ἔνεστι πᾶσι τοῖς ὄροις ὁ τῆς πρώτης δυνάμεως λόγος.*

326 I follow the conjecture of Bonitz and Susemihl to read πᾶσιν instead of ἡμῖν. A passage, which may be cited in favour of this conjecture is found in *Met.* IX.1, 1045b31: πάντα γὰρ ἔξει τὸν τῆς οὐσίας λόγον. In this context *all – πάντα* derivative notions of being have to contain the primary one i.e. τὸν τῆς οὐσίας λόγον – *the definition of the substance.* A further passage may be found in *MM* 1.1.12.5: *The common element exists in all and is therefore not identical to the independent <Form> – τὸ δὲ κοινὸν ἐν ἅπασιν ὑπάρχει, οὐκ ἔστιν δὴ ταῦτον τῷ χωριστῷ.* Moreover, *MM* 1.1.12.7 / *MM* I.1, 1182b11ff.

I assume these passages essentially agree although a different vocabulary is applied to (presumably) state the same thoughts. The definition of the focal reference is part of the definition of the focally related entities. This may be confirmed by [7] where the contrary of *ὑπάρχειν* can be identified as “not being in”.<sup>327</sup> From passage [1] we learn that the focally related entities do not belong to a common genus. Thus the focal reference which *exists in* the definition of all focally related entities cannot *exist in* or *belong to* (*ὑπάρχει*) them as a genus. This is how the focal reference and the focally related entities are related. I identify this relation as priority in *λόγος* – *account/definition*.<sup>328</sup>

[6] Here, Aristotle tells us *what it is to be medical* for an instrument. Before, it was only indicated that there needs to be a relation to the medic, but now it is made explicit. In the phrase “οἷον ὄργανον ἱατρικόν, ᾧ ἂν ὁ ἱατρὸς χρήσασαίτο”, one should read “ἱατρικόν” predicatively to highlight the aspect correctly: “e.g. an instrument <would be something> *medical* – ἱατρικόν, in consequence of (ᾧ) the use by a medic.” This is a paradigmatic explanation since we can construe *mutatis mutandis* accounts for the other cases, e.g. the *ἔργον* – *action* is something ἱατρικόν – *medical* if a medic does it. It is most important to realise that by comparison of the definitions of the *medical action* and the *medical instrument* and possibly other cases an underlying commonality can be revealed, namely a reference to the same thing, i.e. the medic. By this comparison, the primary notion is identified, since this is the one, which *belongs to* – *ὑπάρχει*<sup>329</sup> all derivative cases, while according to [7] the derivative notions will *not be* – *οὐκ ἔστιν* in the primary.

[7] Knowing that the derivative cases *are not in* the definition of the primary while the primary *is in* or *belongs to* the definition of the derivatives, we know that the relation between the two definitions is asymmetrical. Because of this, the focal reference and the definition of the focal reference is called *prior* to the derivative ones. As stated ear-

327 From the phrase [7] 1236a22: ἐν δὲ τῷ τοῦ ἱατροῦ λόγῳ οὐκ ἔστιν ὁ τοῦ ὄργανου – *in the definition of the medic <the definition of> the instrument is not included.*

328 Cf. *Met.* XIII.2, 1077b3-4; *Met.* VII.1, 1028a34-36 and the remarks to [7] and section 6.2. Remotely related are: *Met.* VII.10, 1034b31-32 and 1035b3-14.

329 Cf. the remarks on [5]: In *Met.* IX.1, 1045b31 Aristotle uses *is kept in* – ἔξει instead of *ὑπάρχει* and in *Met.* VII.1, 1028a36 he uses *is contained in* – ἐνυπάρχειν.

lier, this priority is *priority in account or definition*. A standard example for this relation are the following: The acute is defined as *smaller than the right angle* – ἐλάττων γὰρ ὀρθῆς ἢ ὀξεῖα (example from *Met.* VII.10, 1035b8). The definition of the right angle is part of the definition of the acute and hence prior in definition. However, Aristotle states nowhere that the acute is *pros hen* related to the right angle. Neither does he in the following case: Thunder is defined as the extinction of fire in the clouds.<sup>330</sup> Surely, the parts of the definition describing the fire or the clouds are *prior in definition* to thunder, because they *are in* or *belong to* the definition of thunder, but thunder surely is not *pros hen* related to those things. Thus, priority in definition is necessary for the PHR, whilst it is not sufficient for it.<sup>331</sup>

[8] It is not entirely clear whether Aristotle states here that the primary kind of friendship he is talking about coincides with the one everyone agrees upon or whether the primary form of friendship *should* be the one everyone agrees on. It does not seem likely that any primary point of reference is primary because people recognise it as primary. Rather it seems to be likely that one agrees upon this kind of friendship as primary because it is δι' αὐτήν – *the one by which* the others are friendships. Another thought on this is the following: Aristotle's discussion of the different kinds of friendships apparently explains a state of affairs that did not have or did not require an explanation before. Let us assume that the different kinds of friendships are ordered axiologically and that this axiological order is agreed upon by everyone. Friendship based on virtue is more valuable than other friendships for several reasons. If we assume that this is a simple fact of common knowledge, then Aristotle's discussion of the different kinds of friendship provides us with a good explanation for the priority of this kind of friendship, which goes beyond the axiological convention, i.e. the occurrence of the first friendship in the definitions of other kinds of friendships.

The last remark [9] states that the subordinate friendships derive their name from the primary. Thus, it is not a coincidence that they bear the same name. However, as other examples have shown, e.g. the health-

330 *An. Post.* II.8, 93b8f., similarly *Met.* VII.17, 1041a25.

331 See the section on priority in a PHR.

example, it is not always the case that the primary and the focally related entities bear the *same* name but bear paronymous names. But [9] does not exclude this possibility. For a similar remark regarding nomination cf. *Met.* IV.2, 1003b16-17.

The analysis of these passages allows us to characterise the PHR as follows:

- a. A PHR is not a genus-species-relation (from [1])
- b. *Pros hen* related entities are *not homonymously* related (from [2]).
- c. Definitional containment: In a PHR, there is a common point of reference (from [3]), the “primary”, which is primary because its definition “belongs” to all derivative cases (from [5]), but the definition of the derivative cases *is not in* the definition of the prototype (from [7]).
- d. The prototype can be identified by comparison of the definitions (from [6]).
- e. The prototype is the reason for the others being named so [from 9].
- f. The derivatives either bear the same name as the prototype or a derivative one: as in *friendship* – *φιλία* or in *medic* – *ιατρὸς* and *ιατρικόν* – *medical* (from [4]).

These features represent what Aristotle tells us about the PHR in *EE* VII.2. No other place in the corpus contains a more detailed account of the PHR. Unfortunately, this is not a precise definition, but merely a conglomerate of features. A definition of the PHR would, therefore, need to import criteria that are not defined by Aristotle. Hence, any reconstruction of this association would rest upon presumptions.<sup>332</sup> While one has to appreciate the effort of intentionally precise accounts such as Shields’s CDH4 and Ferejohn’s definition, both of which are given above, it is clear that they do not rest upon something one could call “Aristotle’s definition” since this does not exist. Because of this, one has to agree with Owen, who puts it the following way:

332 There is another feature of the PHR that is not mentioned in this context. It is the function of the PHR to feature as principle of unity of sciences. A feature that is developed not until *Met.* IV. Cf. section 8.

“Aristotle has not solved the problem of defining focal meaning fully and exactly so as to give that idea all the philosophical power that he comes to claim for it: he has given only the necessary, not the sufficient, conditions for its use. But there is no reason to think that this problem can have a general answer. Aristotle’s evasion of it may come from the conviction that any answer would be artificial, setting boundaries that must be endlessly too wide or too narrow for his changing purposes.” Owen (1960: 189)

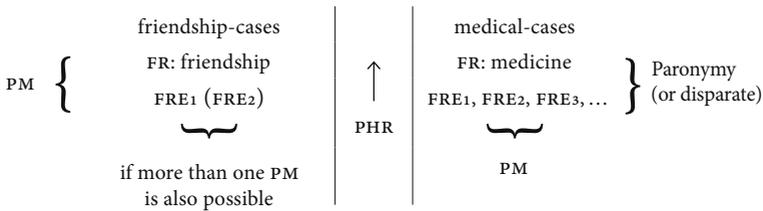
Nevertheless, this does not mean one should stop investigating this notion: There is one feature in the list that has been widely neglected so far. Scrutinising the last point f), there are two different examples given in the passage, i.e. the *friendship*- and the *health-example*. While both examples are supposed to illustrate the same relationship, namely the PHR, they differ in some respect. Let us dissect the examples. It contains examples for the PHR, such as the medical- or the health-example, in which the primary and the derivatives are paronyms: for the medical, it is the *medic* – *ιατρός* (or medicine<sup>333</sup>), for the healthy it is health.<sup>334</sup> This is not the case for examples such as *friendship*. Here, the primary and the focally related entities share the same name. Because of this, the first kind of examples are paronymous,<sup>335</sup> while in the second case there is no paronymy between prototype and derivatives possible, but only polysemous multivocality. This influences the number of derivatives necessary to establish a PHR. In examples without paronymy (*friendship*-examples) it is not necessary, albeit possible, that there is more than one focally related entity. Why is this so? In examples with paronymy (*health*-examples), it is necessary that there is a multiplicity of derivatives (see the diagram below) because otherwise there would not be any case of multivocality and hence there would be nothing the PHR could explain. *Medicine* is prior to the medical things since it is the *medicine* that occurs in the definition of a multiplicity of *medical* things, which are all medical but not homonymously so. If there were no multiplicity, the relationship between the prototype and the focally

333 Cf. *Met.* IV.2, 1003b1: τὸ ἰατρικὸν πρὸς ἰατρικήν.

334 *Met.* IV.2, 1003a35: ἅπαν πρὸς ὑγίειαν.

335 Also in *Met.* IV.2, 1003b16-17 it seems likely that the following phrase οὗ τὰ ἄλλα ἤρτηται, καὶ δι’ ὃ λέγονται amounts to paronymy.

related entity would reduce to mere paronymy. Thus, it is clear that in order to establish a PHR, there must be a polysemous multivocity either between the primary and at least one derivative or between a multiplicity of derivatives. Consequently, another aspect in which friendship- and healthy-examples differs concerns the “placement” of the polysemous multivocity. The following diagram illustrates the differences:



“FR” abbreviates “focal reference”; “FRE” abbreviates “focally related entity”; “PM” abbreviates Polysemous Multivocity. As stated earlier, the medical-example can involve things such as an action or an instrument. Further, it has been said that it is the medic (or medicine), which is responsible for the names of the derivatives (e). This is not always the case since there is at least one counterexample, i.e. the *σπουδαῖος* – *good/excellent*. Thus, there is the bracketed “or disparate” on the righthand side. As will be shown in the next section of *the good/excellent* there is not even paronymy between the alleged prototype and the derivatives.

In light of all these features of the PHR, I attempt to define it. The definitions will not include all the features mentioned above, but only those I consider essential. I agreed with Hamlyn (1977) that the PHR itself does not embrace a thesis about meanings or senses of words and their connection since the PHR holds between different sorts of entities, e.g. between different kinds of being healthy. These things lack generic unity. Nevertheless, they belong together for a specific reason. The principle of their unity is their shared relation to the same thing, i.e. the focal reference, which is identified by an analysis of the accounts of the focally related entities. Although all these things bear the same name, it is not necessary to determine the PHR as a theory of meanings or senses of words. The PHR is a principle of unity that could even be determined independently of any linguistic representation it is primar-

ily determined by definitional dependence among things, not words. I assume it is best conceived as a principle of unity alternative to generic unity and other forms of unity. One may even assume that the commonality in the name should not be considered a condition of the PHR, but a consequence of the real relationship between certain things.

I deem the PHR a principle that unifies a multiplicity of things. This multiplicity has certain characteristic features. These things bear the same name but are defined differently and they can belong to different categories. However, their definitions are not entirely but only partially different. It is crucial that there is one element in their definition that all things have in common. This thing either bears the same name as the other things (friendship-cases), or it bears a paronymous name (healthy cases). My attempt involves two definitions, one that covers friendship examples and one that covers healthy examples.

*Healthy cases:*

A multiplicity of F things is *pros hen* related iff (1) “F” is multivocal and (2) there is a common element in the definitions of the Fs. (3) the common element bears a name F\* paronymous to “F”.

*Friendship cases:*

A multiplicity of F things is *pros hen* related iff (1) “F” is multivocal and (2) the definition of one of the Fs is non-reciprocally contained in the definitions of at least one other F.

The first definition does not require the focal reference to be itself one of the Fs, whereas the second does require it. Another difference concerns the scope of these definitions. According to the first definition, the PHR holds between those things that are called F. I purposely formulated it this way. This formulation tries to reflect Aristotle’s assertion that *all healthy-things are related to health – ἅπαν πρὸς υἰγίαν* (cf. *Met.* IV.2, 1003a35). The focal reference is not a part of that multiplicity. According to the second definition, the focal reference is part of that multiplicity and in those cases, there is a primary application of the term “friendship” while there is none in the case of “healthy” or at least none that signifies the focal reference “health”.

These definitions are relatively simple. They do not tell us whether there must be some kind of causal relationship between the focal reference and the focally related entities.<sup>336</sup> I prefer it this way since I assume that problematic cases such as spurious homonyms should be discarded not by specifying the conditions of the definition of PHR directly, as there is no textual basis for this, but instead by a clear theory about the way in which Aristotle defines things. As I argued in section 4, the man and the image of a man, which may both be called man are homonyms, and thus, they disqualify from being *pros hen* related since they lack overlap in definition.

### 6.1.3 Paronymy and the *Pros Hen* Relation

There is a close relationship between paronymy and the PHR, which has often been discussed.<sup>337</sup> Revisiting the example of the *medical* – *ιατρικόν*, the “medical” means something like “of” or “for a *ιατρός*”. “Medical” is a paronym of the *medic* – *ιατρός*.<sup>338</sup> Furthermore, as stated in the last section that “everything”<sup>339</sup> that is called “medical” is *pros hen* related to the medic. The same pertains to the example of health. The *healthy* – *τὸ ὑγιεινόν*, is a paronym of *health* – *ὑγεία* and *pros hen* related to health (*ἅπαν πρὸς ὑγίειαν*).<sup>340</sup> Naturally, at least in those cases, paronymy and the PHR occur together, which does not mean they are the same. This is corroborated by the terminological introduction of paronymy in Aristotle:

336 As discussed earlier (section 6.1.1.5), a causal relationship is required by Shields’s definitions of the PHR.

337 Cf. Oehler (1986: 197–200); Ross (1924); Krämer (1967).

338 Or of *medicine* – *ιατρική*. As mentioned earlier cf. *Met.* IV.2, 1003b1: τὸ *ιατρικόν* πρὸς *ιατρικήν*. In *Met.* XI.3, 1061a4 the focal reference of “medical” is the medical science as Aristotle states that what is called medical is called to *ἀπὸ τῆς ιατρικῆς ἐπιστήμης*.

339 As long as no exceptions are determined.

340 *Met.* IV.2, 1003a35. Cf. For medical and healthy cf. also *Met.* XI.3, 1060b37–a7. Also cf. Patzig (1961: 192ff.) who emphasised the close relationship of paronymy and *πρὸς ἓν λέγεσθαι*. Patzig, G. (1960)/61. *Theologie und Ontologie in der Metaphysik des Aristoteles*: Philosophische Zeitschrift der Kant-Gesellschaft. *Kant-Studien* (52): 185–205.

*Cat.* 1a12-15: παρώνυμα δὲ λέγεται ὅσα ἀπὸ τίνος διαφέροντα τῇ πτώσει τὴν κατὰ τοῦνομα προσηγορίαν ἔχει, οἶον ἀπὸ τῆς γραμματικῆς ὁ γραμματικὸς καὶ ἀπὸ τῆς ἀνδρείας ὁ ἀνδρεῖος. Paronyms are called those things, which have <their> description (τὴν προσηγορίαν) according to the name <of the other thing> from which they are different in their grammatical form [τῇ πτώσει], like the grammatical from grammar and the courageous from courage.

What is called the paronym is that thing, which is called after the name of another thing. The paronymous name is modified with respect to the name of the other thing. Aristotle states that the paronymous name differs *in its grammatical form* – τῇ πτώσει from the other. According to the examples, the two different names belong to different word classes; one is a noun, the other an adjective. The names are similar not for etymological, but for logical reasons and usually can be derived by grammatical rules. The *grammatical* and the *courageous* derive their names from *grammar* and *courage*. The converse does not hold.<sup>341</sup> Thus, in contrast to homonymy and synonymy, there is no symmetry in paronymy, since *x* may be a paronym of *y*, while *y* is not a paronym of *x*. Because of this, it is possible to determine one of the two forms of the words as prior to the other, in this case: “courage” is prior to “courageous”. The reason for this priority on the linguistic level is found on the extra-linguistic level. Courage is also prior to the courageous. Unfortunately, Aristotle remains silent on the exact kind of priority between courage and the courageous in this context. According to this view, linguistic features exactly mark-off metaphysical features (which is a view one may find implausible).

In the *Categories*, there is a hint from which one could draw inferences about the relationship of courage and the courageous. The corresponding extra-linguistic counterparts of the names “courage” and “courageous” are *qualities* – ποιότητες and *qualified things* – ποιά.

*Cat.* 8, 10a27-29: Ποιότητες μὲν οὖν εἰσὶν αἱ εἰρημέναι, ποιά δὲ τὰ κατὰ ταύτας παρωνύμως λεγόμενα ἢ ὅπως οὖν ἄλλως ἀπ’ αὐτῶν. Qualities are those mentioned; qualified are those things [1] which are called according to those <qualities> paronymously or [2] which are in some or other way derived from them.

<sup>341</sup> In addition, the structure seems to orient on different word-forms: the noun is prior to adjective.

Aristotle calls *qualified* – ποιὰ [1] those things, which have their names derived from the names of qualities, e.g. the courageous from courage and the grammatical from grammar, or [2] those things, which are related in some other, rather exceptional, way.<sup>342</sup> While “courage” is the name of a quality, “courageous” is the name of a qualified thing, i.e. a thing that *bears or receives* the quality courage.<sup>343</sup> From this, it is clear that paronymy involves four elements: Two things, i.e. a quality and its name related to two other things, *the qualified thing* – ποιόν τι and its name which is derived from the name of the quality.<sup>344</sup> Moreover, since the qualified thing bears or receives the quality, it is clear that the quality must be logically prior to the qualified thing. I assume that the analogical pertains to the paronym and the name it is related. Thus, courage is logically prior to the courageous.<sup>345</sup>

Paronymy, just like synonymy and homonymy, is tied to linguistic conditions. This becomes evident by the following remarks: Aristotle states in *Cat.* 8, 10a27-b12, that in some cases there is no paronymy possible, although something may be *called after* something else. Yet, if there is no name for the quality from which the qualified things derive their names, then this is not a case of paronymy. Thus, it is evident that *linguistic derivation* is a necessary condition for paronymy.

An example is the *good/excellent* – σπουδαῖος man. A man is called “good” because he has virtue, but “virtue” is a term that is not relative to the term “good” / “excellent” (σπουδαῖος). Thus, he is not called good paronymously from virtue. Ancient Greek does not have an adjective that is derived from ἀρετή – *virtue*, while there is one in English, i.e. “virtuous”.<sup>346</sup>

In addition to that, if “σπουδαῖος” was a polysemous multivocal just as “ἀγαθόν” as stated in *EE* I.8 and *EN* I.6, then it would mark off the third kind of *pros hen*-examples, which cannot be subsumed under

342 *Cat.* 8, 10a31: *almost in every case one speaks <of the qualified things> paronymously – σχεδὸν ἐπὶ πάντων παρωνύμως λέγεται.* The exceptional case will be mentioned in the following along with the example of the *good/excellent* – σπουδαῖος man.

343 Cf. e.g. *Cat.* 8, 9a32: *e.g. honey is called sweet because it receives sweetness – οἶον τὸ μέλι τῷ γλυκύτητι δεδέχθαι λέγεται γλυκύ.*

344 Cf. Oehler’s (1986: 191) graphical illustration.

345 While the courageous is prior in being to courage as shown earlier. Cf. section 6.1.1 or for a summarised version 6.4.

346 Ancient Greek uses different words instead e.g. ἐπιεικής, καλός, ἀγαθός, σπουδαῖος.

the two separate cases of the *friendship* and the *healthy-examples*. This class would be closer to the class of the *healthy-examples*, since also in this class, the linguistic means, which are used for the primary and the derivatives are different already. The only difference here would be that the means are *entirely* different. Nevertheless, Aristotle states nowhere that the name of the focal reference and the focally related entities *must exhibit any similarity*. Yet, as said above, it is necessary that there is a multiplicity of things with the same name.

### 6.1.3.1 On the Relation of Paronymy and *Pros Hen*

The PHR and paronymy are not identical.<sup>347</sup> These notions are related but not congruent. It is clear from specific examples that paronymy is possible in cases in which there cannot be a PHR, e.g. the grammatical and the grammar. There is no polysemous multivocality possible since there is no plurality of things said in many ways for there are no other things except grammatical men. The ability to know grammar is idiosyncratic of men and hence “grammatical” is synonymously predicated. Thus, paronymy can be considered the narrower notion. If the paronym is said in one way only, there is no need to apply the PHR because there is no explanatory necessity. There is not a plurality of things whose association required an explanation. Hence, I assume that the necessity to introduce a relationship such as the PHR is directly connected to there being a plurality of things exceeding a generic unity. If there is no plurality of entities, which is related to some one thing, as it is the case when the paronymous term is said synonymously, then there is no need for the PHR. In this regard, the PHR is broader than paronymy.

In another but related way, Krämer (1967: 341 n. 91) suggests that Aristotle broadens paronymy to the PHR.<sup>348</sup> He states that the phenomenon of paronymy has a model-character for ΠΗ-λεγόμενα. From a developmental perspective, one could argue that Aristotle takes the relation

347 Cf. e.g. Ross (1924: 256; 1936: 559) and Patzig (1961: 192ff.). Though it has been claimed by Fonfara (2003: 67 n. 27), that Patzig identifies the PHR with paronymy he actually does not, at least not strictly, cf. Patzig (1961: 192 n.21).

348 He describes *pros hen* as “sinngemäße Neuformulierung des Paronymie-Verhältnisses in einem Bereich, in dem die Ordnung der Glieder nicht mehr durch die Sprache angezeigt wird”.

of paronymy and “broadens” it, in order to apply it in areas where the order of things is linguistically undifferentiated, as it is the case with friendship-examples. Although this is correct, one must emphasise that it is not specific to the PHR since in many *pros hen* cases the order is still indicated by the language. This is true for all health-examples of *pros hen*.

Further, this kind of “broadening” limits paronymy, as an essential feature of paronymy is lost, namely the derivation of names. One has to keep this in mind if one proposes that “paronymy is broadened to apply also to linguistically undifferentiated cases”. Instead, as suggested above, one should suggest that it is broadened in regard to the number of things, which can be paronyms of one and the same thing. From this perspective, the phenomenon of paronymy is broadened and not diminished (at least in the cases of health-examples). Still, one has to exclude that the paronymous name, e.g. “healthy” is said synonymously. Since this is the case in the class of healthy-examples, it is appropriate to call all healthy-examples paronyms, however, *multivocal paronyms*. In this respect, it is entirely appropriate to assume that paronymy is to be placed between homonymy and synonymy. While homonyms differ completely in definition, synonyms have the same definition; paronyms derive their name and the corresponding definition by their relation to one thing. Nevertheless, the notion of paronymy is too narrow to perform the explanatory work that is done by the PHR.

To conclude, paronymy and the PHR are closely related primarily because paronymy is involved in all healthy-examples of the PHR and because the paronym depends in its definition on its point of reference just as focally related entities depend on their focal reference. Paronymy does not require multivocality, while the PHR does. Grammar and the grammatical are paronyms but not focally related since the grammatical is said in one way only. In this regard, it seems that the scope of paronymy is wider. But as outlined above, there are also cases of the PHR that do not require paronymy, i.e. friendship-examples. Thus, paronymy and PHR occur together in all healthy-examples. They do not occur together in all friendship-examples, and they do not occur together in all grammatical examples. There is only one set of cases where both occur together. This may suffice to answer the question of similarity and difference of paronymy and PHR.

## 6.2 Logical priority in the *Pros Hen* Relation

I argued earlier that *logical priority* (λόγῳ or κατὰ τὸν λόγον) is the “most” essential characteristic of the PHR.<sup>349</sup> In this section, I attempt to characterise the alleged “kind” of logical priority essential to the PHR. The following trains of thought are primarily designed to contribute to a more detailed understanding of the relationship of the focal reference to the focally related entities and do not provide a detailed analysis of Aristotle’s theory of definition.

To be able to reveal the alleged kind of logical priority that is applied in the PHR one has to justify that there are different kinds of logical priority in Aristotle at all. Yet, Aristotle distinguishes nowhere different senses of logical priority, at least not explicitly. Nevertheless, to a certain degree, it is possible to draw a distinction between different ways in which something can be logically prior as Aristotle *defines* things in different ways.<sup>350</sup>

Before trying to distinguish different kinds of logical priority, let us consider first how Aristotle describes logical priority. In *Met.* XIII.2, 1077b3-4 Aristotle “clearly” states that “[Things are prior] in definition to those things whose definitions are compounded from definitions of them”<sup>351</sup> – τῶ λόγῳ δὲ ὄσων οἱ λόγοι ἐκ τῶν λόγων. According to this passage, everything that is part of a definition of something else is logically prior to it.

LP: *A is logically prior to B iff A, or the definition of A is contained in the definition of B while B or the definition of B is not contained in the definition of A*

The following example illustrates the definition of a substance by a genus-differentia definition. The *man* is a *biped animal*. This definition contains the differentia *biped* and the genus *animal*, which defines the

<sup>349</sup> Cf. especially Owen (1960) and Ferejohn (1980). Beside these cf. Irwin (1981: 531 n. 12): “If Fs are focally connected, then the focus F<sub>1</sub> has the definition „G,” and subordinate Fs have the definition „G + H,” „G = J,” etc. F<sub>1</sub> is primary and the focus because other Fs include its definition in theirs.”

<sup>350</sup> Also “definition” is said in many ways. Cf. *Met.* VII.5, 1031a9-10, similarly before in VII.4, 1030a17-18; b4-7; b12-13.

<sup>351</sup> Translation of Annas. Annas, J. 1988. *Aristotle’s Metaphysics: Books M and N*. Oxford.

species of man. This kind of definition often is called *diairetic* definition.<sup>352</sup> In this case, both the *differentia* and the *genus* are prior in definition to the species man. As outlined in the first chapter of this study, Aristotle distinguishes between things that are strictly definable (such as substances) and those that are not strictly definable, such as non-substances, for instance.<sup>353</sup> To understand a definition of a non-substance we must understand the definition of the kind of substance it belongs to. Aristotle explains this in *Met.* VII.5 with a reference to necessary accidents.<sup>354</sup> If one defines “odd” we must make reference to kind of thing it belongs to, i.e. number. Because of this, he claims that non-substances are defined *by addition* – *ἐκ προσθέξεως* (cf. *Met.* VII.5, 1031a1-4). I propose this also pertains to focally related entities. In order to understand the definition of something healthy one needs to understand the definition of health. Because of that, I assume that healthy-things and other focally related entities are defined in the way that Aristotle class *by addition* – *ἐκ προσθέξεως*.

Aristotle states that if we admit that a definition is possible of accidental compounds (e.g. the white man) as well, then it is clear that “ὀρισμός”<sup>355</sup> is said in many ways.<sup>356</sup> Because of this, one could assume

352 A definition in general answer the what-it-is question, cf. *Top.* I.5, 101b38 and *Met.* VII.4, 1030a6-9. The ways in which this task can be fulfilled vary. For an overview on definition in Aristotle cf. Charles (2010) part II.

353 Cf. *Met.* VII.4–6. In general, things that lack the appropriate form of unity such as heaps, accidental compounds, artefacts, events and the like are strictly speaking not definable.

354 These properties are often also called *per se 2*-properties as they occur in Aristotle’s discussion of “*per se*” on the second place. Cf. *An. Post.* I.4, 73a37ff. For instance, even and odd, male and female, or the risibility of men.

355 Be aware that not every *λόγος* is a *ὀρισμός*, cf. *Met.* VII.10, 1034b20. Moreover, *An. Post.* II.7 and 10. The details of this difference are not discussed here, since they are of remote importance for my purposes. The study primarily reflects on *Met.* IV.7, 1012a23f. where Aristotle states that *the combination of words (logos) whose name is a sign is a definition* – *ὁ γὰρ λόγος οὗ τὸ ὄνομα σημεῖον ὀρισμός ἐσται*.

356 Cf. also footnote 350. This study does not intend to enter the topic of definitions in Aristotle too deeply but the main reason for the difference between the phrase “biped animal” and the phrase “white man” is that in the latter case there is something *trans-categorially* predicated of something else and this combination does not form a unity, though a proper definition should do that (cf. *Met.* VII.12 and VIII.6). Aristotle calls this an *something of something else* – *ἄλλο κατ’ ἄλλου* – predication (1030a4, 11 cf. on this also *An. Post.* I.22). This difference enables Aristotle to explain why not any combination of words can be considered as *definitory* of something.

that there are also differences between the logical priority related to each kind of definition, i.e. in our context the genus-differentia definition and the definition *by addition* – ἐκ προσθέσεως. One may think that the genus is logically prior in a different way the accident or the substance is logically prior to the accidental compound. But Aristotle does not address this question. LP holds equivalently of them.

Nevertheless, one may narrow down the way the focal reference is logically prior to the focally related entities to get a better understanding of the logical priority that is part of the PHR. We know that the focal reference cannot play the role of a genus since the *pro hen* related entities are decidedly *not species of a common genus* – μηδ' ὡς εἶδη ἐνὸς γένους (EE VII.2, 1236a17). Thus, there has to be a difference in the way the focal reference is part of all the definitions of the focally related entities and the way the genus is part of the definition of all its species.

Senfrin-Weis (2009), in some sense, addresses this difference. In her opinion, Owen's thesis of *reductive translation*<sup>357</sup> blurs the difference of the function of the genus and the focal reference in the definition of things.<sup>358</sup> According to Owen, statements about non-substantial beings can be reduced or translated into statements about substance. The worry of Senfrin-Weis is, and it is a justified worry, that it makes substance a genus of non-substances. Indeed, as I outlined earlier, Owen's *reductive translation* seems possible, maybe even primarily possible, for things that are unified by a common genus. To address this worry, one has to reassess the distinction and the difference between the functions of the genus and focal reference in the respective definitions. The following paragraphs will explain the dissimilarity between the logical priority of genus and what falls into that genus and that of focal reference and what is focally related.

The *focal reference* and the *genus* may appear similar, yet they differ in several regards. The relation of these notions seems to be a source of confusion. I will address two issues. 1. The essence-issue and 2. The universality-issue. The example of the medical and the man will help

357 Cf. section 6.1.1.5.

358 As a reminder: She tries to explain this with her terminology of *content-based* and *non-content based predication* which is elusive.

illustrating these issues. Contained in the definition of all *medical things* is the *medic*. In this regard, the *medic* behaves similarly to the genus *animal*, which also is contained in the definition of a multiplicity of things with the same name, e.g. *men*. But according to *Top.* I.5, 102a31-b3 *the genus is an answer to the what-it-is question, i.e. a question for the essence*. Even if one ignores the remainder of the definition, the genus is a valid (although partial<sup>359</sup>) answer to the what-it-is question. To state what the man is, one can also provide the abbreviated answer: the man is an animal. In accordance with that, he states in *Cat.* 3a17-18 that the *name and the definition* of the genus (as secondary substance) may be predicated of the subject. All of this does not pertain to the focal reference. It cannot be such a (partial) answer to the what-it-is question. Neither can its definition be predicated of the focally related entity. A non-substance is not a certain kind of substance, and a medical knife indeed is not a kind of a *medic*, and the healthy banana is not a certain kind of health either. Thus, the genus is prior in definition in a different way compared to focal reference.

Another issue concerns the *universality* of genus and focal reference. In *Met.* VII.13, 1038b11-12 Aristotle states: *one calls universal that which by nature belongs to many things – τούτο γὰρ λέγεται καθόλου ὃ πλείοσιν ὑπάρχειν πέφυκεν*. The genus is said of a multiplicity of things and is in this way common to many things. It is *by nature* common to a plurality of things because it is a universal.<sup>360</sup> Every genus is predicable of a multiplicity of species. In contrast to that, the focal reference is *not predicable* of a multiplicity of things. Although the focal reference *belongs to* or *exists in* (*ὑπάρχει*) the accounts of a multiplicity of things (which may belong to different categories) it is not common to the multiplicity it belongs to in the same way as the genus. I assume one should say that the focal reference is common to a multiplicity of things, but it is not a universal, at least not in the same way the genus is a universal.

Devereux (2009) suggests in his commentary on Senfrin-Weis (2009) that one should conceptualise this difference by proposing dif-

359 Cf. *Top.* I.5, 102a33-35.

360 Cf. Frede; Patzig (1988: 246).

ferent types of logical priority.<sup>361</sup> He proposed *inter-* and *intra-generic* logical priority. I agree with these labels, although they seem to be designed to address only one part of the *universality* issue as I outlined above, i.e. the fact that the focal reference may belong to definitions of things of different categories while the genus only belongs to definitions of things within a single category. Nevertheless, also the essence-issue is supposed to be addressed by this distinction. *Intra-generic logical dependence* describes the subordination of a multiplicity of things under a genus while the genus is a partial answer to the what-it-is question. *Inter-generic logical dependence* describes the relation of a multiplicity of generically different things to one and the same entity whereas this entity does not function as a partial answer to the what-it-is question like the genus.

To conclude, as focally related entities cannot be defined in the genus-differentia mode of definition since they do not belong to a common genus, they are defined in a different way. I assumed that, overall, they are defined in the way non-substances are defined, i.e. *by addition – ἐκ προσθέσεως* (cf. *Met.* VII.4 and 5, 1031a1-4). Furthermore, although the focal reference also *belongs to* or *exists in* the accounts of a plurality of different things, it is not, or at least not in the same way, universal as the genus and it is not a partial answer to what-it-is question. Aristotle does not distinguish between different kinds of logical priority. Nevertheless, we have seen that they play vastly different roles in the definition.

### 6.3 Polysemous Multivocity by Analogy

In *EN* I.6, 1096b26-28 Aristotle lists the analogy as a possibility, which may explain how the things that are called “good” are related. Shields (1999: 10 n. 3) does not believe that the occurrence of analogy in that passage is meant to demarcate an alternative explanation for the connection of certain multivocals.<sup>362</sup> Indeed, the analogy seems to play a subordinate role compared to the *PHR* in the debate about multivocity and homonymy. In contrast to Shields I assume, as indicated in chapter 5,

<sup>361</sup> Section 6.1.1.

<sup>362</sup> Neither does Ward (2008).

that the analogy is a coordinate alternative to the PHR in the sense that one may refer to an analogy in order to explain how two disparate things can be called the same thing.

In Aristotle “analogy” signifies what is called *analogia proportion-alitatis*<sup>363</sup> in medieval philosophy.<sup>364</sup> The term “ἀνάλογος” means in as much as “in proportion”, “equivalent to”, “resembling” or “according to a ratio”. The analogy is a relationship that is based on the *identity* of a *ratio*. He also calls it also “geometrical”<sup>365</sup> analogy, which can be expressed in an arithmetical proportion,  $a : b = c : d$ .<sup>366</sup> This is read in the following way: *As a is to b, c is to d*. Thus, the analogy holds between four items or two pairs of items respectively, which exhibit an identical ratio.<sup>367</sup> Let us fill in some values for the variables, e.g. *as 4 is to 2, 12 is to 6*. The pairs of 4 and 2 and 12 and 6 are analogous because of the identity of the ratios between the elements of the pairs:

$$4 : 2 = 12 : 6$$

As the ratio is a property that is identical on both sides of the identity sign neither of the sides can be said to be the reason for the other side exhibiting this ratio, which implies there are no priority relations to a single point of reference involved in the analogy.<sup>368</sup>

The analogy is also applicable in non-mathematical contexts. It can be applied in all cases in which it is possible to identify a correspondence in different systems or structures. For instance, the *point* and the

**363** Which usually is contrasted with the *analogia attributionis*. Central cases of the analogy of attribution are the examples of “healthy” and “medical” Aristotle mentions in *Met.* IV.2. Aquinas refers to these examples in *De Veritate*, 21, 4, ad 2 and *Sum. Theol.* I, 13, 6. In Aristotle there are no hints that he thought of the PHR as of a form of analogy. For him “analogy” only means the analogy of proportion.

**364** For a detailed overview about the relation of Aristotle and medieval philosophy see chapter 4, “Analogy in Aristotle”, in Rocca, G. P. (2004). *Speaking the incomprehensible God: Thomas Aquinas on the interplay of positive and negative theology*. Washington, D.C.

**365** *EN* V.7, 1131b12-14.

**366** Cf. *Poet.* 21, 1457b16-19; *EN* V.3, 1131a30-32; *MM* I.34, 1193b3f.

**367** Cf. *EN* V.6, 1131a30-33: Aristotle mentions a special case of the analogy which he calls continuous – *συνεχής*. It is also possible to draw an analogy only having “three” items. He states that one of the three is simply repeated: *As a is to b, b is to c*. The regular case with four different items is called separated – *διηρημένη*.

**368** Moreover, the convertibility of the numbers allows to exchange certain elements with each other, while the equation remains true:  $a : c = b : d$ .

number *one* are analogous.<sup>369</sup> Both are *principles* – ἀρχαί: The point the principles of the line, the number *one* the principle of numbers. They occupy the same position in a different system. In this sense, the analogy explains the unity of the point and the number *one*.<sup>370</sup> Aristotle uses the analogy also very often in his biological works. For instance, he claims that the functions of nails and hoofs, and hands and claws, feathers and scales are analogical (*HA* I.1, 486b17-22). In the *PA* I.4, 644a13-23 he tells us that groups of animals that only differ in the more or less an identical element they possess are aggregated under a single class while groups whose attributes are only analogous are separated. For instance, in this sense, one class of birds differs from another by shorter or longer feathers, while birds and fish only agree in having analogous organs. For instance, what in the bird is the feather in the fish is the scale.<sup>371</sup> The analogy is one of the many ways in which things can be one. Scales and feathers are one by analogy. They are one because feathers are to birds what scales are to fish.

Moreover, Aristotle uses the analogy as an explanation of metaphors<sup>372</sup> in the *Poetics* and the *Rhetoric*, and he applies the analogy in his *Metaphysics* where he uses the analogy to form trans-generic concepts such as being in potentiality and actuality.

In *Met.* IX.6, 1048a36-37, Aristotle suggests that one should not look for a definition of everything, but one should also detect what is analogical. He uses several examples to illustrate the analogical structure, which explains his notions of being in potentiality and being in actuality: As what builds a house is to what can build a house and what is awake to what is asleep and what sees and what has closed the eyes but can see, so is what has been distinctively formed from matter to matter and what is perfect to what is imperfect (cf. *Met.* IX.6, 1048b1-4). With these examples, Aristotle tries to show the structural similarity of all

369 Cf. *Top.* I.18, 108b26-29.

370 *Met.* V.6, 1016b34-35: by analogy any <two> things which are related as a different thing to a another – κατ' ἀναλογίαν δὲ ὅσα ἔχει ὡς ἄλλο πρὸς ἄλλο.

371 Although scales and feathers have a communality that is revealed by the analogy there is no name for this. The lack of a name in similar cases is also mentioned in *Meteor.* IV.9, 387b3; *An. Post.* II.14, 98a20-23.

372 Cf. *Rhet.* III.10, 1411a1-b21; *Poet.* 21 1457b6-33.

these cases. A philosopher should be able to spot the similarity of these cases, although they do not fall under a genus.<sup>373</sup> Relevant for us is the claim that follows on these examples that ‘*in actuality*’ is not in all cases said in the same way, but it is said by analogy, like this in this or to this, so is that in that or to that – λέγεται δὲ ἐνεργείᾳ οὐ πάντα ὁμοίως ἀλλ’ ἢ τῷ ἀνάλογον, ὡς τοῦτο ἐν τούτῳ ἢ πρὸς τοῦτο, τόδ’ ἐν τῷδε ἢ πρὸς τόδε. (*Met.* IX.6, 1048b6-8).<sup>374</sup> What is awake and what is distinctively formed from matter is both, as he states, *in actuality* – ἐνεργείᾳ. In contrast to the case of the scales and the feathers, there is a name for the commonality of the different cases (i.e. “in actuality”). As in each case “*being in actuality*” is said in a different way but as all cases are associated by the analogy, they are not said homonymously.

In Aristotle’s example in *EN* I.6, 1096b26-29, he suggested that the analogy may be an alternative to the *PHR as in the body is sight, so in the soul is intellect, i.e. another thing in something else* – ὡς γὰρ ἐν σώματι ὄψις, ἐν ψυχῇ νοῦς, καὶ ἄλλο δὴ ἐν ἄλλῳ. More freely paraphrased: The role sight plays in the body, intellect plays in the soul.<sup>375</sup> I assume that the “καὶ” before the “ἄλλο δὴ ἐν ἄλλῳ” is explicative since it underlines an important feature of the analogy in general as it is known from other passages.<sup>376</sup> It is quite salient that, as in the case of the feather and the scale, there is no common name for the commonality of soul and eye. Unfortunately, Aristotle does not provide any further clarifying remarks about how to deal with the example. However, directly before Aristotle raises the question, *how is <the good> said?* – ἀλλὰ πῶς δὴ λέγεται; (*EN* I.6, 1096b26) he distinguishes between things that are *per se goods* and those that are good as means to these.<sup>377</sup> Some of the examples of things that are *per se goods* are *thinking and seeing* – τὸ φρονεῖν καὶ ὁρᾶν (1096b17). I assume that the eye-intellect-example may pick up again

373 Aristotle suggests practising detecting similarities of even the most remote genera in *Top.* I.17, 108a12-14.

374 Cf. also *Met.* XII.4-5 where, among other things, Aristotle claims that causes and principles are by analogy one for all things.

375 The example is also given in *Top.* I.17, 108a7-17.

376 *Met.* V.6, 1016a34-35 and *Met.* IX.6, 1048b6-8.

377 *EN* I.6, 1096b13-15: *the good must be spoken of in two ways, and some must be good in themselves, the others by reason of these* – διττῶς λέγοιτ’ ἂν τὰγαθὰ, καὶ τὰ μὲν καθ’ αὐτά, θάτερα δὲ διὰ ταῦτα.

the examples of the *per se goods*. Thus, I the name for the commonality of the eye and the intellect in this context is “good” or “per se good”.<sup>378</sup>

This section was supposed to show that it is not necessary to neglect the analogy as a way in which multivocals can be related as it is suggested by Shields. If my remarks are cogent, the PHR and the analogy are both coordinate ways to explain the connection of multivocals.

## 6.4 Conclusions

This chapter investigated polysemous multivocals, i.e. multivocals that are either related by a PHR or by analogy. Polysemous multivocals form one category of multivocality beside homonymous and synonymous multivocals. They are as such of particular interest to most philosophers, because many interesting philosophical concepts are said in many ways, but not homonymously. In this chapter, I examined what kind of relation the PHR is and how things are connected by it.

Section 6.1.1. contained an overview and a discussion of several seminal contributions to the PHR. One of the most important results of the survey of the contributions on the PHR is that quite often it was assumed that the PHR implied some kind of existential priority relation. The focal reference is supposed to be prior in existence to the focally related entities, as without it nothing could be focally related. I argued within that survey (6.1.1.2) that there is no need to propose such a thesis. Firstly, there is no textual evidence for this. Secondly, I deem that the necessity to propose such a thesis originates from an overemphasis of the application of the PHR to being. In the case of being, the focal reference indeed is prior in existence to the focally related entities. I argued that the presence of this kind of priority in that case of the PHR does not suffice to consider this kind of priority essential to the PHR. My main argument is that the only kind of priority essential to the PHR is logical priority, and there is no need to assume that what is logically prior, is prior in existence as well. Aristotle claims this explicitly. There are

378 This interpretation agrees with Brüllmann (2011: 92–93).

things that are prior in definition but posterior in existence.<sup>379</sup> I referred to *Met.* XIII.2, 1077b1-7: The point is logically prior to the line but posterior in existence. I claimed that existential priority of the focal reference to the focally related entities could be essential to the PHR since the healthy-thing is prior in being to health, but posterior in definition to it. Thus, I claimed that questions of existential priority or posteriority are not essential parts of the PHR. These questions are answered independently of there being a PHR. Moreover, in section 6.1.1.5, I pointed out that there are serious problems within Shields's attempt to define the PHR by a causal analysis of the relation between the focal reference and the focally related entities.

In section 6.1.2, the main result of the investigation of the PHR in *EE* VII.2 was that there are two different kinds of examples of the PHR. 1. the healthy-examples, which involve paronymy and 2. the friendship-examples, which do not involve paronymy. I took this distinction to be influential on the attempts to define the PHR. Because of this, I devised two definitions of the PHR, which are comparatively simple and primarily based on logical priority.

Section 6.1.3 demonstrated how the PHR and paronymy are related. I claimed that they overlap in healthy-examples but that they do not occur together in other cases. It is possible that there is paronymy without a PHR in examples I called "grammatical-example", and there is paronymy but no PHR and in friendship-cases where there is a PHR but no paronymy.

In section 6.2, I discuss the way the focally related entities are defined and how the focal reference differs from a genus. I claim that overall focally related entities are defined in the way Aristotle non-substances are defined, i.e. *by addition* – ἐκ προσθέσεως. However, in those cases, the focal reference needs to be added, which plays a slightly different role in the definition compared to the role substance plays in the definition of a non-substance, as the focally related entity does not inhere in the focal reference.

379 I assume that priority *in being* – τῇ οὐσίᾳ identifies with "existential priority" (cf. *Met.* V.11, 1019a1-4) which may be controversial. In this context, I do not see difficulties following from it.

Section 6.3 aimed to demonstrate how it is possible to consider the analogy as a real alternative to the PHR as this has been doubted by Shields (1999). I illustrated that the analogy indeed is a real alternative as it is possible to refer to the analogy as an explanation for a polysemous multivocality. I provided an interpretation of the soul-example in *EN* I.6, 1096b28-29, which suggests that the eye and the intellect are examples for (per se) goods. In this regard, it makes perfect sense to assert that “good” is said of them as a polysemous multivocal by analogy.

## 7 The *Pros Hen* Relation and Ordered Series

Having clarified the difference between analogical and *pros hen* cases, I now turn to another controversial case involving the PHR, namely *things that are ordered in series* – τὰ ἐφεξῆς.<sup>380</sup> *Ordered series* is a topic of widespread discussions<sup>381</sup>, and it remains a difficult topic since it can easily be discussed from many different points of view and with different purposes.<sup>382</sup> The following section primarily focuses on the relation of *ordered series* and the PHR as sometimes there is a tendency to regard ordered series as a variant of the PHR.<sup>383</sup> The attributed close connection between serial order and the PHR is not so much based on clear textual evidence,<sup>384</sup> but rather on similarities that have been noticed by several scholars. Yet, the acknowledgement of similarities does not warrant describing *pros hen* cases as *ordered series*, at least not in the same sense the conventional examples of *ordered series* are ordered in series. Before investigating the relation between ordered series and the PHR, one has to determine what conventional ordered series are.

When Aristotle speaks about *ordered series*, it seems as if it is a well-known notion, not necessitating any detailed explanation. Yet, it is not true that *any* order of priority and posteriority among things form a

**380** Cf. *DA* II.3, 414b22. Compare for ἐφεξῆς in general *Met.* XI.1.2, 1068b31ff; *Phys.* 226b34ff. 231a21ff., b8ff.

**381** Cf. for an overview about the various views about the definitions of soul and the problems of its seriality Ward, J. K. (1996). *Souls and Figures. Ancient Philosophy* 16 (1): 113–128. Furthermore, cf. Krämer (1967); Lloyd, A. C. (1962). *Genus, species and ordered series in Aristotle. Phronesis* 7 (1): 67–90; Wilson, J. C. (1904). *On the Platonist Doctrine of the ἀσύμβλητοι ἀριθμοί. The Classical Review* 18 (05): 247–260; Fortenbaugh, W. W. (1976). *Aristotle on Prior and Posterior, Correct and Mistaken Constitutions. Transactions of the American Philological Association (1974-)* (106): 125–137. Cf. also Lewis (2004: 19 n. 43).

**382** I am alluding to the possibility to connect the topic of ordered series either with a metaphysical (anti-Platonic) claims or with logical claims. Cf. Lloyd (1962: 68). For more remarks about these options see below.

**383** It has been suggested by Robin (1963: 168 n. 172) that ordered series are a special case of the PHR. Robin, L. (1963). *La théorie platonicienne des idées et des nombres d'après Aristote.* Paris. Krämer (1967) follows him in this regard. This tendency is also found in Owen (1960: 173) though he goes not into detail.

**384** The only allegedly “clear” connections between the PHR and serial order are found in *Met.* XII.1, 1069a19–21; *EN* I.6, 1096a17–23 and *Met.* IV.2, 1005a8–11.

series in the relevant sense. As in the case of the PHR Aristotle determines the relevant cases not by definition but by examples. I will follow Lloyd (1962) and abbreviate those groups of things that are *ordered in series* in the relevant sense as *p-series* (read as priority-series). Regular examples of p-series are the following:

Figures: triangle – tetragon – pentagon ...

Souls: vegetative – perceptive – thinking

Numbers: 2, 3, 4, 5 ...

Dimensions: unit/point – line – surface – body  
(constitutions/citizens)<sup>385</sup>

The main issue about p-series is that they lack something. It is a matter of context and interpretation of what exactly it is they are lacking. In general, the issue about p-series is based on their unity. It is possible to distinguish two claims, which are both legitimate within their respective passages:

1. The NF-claim: There is no Platonic *form F besides* – *παρά* things that are ordered in series (because it would be prior to the first).<sup>386</sup>
2. The NG-claim: There is no (Aristotelian) *genus G* for things that are ordered in series

The NF-claim, according to Aristotle, is Academic. The NG-claim is the version Aristotle adopted and applies in his investigations, some-

<sup>385</sup> Among the common examples there is usually also the *citizen* and the *constitution* mentioned cf. *Pol.* III.1, 1275a22-b5. This case is bracketed here because of the elucidating remarks of Fortenbaugh (1976). However, there are also reasons to consider the example as a direct parallel to the soul/figure analogy in the *DA* as argued by Ward (1996: 121).

<sup>386</sup> Cf. especially *EN* I.6, 1096b17ff.; *Met.* B.3, 999a6-14 and *EE* I.8, 1218a1-8. This claim does not exclude other kinds of common entities as e.g. Aristotelian genera and it does not exclude that one can define e.g. figures or souls *in some way*. There is a group of scholars who argue for the possibility of (strict) definability in those cases, cf. Ross (1961: 223); Ross, W. D. (1961). *Aristotle's De anima*. Oxford. Hamlyn (1968: 94); Aristoteles. (1968). *Aristotle's De anima*. Oxford. Hicks (1965: 334–336). Hicks, R. D. (1965). *Aristotle: De anima*, 1907th edn. Amsterdam.

times without indicating that it has an Academic origin.<sup>387</sup> According to the NG-claim, p-series do not fit into Aristotle's standard taxonomical scheme of genus and species, i.e. that any two species of a given genus must be synonyms with respect to the connected genus-term, as, e.g. "figure" or "soul".<sup>388</sup> What do we infer from that? Since they are not synonyms the alleged genus of p-series, e.g. "figure" or "soul" must be said multivocally of the various souls and figures.<sup>389</sup> Aristotle does not draw this inference explicitly, but it is an immediate consequence of the non-synonymy. This train of thought plays a role in the very prominent (ad hominem) argument against the existence of a single idea of the *good* in *EN* I.6, 1096a17-29. In his polemic against the Academy, Aristotle tries to show that there cannot be an idea of the *good* because there is an order of priority and posteriority in the different applications of the *good*. Aristotle infers this from the fact that the *good* applies to all categories.<sup>390</sup> Since the categories are ordered by priority and posteriority (substantial vs non-substantial categories; cf. also *Met.* XII.1, 1069a19-21 and VII.1, 1028a13-20) the *good* must also behave like that. Because of that, it is not only clear that the *good* is a multivocal, but even that the *good* itself is a serial notion, and hence (given the premise that there are no ideas for p-series), there is no idea of the *good*.<sup>391</sup>

**387** It is ascribed to the Academy in *EN* I.6, 1096b17ff.; *Met.* III.3, 999a6-14 and *EE* I.8, 1218a1-8 (the NF-claim is based on these passages. Lloyd (1962) formulates his metaphysical thesis with respect to these passages. His logical thesis is based on the remarks in *DA* II.3, 414b22-23 and *Pol.* III.1, 1275a34-38. The NG-claim is related to these passages.

**388** For the sake of brevity, this section does not discuss the NF-claim. Since the lack of a Platonic idea for p-series does not imply the logical thesis, i.e. that there is no *logical genus* for p-series (i.e. an essential and unequivocal predicate) some scholars thought for instance in the case of soul a single *strict* definition is possible, see footnote 386.

**389** This is also seen by Lloyd (1962: 76) and Lewis (2004: 19 n. 43) although their terminology differs. Another important remark concerns the example of figure. One might raise serious worries about the claim that Aristotle truly believed that there is no genus for figures since he tells us in *Met.* V.28, 1024a36ff. that *plane* – *ἐπίπεδον* is the genus of all figures.

**390** In *Top.* I.15, 107a3-17 Aristotle confirms this stating that whatever is predicated in different categories is said in many ways.

**391** This argument shall not be discussed in detail. Broadly speaking, the line of argument is repeated in *EE* I.8, 1218a1-8 with the example of the *double* – *διπλάσιον* which is the first of the *multiplies* – *πολλαπλασίωv*. In *Met.* III.3, 999a6-14 it is repeated for numbers. In the *DA* II.3, 414b20-a2 for souls and figures, however applying the "logical" version of the claim.

In *EN* I.6, 1096b26-28 Aristotle suggests different possibilities in which the many ways the *good* is said may be related (either by the PHR or by analogy). I discussed this passage in the section about polysemous multivocals, whilst we focus on a different aspect here: The possibility of a connection between the seriality of the *good* and the idea that the *good* might be a *pros hen legomenon*.

One may assume that the question in *EN* I.6, 1096b26-28, indicated by the ἄρα, is really related to the *good* in the various categories as proposed in *EN* I.6, 1096a17-26 (which is not assumed here).<sup>392</sup> In addition to that, one might overstretch the analogy and assume that as there is a primary *being*, i.e. substance, there must be a primary *good*, and just as *being* is a *pros hen legomenon*, so the *good* must be one. On this background, the difference between the PHR and p-series seems to be marginal, and the possibility to identify them as closely related seems to be within reach. One may propose that every *pros hen* case could be described as an abbreviated p-series, i.e. a “two-member p-series” since among all the focally related entities there is no further order.

There is another similarity potentially supporting the closeness of the two concepts: Both the PHR and the p-series explain the unity of things that lack generic unity. *Met.* IV.2, 1005a8-11 supports this. It states that some things are unities or beings because they are related to one, others because of serial succession (τὰ μὲν πρὸς ἓν τὰ δὲ τῷ ἐφεξῆς).

Despite this similarity, there are reasons to also maintain the distinctness of p-series and PHR. The impression that the PHR and p-series are quite different explanatory tools deepens under the following circumstances: The argument from p-series has never been straightforwardly used to show that the different kinds of *being* are not synonyms with respect to a common genus of being (just like man and ox are synonyms with respect to their genus).<sup>393</sup> This is particularly surprising as it seems the argument from p-series could also be applied in that case (if the interpretation from above were correct). In addition to that, it is also surprising that Aristotle never applied the *pros hen* analysis to the

<sup>392</sup> I follow Brüllmann (2011: 91–92) as stated above.

<sup>393</sup> Cf. for this Lewis (2004: 19 n. 43).

priority and posteriority of figures, souls, and numbers even though an application appears to be possible.<sup>394</sup>

This complicates the relationship between the PHR and p-series, as they appear to have different fields of application. The reason for assuming a close connection originates from the fact that both notions apply orders of priority and posteriority. Because of this, the best approach to distinguish p-series from the PHR is to analyse the kinds of priority and posteriority that are involved in the various applications of the notions. The sparse explicit information available exacerbates drawing a distinction between them. The following investigation concludes with the acknowledgement of many similarities, albeit not enough to identify one of the two as a subspecies of the other.

What is the priority of p-series? I propose that Aristotle's lists a sense of priority in *Cat.* 12, 14a30-31 that may be called a priority *sui generis* for p-series. This priority applies to the relevant examples for p-series. In that passage, the examples are numbers and figures. Aristotle states that in those cases, *the order of being is fixed and cannot be reversed*.<sup>395</sup>

In the corpus, there are some remarks suggesting that *pros hen legomena* indeed were considered by Aristotle as constituting p-series. The most straightforward case is the following: The categories of *being* are described as *ἐφ'εξῆς* in *Met.* XII.1, 1069a19-21. One may doubt whether this implies that the categories of being form a p-series in the same sense figures or souls form a p-series. The reason for doubting this is that the structure of those series is not the same. While in "regular" series (like numbers and figures) the prior is contained in the posterior *in potentiality* I doubt this applies to the case of the categories of being.<sup>396</sup> One would have to believe that in the quality of whiteness, there is a substance contained in potentiality. However, substances do not inhere within anything, as *Cat.* 1b3-5 states it. Thus, one may assume, rather, that the passage *Met.* XII.1, 1069a19-21 applies the notion of *serial order* more flexibly.

394 This is noted also by Fortenbaugh (1976: 129).

395 Cf. also *Met.* V.11, 1018b26. Aristotle describes a priority *according to order* – *κατὰ τάξιν* which is resembles the notion of *Cat.* 12.

396 I call this the *containment-thesis* below.

The *EN* I.6, 1096a17-23 provide the same thought as part of the argument described above. The strong tendency to consider the relationship of p-series and *pros hen legomena* very close is probably based on the following hypothesis: If the *good* is a serial notion, then nothing prevents that also *being* is a serial notion since, with reference to *being*, the seriality of the *good* was shown. Yet, since *being* is the most prominent case of the PHR, what prevents us from thinking that every case, which qualifies as a *pros hen* case also qualifies as a p-series? In order to approach the relation of the PHR and p-series one needs to analyse the case of p-series with regard to the relationship between its members in greater depth.

All subsequent members of a p-series are related somehow to their antecedents. Just by considering the examples, one can expect the predecessors to be *simpler/less determined* than the following ones, e.g. the line is simpler than the surface, the triangle simpler than the tetragon. There is always something *less* in the prior in comparison with the posterior (a dimension less, an angle less, a faculty less). In this regard, posterior members are always more complex than prior members. Unfortunately, there is hardly a comprehensive theory given in the relevant passages, which explains the kind of relationship present between the prior and the posterior entities. I assume that the most elucidating passage is one from the *DA* II.3 about the case of figures and souls. Let us examine it in more detail.

As stated above, I assume that the *DA* II.3 passage applies the NG-claim: There is no (logical) genus for p-series. In this context, Aristotle denies that there is a genus as an *essential universal nature*.<sup>397</sup> Nonetheless, Aristotle does not deny that “soul”, or “figure” is amenable to an account (no strict definition), i.e. a common/general account, i.e. a *λόγος κοινός* (cf. *DA* II.3, 414b23). This account has an important qualification: The account fails to be *ἴδιος* of any of the kinds of soul. It is not *prima facie* obvious what is meant by *ἴδιος* in this context, but the best approach to it may be “peculiar to” or “definitory of”.<sup>398</sup> Because of this,

<sup>397</sup> In this regard I follow Lloyd (1962) and Ward (1996).

<sup>398</sup> This also has been suggested by Lloyd (1962: 74) after a discussion of other possibilities which I will omit here. Aristotle states that the definition must be *ἴδιος* of the defined thing in *Top.* VI.1.

*one has to investigate each kind separately – ὥστε καθ’ ἕκαστον ζητητέον* (414b32). If that were the end of the survey, there would be *separate* accounts of each particular soul, which would make “soul” homonymous. The explanation Aristotle searches goes beyond that since he tries to show how the different types of soul connect. As they lack a common genus one should expect him to apply the PHR or the analogy, but he does not. Instead, he explains how the soul-types form an order of priority and posteriority.

In the *DA* II.4, 415a23-25 Aristotle states that the first *faculty* – *δύναμις* of the soul is the vegetative faculty and this *is contained in/ belongs to* – *ὑπάρχει* to *all souls* and is, therefore, *most common – κοινοτάτη*.<sup>399</sup> In *DA* II.4, 416b22, 25 he calls it the *first soul πρώτη ψυχή*. He repeats this thought several times by saying the vegetative soul is a principle for all living beings (cf. *DA* II.1, 412a14-15; II,2 413b1-2; II.4 415a23-25). He states in the *DA* II.3, 414b20-25 that the case of souls is analogous to the case of figures. Generally speaking, the first member of each p-series is the *principle* of the series. Here, the vegetative soul is the principle of the series of souls. More complex living beings like animals have a perceptive soul. Since every soul has a vegetative faculty, the perceptive soul has one too, as it is the second in the series of souls. This, of course, does not mean there are two *souls* in one living being but one soul with two faculties. This kind of *containment* continues for each member of the series, i.e. the first is contained in all, the second contained in all but the previous, the third in all but all previous etc.

A little earlier in the text, Aristotle makes a key remark about the way the posterior contains the prior: It is contained *δυνάμει* – *in potentiality* in the posterior. I call this the *containment-thesis*:

*DA* II.3, 414b28-32: (παραπλησίως δ’ ἔχει τῷ περὶ τῶν σχημάτων καὶ τὰ κατὰ ψυχὴν· αἰεὶ γὰρ ἐν τῷ ἐφεξῆς ὑπάρχει δύναμει τὸ πρότερον ἐπὶ τε τῶν σχημάτων καὶ ἐπὶ τῶν ἐμψύχων, οἷον ἐν τετραγώνῳ μὲν τρίγωνον, ἐν αἰσθητικῷ δὲ τὸ θρεπτικόν)

(As it is in the case of the figures, so it is in the case of the soul: for always that which is ordered in series contains the prior potentially, in case of the figures and in the case of souls, as, e.g. in the tetragon, the triangle <is contained>, so in the perceptive soul the vegetative soul <is contained>).

<sup>399</sup> Here “most common” does not mean that all souls are vegetative soul of some kind, i.e. the vegetative soul is not “most common” because all other souls belong to it as a genus.

The *ἀει* in combination with the analogy *as the triangle is in the tetragon, so in the perceptive soul, the vegetative soul* suggests that the *containment thesis* is a feature of all p-series. The interpretation of the passage proves difficult since it is not clear what it means that the prior is contained *in potentiality* in the posterior. Since *δύναμις* is said in many ways (*Met.* V.12, 1019b35-1020a4; IX.1, 1046a4f., a4-11), one has to determine the way it is used here. The following paragraph suggests considering it in the following way:

The connection of “*ὑπάρχειν*” and “*δυνάμει*” is explicitly addressed neither in *Met.* V.12 nor in *Met.* IX, which are the most relevant chapters about *δύναμις* for our purposes. The notion of *δύναμις* that is *possibly* applied in our passage of the *DA* is the so-called *ontological δύναμις* from *Met.* IX.6, 1048a31-32. According to Aristotle’s suggestions in that passage, one can determine *what is F in potentiality* by comparing it with *what is F in actuality*, since these notions are complements of each other.<sup>400</sup> In our case, that the tetragon contains a triangle in potentiality needs to be contrasted with the case of *containing a triangle in actuality* in the way it is stated in *Met.* IX.6, 1048a32-34: *we say that in the wood there is a Hermes in potentiality, and in the whole line there is its half in potentiality.* And this is explained by the addition: *because it could be taken away [and kept] – ὅτι ἀφαιρεθῆι ἄν.* One can suppose this is meant in a literal sense (in contrast to an abstraction in thought) since one can literally take away the half from a line or the Hermes from the wood. Although it is not said here, but as a necessary consequence, the whole of the line and the (block of) wood is destroyed after having *taken away* the half from the line or the Hermes from the (block of) wood.<sup>401</sup> Accordingly, we have to consider the tetragon that *contains*

**400** 1048a31-32: *Actuality is the being of a thing, not in the way in which we say that a thing is potentially – ἔστι δὴ ἐνέργεια τὸ ὑπάρχειν τὸ πρᾶγμα μὴ οὕτως ὥσπερ λέγομεν δυνάμει.* Aristotle states that one cannot define what *to be potentially F* or *F in actuality* actually means, but that one can see what it means by considering analogous cases (*Met.* IX.6, 1048a37: τὸ ἀνάλογον συνορᾶν), i.e. comparing what is potentially F and actually F with what is potentially G and actually G.

**401** There is a parallel passage which basically conforms with the former focussing on the example of numbers *Met.* VII.13, 1039a3-7: *ἀδύνατον γὰρ οὐσίαν ἐξ οὐσιῶν εἶναι ἐνυπαρχουσῶν ὡς ἐντελεχείᾳ· τὰ γὰρ δύο οὕτως ἐντελεχείᾳ οὐδέποτε ἐν ἐντελεχείᾳ, ἀλλ’ ἐὰν δυνάμει δύο ἦ, ἔσται ἐν (οἶον ἢ διπλασία ἐκ δύο ἡμίσεων δυνάμει γε· ἢ γὰρ ἐντελεχείᾳ χωρίζει)* *For it is*

the triangle in potentiality in the same way, and similarly the case of the different souls. It is impossible that the triangle that is contained in potentiality in the tetragon can become a triangle in actuality without thereby destroying the tetragon. One could “take away” (and keep) the triangle from the tetragon (if one divides the tetragon in the appropriate way). But one could not “take away” the triangle that is in the tetragon *and keep* the tetragon.<sup>402</sup> The relationship between the tetragon and the contained triangle is that of *whole and part*.<sup>403</sup> *Met.* v.11, 1019a8ff. supports this. The thing that is contained in something else *is posterior in actuality*, because only after the corruption of the whole, the part can be in actuality. This is in line with the passage of *Met.* ix.6, 1048a32-34. According to these considerations, the prior members of p-series are components of the posterior members of p-series and the prior members can be the remnants of the corruption of posterior members. In this light, the *containment-thesis* is informative primarily with respect to the internal structure of posterior elements of the p-series and not very revealing regarding the relation *between* the members.

In the case of the soul, it is a little more difficult, but we can assume that the same pertains (cf. *DA* II.3, 414b20) to a certain degree (i.e. in the sublunary sphere and bracketing the difficult case of the intellect). For instance, according to the analogy to figures, an animal could become deprived of its perceptive organs and hence its perceptive soul by a tragic accident. This does not lead to it being soul-less since there is still its vegetative soul.<sup>404</sup> The opposite is not possible: One cannot take away the perceptive soul from the vegetative soul that is contained in the perceptive soul and keep the perceptive soul separately (cf. *DA* II.2, 413a31-b10). Therefore, the perceptive soul cannot be *contained in potentiality* in the vegetative soul. At least this is not stated anywhere in the

*impossible that a substance is out of substances that are contained in actuality <in the substance>: for the two that is in actuality <a two> will never be one in actuality, but only if it is potentially two, it will be one (as e.g. the double consists out of two halves in potentiality, for the actuality separates).*

402 You can't have your cake and eat it too.

403 Cf. for the many ways in which ἄλλο ἐν ἄλλῳ is said *Phys.* IV.3, 210a14-24.

404 One has to concede that this way of thinking about it does not work for the intellect, since there is no corresponding organ which could be lost.

Corpus. It is evident that the one can be without the other, while the other cannot be without the first. The following remarks confirm this:

DA II.3, 415a1-2: ἀνευ μὲν γὰρ τοῦ θρεπτι- without the vegetative, there is no perceptive  
 κοῦ τὸ αἰσθητικὸν οὐκ ἔστιν

This passage shows that the existence of higher-order members of p-series may depend on prior members. The perceptive is dependent on the vegetative for its existence: *If the vegetative (faculty) does not exist, then the perceptive (faculty) does not exist.* (This sounds very similar to the prominent claim of *Cat.* 5, 2b5-9 according to which nothing exists without substance).<sup>405</sup> From this we can infer: *if a perceptive (faculty or soul) exists, a vegetative (faculty) exists (in potentiality).* What follows from this statement? The posterior members of the p-series are dependent on the existence of prior members of the p-series. There is the following restriction to this: Posterior members do not depend on the existence of prior members which exist in actuality but only in potentiality.<sup>406</sup> Nevertheless, the *vegetative faculty* has a special status because it can exist without the other faculties. Either as the soul of a plant or *according to corruption – κατὰ φθοράν* (*Met.* V.11, 1019a14-15) as other types of souls can deteriorate into vegetative souls. Because of this, I propose that the vegetative faculty is prior *in nature and being – κατὰ φύσιν καὶ οὐσίαν* (cf. *Met.* V.11, 1019a3) to all other types of souls. No other soul can exist without it, while the vegetative soul can exist without them.<sup>407</sup> I will call this type of priority *existential priority*.

Since substances are also prior in existence to accidents just as the vegetative soul is prior to other soul types, one may assume a close relationship between the two cases. I admit that these cases resemble each other in this regard. However, there is also a crucial difference between the two. While accidents inhere in substances, higher-order entities of

405 Cf. also *Phys.* I.2, 185a31-32.

406 This restriction is necessary to clarify that posterior members do not depend on the existence of any vegetative soul but on the existence of that vegetative souls that are components of themselves.

407 The series of vegetative, perceptive and intellectual soul pertains in this form only to the *mortal* beings cf. 415a9. Aristotle states that there is a separated account for the contemplative mind cf. 415a11-12. Cf. also the remark about the destruction of the posterior elements of the series by the destruction of the first in *EE* I.8, 1218a1-8.

p-series do not inhere into lower-order members — the situation is quite the opposite. Lower-order members inhere in higher-order members and become parts of them while substances do not become part of non-substantial entities.

Since each perceptive soul or faculty contains a vegetative faculty in potentiality, the statement of the *DA* II.3, 415a1-2 reflects the *internal* priority relations within posterior members of p-series (whereas from this it does not follow that the perceptive soul is a mere aggregate of the vegetative faculty and some further distinct capacity).

Unfortunately, the passage (*DA* II.3, 415a1-2) fails to satisfactorily answer the question in which way the prior members of the p-series are prior to the posterior members. It does not add anything to the thesis that the vegetative faculty is *most common* – *κοινοτάτη*, and the *first soul* – *πρώτη ψυχή* (*DA* II.4, 415a23-25) because it is a (fundamental) part of all souls. There are other senses of priority one might wish to discuss in this context. However, the only one relevant to us regarding the relation of p-series and the PHR is *logical priority*- *κατά τον λόγον*, since this is the most characteristic feature of the PHR.<sup>408</sup>

There is no evidence that the definitions of members of p-series depend on other members – be it the prior on the posterior, or the posterior on the prior. It does not seem necessary to define the perceptive faculty (or the tetragon) in relation to the vegetative (or the triangle), or vice versa. What it means to be for a perceptive soul is to be a capacity to receive certain forms. It does not seem necessary to add that it also contains the capacity to nourish and grow. Even though if the vegetative faculty is a necessary part of it, it is not necessary that the definition of the perceptive soul depends on it.<sup>409</sup> Unfortunately, there is no explicit textual evidence given in the *DA* regarding this question. Neither is there any clear evidence for the other examples of p-series except one. In the Academic example of number/point – line – plane – solid, there

<sup>408</sup> Especially, Owen (1960: 169–170) and Ferejohn (1980: 118–120) determine this as the decisive feature of the PHR.

<sup>409</sup> Fortenbaugh (1978: 129) does not see any reason to assume definitional priority within p-series, since there is no “logical analysis” to be found in those cases. He assumes that the vegetative soul is first not because it is logically prior, but because it is “most common”. He refers to 415a24 (p. 131).

is a dependence in definition. However, I doubt that this occurrence enables us to consider dependence in definition an essential feature of *all* other cases of p-series.<sup>410</sup> Even if one assumed that the first member of a p-series is prior in definition to the posterior members, it cannot be identified with the PHR. The main reason for the difference between these two concepts is provided by the containment-thesis which does not apply to the focally related entities. It is not the case that health is contained in potentiality in any of the focally related entities.

To conclude, there is insufficient evidence to accept p-series as a *variant* of the PHR or to consider the PHR an abbreviated variant of a p-series. The similarity of p-series and the PHR primarily consists of providing alternative rationales for the unity of things that lack a common genus but share the same name. Moreover, I claim that there is no elaborate theory of p-series to be found in Aristotle. The alleged priority relations of the members of p-series cannot be used to clarify the relation to the PHR because the relevant kinds of priorities within p-series are not specifically determined. The priority relations vary from example to example, and there are not too many of them. The only kind of priority that belongs to all p-series cases is the one that genuinely belongs to those orders (cf. *Cat.* 12, 14a30-31). Because of all this, the relationship between *ordered series* and the PHR is more remote than often assumed.

<sup>410</sup> In the same way I rejected existential priority as a feature of the PHR. While in the case of being existential priority is combined with the PHR it does not legitimate the claim that existential priority is an essential part of the PHR.

## 8 The *Pros Hen* Relation in the Context of the *Metaphysics* IV

### 8.1 “Being” is said in many Ways!?

Ultimately, in *Met.* IV Aristotle explicitly claims that the PHR also applies to *being*. Hence, according to the classificatory scheme of the DefH-view, “being” must also be a polysemous multivocal. In the present study, this thesis is essentially undisputed. Nonetheless, it is worth mentioning that Shields (1999) proposes that Aristotle fails to *show* that “being” is said in many ways (in Shields’s terminology, he fails to demonstrate that being is homonymous). Shields argues at great length in his 9th chapter (starting 217ff.) that “there is no workable analysis of being as core dependent homonym” (225). Despite admitting that “many central philosophical concepts are in fact core-dependent homonyms”<sup>411</sup>, he holds that “being fails to be homonymous” (268). In addition, he claims “there is no distinctively Aristotelian doctrine about the homonymy of being to illuminate or defend” (267), and, albeit many central philosophical concepts are homonymous when it comes being “[...] Aristotle may be guilty of a certain sort of overreaching” (270). I disagree with Shields’s assessments for several reasons, not all of which can be incorporated into this study. Nevertheless, some issues are addressed.<sup>412</sup>

On the one hand, Shields is right to call for a proof that indicates that “being” is homonymous (in Shields’s terminology) as in other cases something like proof is indeed issued.<sup>413</sup> On the other hand, one has to be aware of where the thesis of the homonymy of being originates from. The following explanation does not present the only origin of the hypothesis that being must be said in many ways, yet, it is an influential one: That being is said in many ways can be considered a *thesis* that is set up to solve certain problems deriving from the *Eleatic* assumption

411 His examples are “‘cause,’ ‘principle,’ ‘nature,’ ‘necessity,’ ‘substance,’ ‘friendship,’ ‘part,’ ‘whole,’ ‘priority,’ ‘posteriority,’ ‘the state,’ and ‘justice.’” (268).

412 Ward (2008: 103ff.) provides a defence of Aristotle against Shields’s objections.

413 Aristotle lists various tests (about twelve) that are supposed to show that something is said in many ways in *Top.* I.15.

of the *univocity of being*.<sup>414</sup> One may call it an assumption of hypothetical necessity, which Aristotle uses to avoid certain Eleatic absurdities, such as the claim that all being is one. From this point of view, it is easy to see why there is strictly speaking no “proof” in the case of “being” despite there being “proofs” in some other cases.

A further critique by Shields on Aristotle may prove dubious: Shields (1999: 266) admits that it is “account dependence that is relevant for establishing core-dependent homonymy”, and further, he contends that “those who point to these forms of dependence already assume the non-univocity of being.” Hence, if Shields’s denial of the non-univocity of being also rejects account-dependence between one being and another, he criticises how Aristotle defines things. There is no reason to think that Aristotle defines one being as logically prior to the other *because* he presupposes that being is said in many ways. Of course, one may criticise how Aristotle defines things, and one may suggest other definitions, but since he defines as he does, i.e. proposing that the definition of being x contains the definition of being y, as stated in several passages, one should rather claim that the non-univocity of being is something Aristotle “reads off” the definitions of the different beings. In this respect, the non-univocity of being is not a presupposition, but a consequence of the way Aristotle defines things.

In addition, Shields’s interpretation of the following thesis in *Met.* IV.2, 1004a4-5 indicates another problem. The passage in question is: *that which is falls at once into genera – ὑπάρχει γὰρ εὐθὺς γένη ἕχον τὸ ὄν*. Among Aristotle scholars, this claim is well-known.<sup>415</sup> Every being is of some kind and each time “being” is said of something, it is possible to determine with reference to that kind what it is to be for that thing. Thus, the term “being” must be said in many ways. Shields (1999: 229), however, interprets Aristotle’s claim in the following way. He assumes that this claim states that “Everything of which it is true to say that it exists is such that there is some predicate, other than existence, which can also be predicated of it.” With this interpretation, Shields disen-

414 Cf. *Soph. El.* 182b25-27. Also cf. *Phys.* I.3, 186a22ff. cf. also footnote 118.

415 Owen (1965a: 264); Shields (1999: 229); Geach, P. T. (1954). *Form and Existence. Proceedings of the Aristotelian Society* 55: 251–272. Anscombe, G.E.M., and P. T. Geach. (1963). *Three Philosophers: Aristotle, Aquinas, Frege. Les Etudes Philosophiques* 18 (2): 207–208.

tangles what he calls “existence” from “some [other] predicate”, and he considers them two co-occurring predicates. However, this does not seem to be Aristotle’s intention in this passage. One may very well infer from Aristotle’s remark that everything that is is determinable *because* it immediately falls into different genera. I assume this means that the accounts of beings differ not because some other predicate belongs to them as well but because they differ insofar as they are beings.<sup>416</sup> Shields’s interpretation is based on the assumption that, in his words, “to exist” and “falling into a genus” are two vastly unrelated predicates. Apart from their co-occurrence, there is no connection.

Yet, there must be a connection that goes beyond co-occurrence, since the question what it is to be (or “to exist” in Shields’s words)<sup>417</sup> for *x* is the same question as what it is to be *x*. In the context of the passage, one can infer this from Aristotle’s statement 1003b26-29 that there is no difference between the expression “man” and “being a man” (*καὶ οὐχ ἕτερόν τι δηλοῖ κατὰ τὴν λέξιν*). Generally, this is clear from Aristotle’s practice of referring to the *essence* (the *τί ἦν εἶναι*) of something. Aristotle commonly uses phrases such as *τὸ ἀνθρώπων εἶναι* or *τὸ κρύσταλλου εἶναι* to refer to the essence of something in quite an abstract way. The full account of *τὸ ἀνθρώπων εἶναι* is simply the definition of man. Thus, for Aristotle, there is one single answer to the following two questions “what it is to be for the man” and “what it is to be a man”.<sup>418</sup> Because of

<sup>416</sup> This claim may be guilty of falling into the sense-kind confusion described by Matthews (1972: 157). Matthews claims that if one thinks that 1. “To exist’ has ten senses”; and 2. “There are ten kinds of existence” are jointly acceptable one is to fall into the sense-kind confusion. Moreover, “And to suppose that the *reason* there are *n* senses of ‘exist’ is that there are (correspondingly) *n* kinds of existence is to compound the confusion;” (p. 157).

<sup>417</sup> Unfortunately, Shields does not explain when he uses “to exist” to translate “εἶναι” and when “to be”, even though the distinction is highly controversial among Aristotle scholars. Cf. Brown, L. (1994). The verb „to be” in Greek philosophy. In *Language*, ed. Stephen Everson, 212–237. Cf. also Kahn, C. H. (1966). The Greek Verb ‚To Be’ and the Concept of Being. *Foundations of Language* 2 (3): 245–265. Cf. also Dancy, R. M. (1983). Aristotle and Existence. *Synthese* 54 (3): 409–442. And Matthews (1995); For a controversial interpretation cf. Gómez-Lobo, A. (1980). The So-Called Question of Existence in Aristotle, *an. Post.* 2. 1–2. Review of *Metaphysics* 34 (1): 71–89.

<sup>418</sup> Another illustration of this practice is given in the *DA* II.4, 415b13 *living for the living things is their being, but cause and principle of this is the soul – τὸ δὲ ζῆν τοῖς ζῶσι τὸ εἶναι ἐστίν, αἰτία δὲ καὶ ἀρχὴ τούτου ἡ ψυχὴ*. In this passage “to be” for a living thing means “to be alive”. Thus, if one calls an animal a “being” then what it is to be a being for this thing will simply be what it is to be an animal.

this, I may propose the following reassessment of Shields's interpretation of Aristotle's thesis from above: "To exist" and "falling into a genus" behave like *definiendum* and *definiens*. What it is *to be* (or *to exist*) is nothing else than belonging to *this* or *that* genus and be defined in terms of that genus. Since the genera can differ, the accounts of these beings can differ, and hence, the non-univocity of being is warranted.

There is another of Shields's arguments that needs reassessment. In his section 9.9 (260ff.) much of Shields critique is based on Aristotle's claim that homonymous things are incommensurable. (He refers to *Phys.* 248b6-11; cf. *Cat.* 11a5-13; *Pol.* 1259b36-8; *Top.* 116a1-8).<sup>419</sup> Shields apparently assumes that this claim has to be taken very seriously, i.e. without exceptions. According to Shields's terminology (which mainly covers the InfH-view), being would be homonymous, and thus it should also be incommensurable. However, since as Shields claims (261) that all beings are commensurable, he concludes that they must be synonymously beings.<sup>420</sup> On the one hand, one may argue against this that the incommensurability-test<sup>421</sup> is only to warrant (accidental) homonymy and not polysemous multivocity. On the other hand, even if also those cases are all incommensurable, it is not evident that being is commensurable in the relevant sense. I may even argue that it is not commensurable at all. If it is not commensurable, Shields's argument is based on false assumptions. Indeed, one may wonder about the commensurability claim concerning beings. Shields explains that this claim only holds if Aristotle adheres to something he calls "degrees-of-reality hypothesis" (264). Fortunately, Shields admits that this claim is of "dubious coherence" (265). Yet, he does not mention that the thesis one usually associates with "degrees of reality" is connected to the interpretation of the *μᾶλλον*-passage in *Met.* VII.1, 1028a25-26. Morrison (1987)<sup>422</sup> suggested

419 According to the terminology of DefH-view all these claims do not create any problem. Within the InfH terminology, one would have to add that the cases with associations between the homonyms are problematic since in those cases Aristotle admits commensurability.

420 He assumes: "Unless two things are F synonymously, it is impossible to compare them in terms of F-ness." (262).

421 Cf. *Top.* I.15, 107b13-18.

422 Morrison, D. (1987). *The Evidence for Degrees of Being in Aristotle. The Classical Quarterly* 37 (02): 382.

three ways one can conceive of *μᾶλλον*.<sup>423</sup> Here, only two will be mentioned. The first assumes that *μᾶλλον* means “more”, i.e. “to a higher degree”. Morrison (1987) calls this interpretation the “intensity” interpretation. The second assumes that *μᾶλλον* means “rather” (Morrison’s “metalinguistic” interpretation). Something can be called F *rather*, i.e. *in a stricter sense*, than something else that also is called F.<sup>424</sup>

Shields presumably agrees with the intensity-reading of *μᾶλλον*. Only this reading supports his “degrees-of-reality” thesis while the other two do not. Unfortunately, an inconsistency results from this assumption as *being* is also claimed to be said in many ways and, as known, nothing that is said in many ways is commensurable. Morrison points out that there is a solution to this problem, which avoids inconsistency based on the *Protrepticus* B 81–82 which, he assumes, makes a point for those multivocals ordered by priority and posteriority.<sup>425</sup>

“Normally one is not allowed to compare across ambiguity. But when the items to which the ambiguous predicate is applied are related to each other as prior and posterior, then comparison is allowed. Aristotle’s point is not that ‘more’ can mean ‘in a stricter sense’ rather than ‘to a greater degree’. Rather, his point is that when the subjects of predication are related as ‘prior and posterior’, then one is allowed to speak of the predicate applying ‘to a greater degree’ despite the multiplicity of senses.” Morrison (1987: 398)<sup>426</sup>

423 For a discussion of this topic see Morrison (1987).

424 This thesis is adhered to by Owen (1960: 186).

425 The reference to the *Protrepticus* B 81–82 is also found in Owen (1960: 186). However, it is a matter of interpretation what exactly these passages suggest. A full comparison of Owen (1960), and Morrison (1987) is not necessary in this context. Shields (1999: 262 n. 367) is aware of Morrison’s remarks, however, apparently Shields does not share Morrison’s assessment of the *Protrepticus* B 81–82. The passages of the *Protrepticus* can be found in Düring (1969: 71–73). Düring, I. (1969). *Der Protreptikos des Aristoteles*. Frankfurt am Main. For a concise review of Düring cf. Strycker, E. de, and Ingemar Düring. (1969). *Gnomon* 41 (3): 233–255.

426 Cf. also page 400: “For in this passage, Aristotle points out an exception to his usual prohibition. If the ambiguous terms are related as prior and posterior, it is acceptable to compare them after all!”

According to Shields's interpretation, the commensurability of being not only threatens but makes the non-univocity of being impossible. But even though the passages of the *Protrepticus* allow different interpretations, they provide sufficient reasons to doubt that Shields's (1999: 261) argument rests on solid grounds. In addition, one may object to Shields because his interpretation approves Aristotle being inconsistent, which is nothing a charitable interpretation should desire. I thus refute Shields's interpretation.

## 8.2 What is the Innovation of the *Metaphysics IV*?

It is common within Aristotelian scholarship that the most innovative feature of *Met. IV* is the application of the PHR to being and connected with that the justification of the possibility of a single science of being. It is often assumed that development in Aristotle's thought caused this introduction of new ideas.<sup>427</sup> Still, there are reasons to assume that the application of the PHR to being does not imply a vast doctrinal change and that it is not this feature that is most innovative but the expansion of Aristotle's notion of science.

Yu (2001) argues there are reasons to doubt a decided doctrinal change between Aristotle's *Categories* approach to being and his *pros hen*-approach in *Met. IV*.<sup>428</sup> Whether or not Yu's arguments to harmonise Aristotle's awarded two doctrines are entirely convincing or not, I admit that he brings the fact into focus that in *Met. IV*, Aristotle presents a new kind of unity for sciences. I agree with Yu that this is the most

427 Cf. Bostock (1994) and Owen (1960).

428 Cf. also the remarks made earlier in this study on Yu (2001), Bostock (1994) and Owen (1960) in section 6.1.1.1. Yu calls the *Categories*' approach to being the "multiplicity account" while he calls the *Met. IV* approach the "focal meaning account". Yu (2001: 214) argues that in the *Categories* 4 Aristotle asks several questions about the same subject, e.g. whether something is in the Lyceum or whether it is grammatical. The form of predication is "S is P" whereas S is of the category of substance and P is a member of any other category. Yu calls this "substance-subject predication". It itself indicates "that different things are all related to substance" (215). Finally, Yu concludes (216) with a hint to *Met. 1003b6-10* "It should not be difficult to see that what substance-subject predication indicates is precisely a *pros hen* relation of other beings to substance".

important theoretical development of *Met. IV* since it allows Aristotle to develop the science of being qua being.

The application of the PHR to being is most prominent since it is combined with a unique innovation regarding his theory of sciences. In *Met. IV*, Aristotle justifies the possibility of a unified science of being, however, the way he does that reveals an explanatory pattern that does not only justify the unity of the science of being but possibly also the unity of other sciences as, e.g. medicine, i.e. the science of all healthy things (cf. *Met. IV.2*, 1003b11). Aristotle determines the subject of the science of being as *being qua being and what belongs to it per se* – ὄν ἢ ὄν καὶ τὰ τούτῳ ὑπάρχοντα καθ' αὐτό (1003a21-22; 1005a3, 13).<sup>429</sup> Since being is said in many ways, large parts of *Met. IV* deal with the challenge to explain why and how it is possible to suggest that there is a *single* science that considers all beings. This may pose a challenge since it is possible (according to several developmental theses about the order of Aristotle's works) that in *Met. IV* (and VI), Aristotle *revises* some of his earlier views (see below). Still, it is debatable whether Aristotle actually *revises* his view or whether he has merely *postponed* the application of the PHR to being. This question is addressed in many contributions, some of which have been mentioned already above.<sup>430</sup>

These allegedly “older” views are primarily given in *EE I.8*, 1217b27-18a1 and the parallel *EN I.6* 1096a24-33.<sup>431</sup> What is stated there *implicitly* denies the possibility of a single science of being.<sup>432</sup> In *EE I.8*, 1217b27-18a1 Aristotle states that “good” is said in many ways. In *EN 1096a24*, the claim differs a little bit: He states that the good is said in

<sup>429</sup> These per se attributes are *unity, sameness, difference and contrariety*; cf. *Met. IV.2*, 1004a16-20, 25-31; 1005a11-13. Furthermore, this science is not compartmentalised (*Met. IV.1*), but *universal in as much as it is primary* (*Met. VI.1*, 1026a30-31). The task of this science is to investigate into the *principles and causes* of substance (*Met. IV.1*, 1003a31-32; similar also 1003b17-19). However, in *Met. IV.2*, 1004b6-8 Aristotle also includes the accidents (*συμβεβηκότα*) into the scope of that science.

<sup>430</sup> One has to mention Owen (1960) and his developmental thesis which was mentioned above. In addition, as mentioned, Yu (2001) and Bostock (1994). A thorough analysis of this topic is also found in Wilson (2000).

<sup>431</sup> These passages have been mentioned already in chapter 7.

<sup>432</sup> In addition, in *An. Post. II.7*, 92b14 and in *Top. IV.1*, 121a16-19 and 121b7-9 there are remarks that make us wonder whether Aristotle ever had a unified science of being at the back of his mind, yet, these remarks do not exclude this necessarily.

as many ways as being is said. Let us call this the *being – good – analogy*. Moreover, he claims that *it is hardly possible, that the good-itself will be considered in the leisure of one*, i.e. in one single science – ὥστε σχολῆ αὐτό γε τὸ ἀγαθὸν θεωρῆσαι μιᾶς (1218a40-b1; also compare lines 1217b33-35). Nothing prevents thinking that, *mutatis mutandis*, according to the *being – good – analogy*, this also pertains to the possibility of a science of being. Because of this, it is surprising that in the *Metaphysics* Aristotle claims that there is a science of being possible. The conscientious reader of the *Ethics* should expect that there is no unified science of being, but *many* sciences of being in analogy to the case of the good of which Aristotle claims that there are many sciences (EN 1096a30). Aristotle even emphatically adds that *there are various sciences of the goods that are in one category* – νῦν δ’ εἰσὶ πολλοὶ [ἐπισημαί] καὶ τῶν ὑπὸ μίαν κατηγορίαν (EN 1096a31-32). The examples in this context are of *opportunity* and *moderation* (οἶον τὸν καιρὸν ἢ τὸ μέτριον (1217b36-37/1096a32-35)). *Moderation* belongs to the category of *quantity* and *opportunity* belongs to *time* (1217b31-32). Yet, the various sorts of opportunity and moderation are studied in different sciences, e.g. concerning food by medicine and gymnastics, concerning military operations by strategies, *and similarly in respect of another pursuit by another science* – καὶ οὕτως ἕτερα περὶ ἑτέραν πράξιν (1217b40).<sup>433</sup> Consequently, Aristotle explicitly claims, at least in the *EE* (1218a40-b1; compare also lines 1217b33-35), that the complexity of the things that are goods, analogously to the multiplicity of the things that are beings, is hardly attainable in the leisure of a single science.<sup>434</sup>

433 According to Woods’s (1992: 69) reading of that passage it may also be possible that one science studies *opportunity* (something that belongs to the category of time) and *moderation* (something that belongs to the category of quantity) at the same time. According to this idea, there is no such restriction that sciences only study objects that belong to a single category.

434 This view is at variance with what Aristotle presents as a Platonic view on it, namely that there is a single idea of the good which is a thesis which demands that the “good” is said in one way only. Aristotle claims that for Plato everything that is good is good for the same reason: Everything that is good is good because it participates in the good-itself (compare for this *Meno* 71e1-72a5). In addition, as stated earlier, section 4.1.2, there is only one account for the good thing and the good-itself. Aristotle is explicitly sceptic about the question what the “itself” supposedly means since he assumes that for the *man* and the *man-itself* there is just *one and the same definition* – εἷς καὶ ὁ αὐτὸς λόγος ἐστὶν (EN I.6,

There are several ways in which Aristotle determines what a single science is. Within *Met.* IV.1, 1003a21-26 a single science is devoted to a separated “part of being” and it considers this part solely under a certain aspect. In a similar vein, this is repeated in *Met.* VI.1, 1025b7-9: *But all these [the special sciences] draw a line around a specific being, i.e. a specific genus with which they deal – ἀλλὰ πάσαι αὐται περὶ ὄν τι καὶ γένος τι περιγραψάμεναι περὶ τούτου πραγματεύοντα.* These genera establish the traditional branches of sciences such as biology, physics or geometry. These sciences investigate specific domains of being, i.e. biology investigates beings insofar as they are alive, physics insofar as they are being moved, geometry insofar as they are two-dimensionally extended.<sup>435</sup> Specific of these sciences is that they consider things that fall under the same genus. The case of the good falls out of alignment for several reasons.<sup>436</sup>

Even though Aristotle denies in *EE* I.8 that there is a single science in the case of the good, and analogously in the case of being, he points out in *EN* I.6, 1096b27-28 that the different ways the good is said are (*perhaps* – ἴσως) associated (either by analogy or PHR).<sup>437</sup> The tension that troubles the scholarship emerges from the following fact: In the *Ethics* nothing is said about the possibility of a science that rests on the association of the different senses of the good, or of being. At least concerning being there is a claim of this kind in the *Metaphysics* (in IV.1-2, VI.1 and also in K.3<sup>438</sup>). In the *Metaphysics*, it is clear that the association necessary for the possibility of a single science is the PHR.

1096b1, also *Met.* XIII.4, 1079a33-b3 = *Met.* I.9, 991a2-8). Thus, (for Plato) “good” is said synonymously, and because of that there would be only one science of the good (cf. *EN* 1096a29). However, among other things, Aristotle claims (*EN* 1096a30-32) that this contradicts the facts, i.e. the fact that there are many sciences of the good.

435 Of course, a horse can be considered in biology and at the same time in physics, yet, under a different aspect. Aristotle is explicit in this regard. Cf. *Met.* XIII.3, 1078a9-31.

436 In fact, there is a multiplicity of sciences of the good (*EN* 1096a30-32). Furthermore, Aristotle claims that the accounts of honour, wisdom and pleasure insofar as they are goods are evidently distinct (1096b23f.). The good is evidently predicable in all categories (1096a24ff.). Hence, the good is said in many ways and it is hardly possible to consider them in the leisure of one science (*EE* 1218a40-b1; also compare lines 1217b33-35).

437 Cf. section 6.3.

438 If there is a certain association between the things with the same name, there can be a common science of them, if not, there will be not one but many. This is how Aristotle puts it for the case of *being* in *Met.* XI.3, 1060b33.

The *EE* I.8 comprises no remark on this solution although the PHR is a concept available in *EE* VII.2. In contrast to *EE* I.8, the parallel in *EN* I.6, 1096b27-32 contains a clear reference to the PHR, albeit followed by the remark that “the discussion of this question [i.e. the association of the different ways in which the good is said] must be dismissed [...] because it belongs more properly to another branch of philosophy.”

Three possible options may explain this “tension”:

1. Relocation-thesis: The admission of a single science of the good (and also of being) is not mentioned in the *Ethics* since it would undermine Aristotle’s argument against the Platonic theses about the idea of the good. It is a part of his argument that there are “in fact” various sciences of the good (*EN* 1096a30-32). If he admitted that there is a single science (even though only in a certain sense), this would undoubtedly weaken his argument. Thus, he remains silent in this regard and might just relocate the presentation of his views to another occasion which is found in the *Metaphysics*.
2. Change-of-mind-thesis:<sup>439</sup> This thesis considers the argument of the *Metaphysics* to present a new theory. In the *Ethics*, the application of the PHR to being has not yet been on Aristotle’s mind. This explains the lack of information on it. Aristotle had the PHR available, but not its applicability to being.
3. Expansion-of-science-thesis: According to this thesis, the significant change in Aristotle’s thought does not concern the applicability of the PHR to being or other notions, but it concerns the possibility to use the PHR to justify the unity of a single science.<sup>440</sup>

While the first thesis remains neutral on a possible development in Aristotle’s thought, the latter two can be considered developmental theses, albeit, regarding distinct aspects.

The relocation-thesis is appealing because it does not imply (nor exclude) any changes in Aristotle’s thought. Furthermore, it complies

<sup>439</sup> Owen (1960: 168) proposes this view which implies a development of Aristotle’s thought.

<sup>440</sup> This claim also has been proposed by Yu (2001). Cf. section On Owen (1960), Bostock (1994) and Yu (2001) 6.1.1.1.

with Aristotle's remark that a proper investigation of these matters does not belong to ethical studies (*EN* I.6, 1096b30-32). Additionally, nothing in the *Organon* or the *Ethics* contradicts the possibility that the PHR is also applicable to being. Hence, the relocation-thesis is not inconsistent with other works, and it does not impose assumptions about any possible development in Aristotle's thought.

The change-of-mind thesis is the boldest of the theses since it implies a change in Aristotle's thought of which the only evidence is his omission of the applicability of the PHR to being in the *Ethics* (and possibly other works).<sup>441</sup> Although this thesis aims to explain this silence, and a change of mind would suffice for this, it is difficult to back this claim with direct evidence. Nevertheless, there is a closely related example illustrating that a change of mind is possible. It is the case of *friendship*. While in *EE* the PHR applies to friendship, it does not apply to it in the *EN*. Hence, at least, in that case, Aristotle changed his mind about the applicability of the PHR.

The *expansion of science thesis* also implies a developmental aspect, however, in comparison to the former claim, it is not entirely based on silence. Aristotle states in *EE* I.8 that a single science of things that are said in many ways is *hardly* possible. However, as the possibility that the PHR is also applicable to being is within reach because of the analogous treatment of the good and being, it is plausible to assume that the real "change of mind concerns" the way in which sciences are unified.

Further support for the *expansion of science thesis* is given by the fact that even without the remarks in the *Ethics*, the possibility of a single science of being as it is presented in the *Metaphysics* is something innovative. Several times, Aristotle claims and argues that *being* is not a genus<sup>442</sup> and since sciences are usually unified by genera,<sup>443</sup> it is plausible to doubt that there is a single science of being. Yet, in *Metaphysics IV*, Aristotle explains that *not every* science is of one genus. The absence of

441 Owen (1960: 168) claims that in the *EE* Aristotle had "not yet seen its [i.e. focal meaning] application to such wholly general expressions as 'being' or 'good.'" Against Owen one has to concede that at least in *EN* I.6 is quite clear that Aristotle saw the possibility of applying the PHR to the good.

442 *Met.* III.3, 998b22, X.2, 1053b21-24, *Met.* XI.1, 1059b31-34, *An. Post.* II.7, 92b14.

443 For more information about this cf. the next section.

a genus is no longer an obstacle for the foundation of a single science. This may well have been different in the *Organon* (cf. *An. Post.* I.28), although it does not mention this. Even if it was explicitly stated that there are no alternatives to the generic unity of sciences, the admission of sciences, which are one, not by a common genus, but by the PHR is a comparatively small concession. This small concession has influential consequences. In combination with the application of the PHR to being, which is not necessarily an entirely new body of thought in the *Metaphysics*, Aristotle can found a unified science of being. Whether Aristotle changed his mind or not, and whether there was a reason for this change, or whether Aristotle simply remained silent on this question is hardly reconstructible. Yet, the view that a science is possible of something that is said in many ways is at variance with the Platonic view, cf. footnote 434.<sup>444</sup>

### 8.3 The Impact of *Met.* IV on the *Pros Hen* Relation

Yu (2001) pointed to an important feature, the expansion of the Aristotelian notion of science. This is not only the notion of science that is further developed in the book; the *Metaphysics* also has an impact on the PHR. Before *Met.* IV, the PHR does not serve as a principle of unity for sciences. This is an entirely new task that Aristotle ascribes to the PHR. In the *Ethics*, particularly in *EE* VII.2, Aristotle does not mention this function of the PHR. Hence, the expansion of science claim does affect not only the notion of science but also the notion of the PHR. In fact, this modification seems adequate since apart from the usual way sciences are unified, i.e. by reference to a genus, there is ostensibly no other way a

<sup>444</sup> Cf. also *Met.* I.9, 992b18-24: Aristotle argues against the Platonic approach, to explain every being is constructed out of the same elements, without distinguishing between the different ways in which “being” is said. This approach would be unsuccessful, since one would find “elements” only in substances, while one would not find “elements” in the accidental categories. Consequently, these alleged “elements” would not be elements of all beings but only of some beings. And hence the Platonic approach (the assumption of a universal science for everything) cannot be right. Remotely related is also *SE* 11, 172a9-15 where Aristotle claims that there is no genus of all things.

science can be unified, except by the PHR.<sup>445</sup> That the PHR is a principle of unity of sciences is a feature of the PHR that cannot be equated with its feature that it is a principle of unity alternative to generic unity. Not every principle of unity is apt to serve as principle of unity of sciences.

The next section reveals that the PHR is a principle of the unity of sciences in general, not only in the case of the science of being qua being. Thus, it seems that in all cases in which a PHR features as a principle of unity, a scientific investigation is possible.

## 8.4 *Kath Hen vs Pros Hen* – Two Possible Subject Areas of Sciences

### 8.4.1 A Clarification: Talking about *ἐπιστήμη* in Aristotle

If one talks about science in Aristotle one talks about what he calls “ἐπιστήμη”. Still, “science” is just one of the possible translations of “ἐπιστήμη”. The most common translation is not “science” but “knowledge”. In addition, it can also mean “acquaintance with something”, in the sense of “skill”; and also “profession”. Quite often the plural “ἐπιστήμαι” is translated as “science”. There is no strict convention. The most appropriate translation depends primarily on the context.

The translations “science” and “knowledge” are related. To provide a general account of science, one could say that one calls “science” knowledge that is structured according to some principle. The following distinction does not aim to delineate a complete theory of the notion of *ἐπιστήμη* in Aristotle but a rough overview. According to *Top.* 130a20; *Met.* 1017b3, 1087a15, *An. Post.* I.2) one can distinguish between

1. Knowledge as a mental state
2. Knowledge as the *content* of the mental state, i.e. what is called “knowledge of something.”

445 Cf. also section 8.4.2 and the remark about *Met.* IV.2, 1004a23-25.

The first of these two options are not relevant in this context. The second one can be further distinguished in different ways. There are two main approaches to distinguish between “kinds” of knowledge as content.

1. The distinction of *kinds of knowledge* (as content) *by way of its acquisition*:
  - One calls knowledge that which is gained from sensory perception, memory and experience (cf. *An. Post.* II.19, also *Met.* IV.2). This leads to (universal) knowledge of facts (*An. Pr.* I.30). This can become starting points for demonstrations and then it may be called
  - Non-demonstrative knowledge (72a15: *Ἀμέσαι ἀρχαί* – *immediate principles* (*axioms, hypotheses, and definitions*, also 72b19-20 and 88b37)
  - Demonstrative Knowledge: Knowledge that is acquired through demonstrations
2. The distinction of *kinds of knowledge* (as content) *by the kind of content* (ΚΟC):
  - One may say: *This* knowledge (as content) is of *one kind* because it is concerned with one kind of content, e.g. animals.

The following paragraphs primarily focus on the latter way of distinguishing between *kinds of knowledge*. The ΚΟC-type distinction is found, e.g. in *Met.* VI.1, 1025a13ff: the principle of *Physics* is that it considers the moved and inseparable. The principle of *Mathematics* is that it considers the unmoved and inseparable. The principle of *theology* is that it considers the unmoved and separate. Normally, *Theology*, *Mathematics* and *Physics* themselves are also called *ἐπιστήμη*, but in this context, *ἐπιστήμη* translates with “science”. Hence, sciences represent those types of *knowledge* that are ordered according to a particular rule determining their content.

Still, as the following paragraphs show, there are two ways in which the topics of sciences can be unified. Hence, the following distinction concerns the unification of the ΚΟC.

### 8.4.2 *Kath Hen* vs *Pros Hen* Unity of Sciences

It is stated above that the regular way sciences are unified is concerned with genera. For example, each of these sciences is *one* science: *geometry*, *physics* and *biology*. One approach to explaining their unity is to refer to the unity of the objects of these sciences. They are unified, in a way, as well. In the given examples, they are unified by their genus (cf. *Met.* v.6, 1016a24). The science that corresponds to these things is also one according to that genus. In the *An. Post.* I.28. 87a38 Aristotle states that science is one when it is of one genus: *Μία δ' ἐπιστήμη ἐστὶν ἢ ἐνὸς γένους* – *A single science is the one that is of one genus*. Presumably, it is valid to specify this in the following way “A single science is the one whose objects are of one genus”.<sup>446</sup>

According to these passages, *genera* serve as the principles of sciences. For instance, if one considers *Zoology* and *Botany* or the like, it is easy to see that these sciences examine *genera of objects*. These two enquire into *animals* and *plants*. Hence, if something is a subject of this science, it must *be* an animal or a plant. There is no difference in what it is to be an animal for an ant and what it is to be an animal for an elephant. Thus, Zoology investigates ants and elephants for the same reason, i.e. because both are animals. Furthermore, it investigates them *as animals*.<sup>447</sup> This is the *regular way* according to which sciences are distinguished.<sup>448</sup>

In *Met.* IV.2 Aristotle presents the alleged innovation, i.e. an alternative to the regular way sciences are unified. The two alternatives are called *kath hen* and *pros hen sciences*.<sup>449</sup> This distinction adds the PHR as an alternative possibility to account for the unity of sciences to the *regular way*.

<sup>446</sup> Cf. also *Met.* IV.2, 1003b19-21. Similarly, in *Top.* I.15, 106a30; also, remotely similar *κατὰ μίαν ιδέαν* in *EN* I.6, 1096a29.

<sup>447</sup> Aristotle deals with this aspect in *Met.* XIII.3, 1078a9-31.

<sup>448</sup> The most important recent contribution on this topic is Wilson (2001).

<sup>449</sup> The question whether there are sciences of things of different genera is also formulated in *Met.* XI.3, 1061b16-17: *λέγω δ' ἐν ἡ διηπορεῖτο πῶς ἔσται πολλῶν καὶ διαφόρων ὄντων τῷ γένει μίαν τις ἐπιστήμη*.

In the following excerpt, Aristotle distinguishes two *kinds of things* according to which it is possible to examine one science. Some things that *are said* – λέγεσθαι

1. καθ' ἓν  
and some are said
2. πρὸς μίαν φύσιν

*Met.* IV.2, 1003b12-16: οὐ γὰρ μόνον τῶν καθ' ἓν [1] λεγομένων ἐπιστήμης ἐστὶ θεωρῆσαι μίας ἀλλὰ καὶ τῶν πρὸς μίαν λεγομένων φύσιν· καὶ γὰρ ταῦτα τρόπον τινὰ λέγονται καθ' ἓν [2]. δῆλον οὖν ὅτι καὶ τὰ ὄντα μίας θεωρησῶνται ἢ ὄντα.

For not only in the case of those things that are said (καθ' ἓν [1]) according to one, it is possible to examine one science, but also in the case of those things said in relation to one (πρὸς μίαν) nature: For these <later> things are also said (καθ' ἓν [2]) according to one, in a way. Therefore, it is clear that one considers also the beings, as <things> of one <single science>, that <considers> beings.

Firstly, let us consider the sciences, which proceed *kath hen*. The phrase “kath hen” simply means “according to one”. It is an elliptical or rather “unsaturated” manner of expression, i.e. to understand it properly, one has to *add* of what kind this *hen* is. In many passages, *kath hen* is supplemented by something such as *species* or *genus*.<sup>450</sup> However, it is quite conventional that *kath hen* is synonymous with “synonymously”. This interpretation agrees with the suggested supplements *species* or *genus* since no matter what is said according to one genus or species is said so synonymously. Several passages support this assumption.<sup>451</sup> Thus, a straightforward assumption is that a *kath hen* science reflects things that are synonymous, and one has to qualify this by stating that they are synonymously Fs, e.g. animals. It is clear from above that the objects belonging to sciences such as Zoology or Botany belong to these sciences because they are synonymously animals or plants. In other words: *kath hen* sciences can be identified as regular generic sciences.

<sup>450</sup> For passages in which *εἶδος* follows on “kath hen” cf. *Top.* 148a29-33; 103a17, 23; *EE* 123b16, b26 (καθ' ἓν in contrast to πρὸς ἓν) and also *EN* I.6, 1096b10.

<sup>451</sup> On *kath hen* as synonym for “synonymous” cf. *Top.* VI.10, 148a29-33 and also Bonitz *Ind. Arist.*, 369a443-49.

In contrast to this are the *pros hen* sciences. They focus on things that are said *in relation to one nature* – *πρός μίαν λεγομένων φύσιν*. The distinction of *kath hen* and *pros hen* seems to be made en passant, but one has to emphasise the importance of this differentiation as it enables Aristotle to establish sciences of classes of things of which there was no science before, or at least not in a unified way. In the context of the given passage, Aristotle's primary focus is to explain *how* the science of being qua being is possible. What is so interesting about this justification is that this explanation is not restricted to the science of being (cf. 1003b11 also all healthy things belong to one science, i.e. medicine). By telling us that beyond the regular *kath hen* sciences there is a different approach the unity of sciences can be explained, namely involving sciences whose objects are said *πρός μίαν φύσιν*, Aristotle declares a principle of unity for a whole new branch of sciences which can be called *pros hen* sciences.

In *pros hen* sciences, one can ask the same questions as above. What is a single science (in this sense)? The answer is the same: A science whose objects are unified in a certain way. Further, what is the way in which they are one? They are one, not because they belong to a common genus<sup>452</sup>, but *because of their relation to one nature* (*πρός μίαν λεγομένων φύσιν*) or *principle* – *ἀρχή* (1003b6). One can further ask what this nature is or how it unifies. Unfortunately, there is no answer given in the passage at hand. It is clear from other passages, e.g., in this context, especially from *Met.* IV.2 (and of course by *EE* VII.2) that generally speaking that nature or principle is what in this study is primarily called "focal reference". The focal reference is prior to the focally related entities because it is contained in the definitions of the objects of that science, while itself does not hold the definitions of these objects.

Hence, Aristotle distinguishes between two kinds of unity concerning sciences. On the one hand, there is a *pros-hen-unity* of sciences, and

<sup>452</sup> Even though in *Met.* IV.2, 1003b21-22 Aristotle states that all kinds of being belong to a science that is "generically" one. This is not in conflict with his *kath hen-pros hen* distinction, since even in the passage where he draws the distinction it is stated that there is a sense in which also the *pros hen* sciences are *kath hen*. From this, one can infer that there is also a sense in which *pros hen* sciences are generically one, even though it considers things of different genera.

on the other hand, there is a *kath-hen-unity* of sciences. From this point of view, Aristotle's significant achievement in *Met. IV* is the expansion of how a science can be unified. This is an innovation as it is the first time it is formulated.

There is a further peculiarity in the passage of *Met. IV.2*, 1003b12-16, which concerns the *καθ' ἕν* at [1] and [2]. This peculiarity has influenced Owen (1960: 168) to his claim that “‘being’ is used not homonymously but even, in a way, synonymously”.<sup>453</sup> By saying this, he refers to the passage just mentioned. This presupposes that the *kath hen* at [1] and [2] are used in the same way, but there are reasons to assume that this is not the case.

There is a difference between the two occurrences of “kath hen” since at [2] “kath hen” is qualified by *τρόπον τινά*. One can assume that at [2] it has a different, attenuated adverbial function that does not imply synonymy, since the things that are said *pros hen* are not *in a certain way* – *τρόπον τινά* synonymous.<sup>454</sup> Additionally, the *certain way* – *τρόπον τινά* may also indicate that the supplement, “genus”, from [1] is not appropriate for *kath hen* [2]. This would presuppose that there is something that is universally applicable to all objects of the respective science in the same way, which is precisely not correct for *πρός ἕν*-sciences since they are considering things of different genera. That is why the *hen* at [2] must be supplemented differently.

The best way to interpret the assertion that both approaches (*kath hen* and *pros hen*) are *said kath hen in a way* – *καθ' ἕν τρόπον τινά* is to assume that this means that both approaches determine the subject area of a single science *according to one regularity*, i.e. either by belonging to a common synonymous genus (*kath hen* [1]), or by being related to a common nature (*pros hen*). Since it is not necessary to equate “kath hen” at [1] with [2], it is not necessary to assume that the things that are said *pros hen* are *in a way said synonymously* which was assumed by Owen. I think this reading needlessly strains Aristotle's terminological distinction of homonymy, synonymy and multivocity.

<sup>453</sup> Because of this claim Owen may be considered adhering the tertium quid view.

<sup>454</sup> In *Met. XI.3*, 1061a10-11 and 1061b10-12 Aristotle uses “kath hen” interchangeably with “pros hen”.

In *Met.* IV.2, there is another informative passage related to the expansion-of-science claim. According to this thesis, the distinction between *kath hen* and *pros hen* sciences is exhaustive. These are the only two ways the unity of a science can be determined. Aristotle states 1004a23-25: *something, when it is said in many ways <does not belong to one science>, if the λόγοι are neither brought up kath hen nor pros hen – οὐ γὰρ εἰ πολλαχῶς, ἐτέρας, ἀλλ’ εἰ μήτε καθ’ ἓν μήτε πρὸς ἓν οἱ λόγοι ἀναφέρονται.* Hence, there will be many sciences of something only in those cases where the accounts of the things are neither related by a PHR nor by something one might call a *kath hen* relation, i.e. a relationship to a single genus.

Finally, the introduction of sciences that differ from the *kath hen*-sciences is either a remarkable by-product in the development of the science of being or it is actually a long-overdue enhancement of Aristotle’s science-theory, which has been in need of this extension to present a theoretical background for sciences that consider things of different genera. Both options are compatible. Concerning the different theses about the relationship of the allegedly earlier and the allegedly later works there is not much hard evidence that renders either of these theses impossible. However, most of the present remarks were made in favour of the *expansion of science thesis*. This thesis highlights an important clarification made in *Met.* IV, while remaining compatible with the other two theses.<sup>455</sup>

### 8.4.3 The “Guide” for *Pros Hen* Sciences of *Met.* IV.2, 1004A27-31

Another indication that *pros hen* sciences are actually presented as a novelty in this chapter is that Aristotle provides something one may call a guide to *pros hen* sciences. If it is actually a guide, it was clearly not designed for only a single application, i.e. to being, but universally for many other possible applications.

To develop a *pros hen* science from scratch, Aristotle proposes that one has to fulfil specific tasks:

455 The Relocation-thesis and the change of mind thesis from above.

*Met.* IV.2, 1004a27-31: ὥστε διελλόμενον ποσαχῶς λέγεται ἕκαστον, οὕτως ἀποδοτέον πρὸς τὸ πρῶτον ἐν ἑκάστη κατηγορίᾳ πῶς πρὸς ἐκεῖνο λέγεται· τὰ μὲν γὰρ τῷ ἔχειν ἐκεῖνο τὰ δὲ τῷ ποιεῖν τὰ δὲ κατ' ἄλλους λεχθήσεται τοιούτους τρόπους. [1] Just as one has to specify in how many ways each thing is said, [2] so one has to specify in relation to the first in each category how it is said in relation to it, <i.e. the first>: for some things will be called accordingly by having it, others by producing it, others by other such ways.

*First task* [1]: one needs to determine in how many ways something is said.

*Second task* [2]: one needs to determine appropriately how each thing is related to the first, i.e. the focal reference.

Only if both requirements are fulfilled, there will be a single science. I suggest that Aristotle puts this guide into practice in book V, VII and XII of the *Metaphysics*. All these books can be considered providing attempts to fulfil these two tasks, albeit in different ways. Book V certainly implements the first task. The second task is not completely implemented as many cases lack a focal reference, and in those which have one, Aristotle does not determine *how* the other senses are related. Nevertheless, many cases comprise something that could serve as a focal reference. This study does not provide a full investigation of the different examples given in *Met.* V. Yet, considering *Met.* V.1 *principle*, V.5, *necessity* and V.7 *being* there is something that could act as a focal reference. At the same time, many cases do not contain such a hint, e.g. V.2 *cause*; V.4 *nature* and V.28 *genus*. Hence, it is plausible to assume that the guide for *pros hen* sciences has a programmatic function.

Given the possibility of a science being concerned with *pros hen* related entities, the oddity of spurious homonyms emerges more strikingly. If spurious homonyms were indeed defined with reference to the thing of which they take their name, one could not deny that they are part of the respective *pros hen* science, e.g. one could hardly deny that images, statues or dead men are also part of the science of man, i.e. anthropology. I may add this odd consequence to the list of arguments against definitional overlap in spurious homonyms given in section 4.1. The fact of spurious cases also clarifies that a *pros hen* science is not a science which has a term as a pivotal point. The *pros hen* science studies only those things that are *pros hen* related to the focal reference. Hom-

onymous applications of the same term are not part of that science. Through this, it is evident that *pros hen* sciences cannot be described as sciences that consider *all* the different applications of identical terms but only those that fulfil the requirements of the PHR. This is touched upon in section 2.2.3. The example concerns those uses of “potency” that are based on similarity (cf. *Met.* IX.1, 1046a8). To determine the scope of a *pros hen* science, it is neither appropriate either to assert that, e.g. medicine considers all things that are called “healthy”, nor is it appropriate to assert that medicine considers all things that are healthy. Both ways are too wide since homonymous uses or homonyms are not excluded. The correct way of putting it is to assert that medicine is the science only of those healthy things that are *pros hen* related to health.

The same may pertain to the case of being. Here, one may justifiably ask, which of the ways of being are *pros hen* related to substance and which are not and thus not part of the science of being qua being.

## 8.5 Which Ways of Being are Relevant for the Science of Being qua Being?

To answer this question, one may first want to pose another question: What does it mean that the science of being qua being is *universal* – *καθόλου* (*Met.* IV.1, 1003a24)?<sup>456</sup> Does it mean that the science of being qua being considers everything that is called “being”? Here the same prevails as in the case of medicine touched upon in the last section. Aristotle’s proposal of the science of being qua being does not attempt to analyse every linguistic occurrence of “εἶναι” or its cognates. If that were the case, Aristotle’s science would be the science *of the term* “being”, but Aristotle’s interest is not merely linguistic. It is difficult to decipher what exactly his interest is since the expression “being qua being” is obscure.<sup>457</sup>

456 Aristotle’s answer to this question is given in the *Met.* VI.1, 1026a30-31. It is universal in as much it is primary. It is primary, if there are substances that are prior to sensible substances such as the unmoved mover which would be the cause of all beings. In this sense the science that considers these things is more universal.

457 One could refer to *Met.* VI.1

One may find a solution in the alleged guide for *pros hen* sciences. The first task to establish this science is to identify in how many ways “being” is said. Then, the second task is showing how they are related.<sup>458</sup> Yet, which ways of being are the relevant ones?

Unfortunately, there are many passages where Aristotle provides lists of the ways “being” is said, which are not identical. Even worse, it is also not straightforwardly obvious how these lists are related. According to the *Categories*, the number of ways may be either four or roughly ten depending on passage one focuses on. In *Met.* v.7, there is a distinction Aristotle repeats several times in the *Metaphysics*<sup>459</sup> which distinguishes again between four ways, which are not identical to the four ways of the *Categories* (The approach of *Met.* v.7 has particular importance for the structure of the discussion of the *Metaphysics*, especially concerning the books VI–IX). These four ways are:

1. Accidental being<sup>460</sup>
2. Per se being / being according to the *Categories*<sup>461</sup>
3. Veridical being<sup>462</sup>
4. The potential and actual being<sup>463</sup>

This distinction is broader than the *Categories* distinction since it contains the distinction of the *Categories* within its “per se being”. Furthermore, it is frustrating that in this chapter, Aristotle does not explain the terminology of this list to his other distinctions. In *Met.* v.7, Aristotle’s terminology seems to deviate from his usual terminology. For instance, the case of *per se being* demonstrated in the *An. Post.* I.4, 73b5-10 and *Met.* VII.1 states that substances are called “per se beings” while accidents are not. In *Met.* v.7 also what is usually called “accidents” is listed under “per se being”. This shows that the terminology in this chapter

458 As indicated before, not all ways of being that can be distinguished must be part of that science, but only those in which there is a focal connection.

459 *Met.* VI.2 1026a33-b2; IX.10, 1051a34-b2; XII.2, 1069b27; XIV.2, 1089a26-28.

460 Accidental being is excluded from scientific investigation in *Met.* VI.2-3.

461 Per se being discussed in *Met.* VII-VIII.

462 Postponed in *Met.* VI.4, 1027b29. Reconsidered in *Met.* IX.10.

463 Discussed in *Met.* IX.1-9.

deviates, i.e. “per se being” or “accidental being” outside of *v.7* is not coextensive with “per se being” or “accidental being” within *v.7*. It is difficult to explain the reasons for this difference in detail. A complete analysis of this problem is not part of this study, but at least for per se being, I make the following suggestion: Outside *Met. v.7* list of being, “per se” beings are those that are ontologically independent, i.e. substances. This is apparently not the criterion which is applied within the *v.7* to qualify as “per se being”. To define a rationale, one could draw a connection to the way the categories occur in *Top. 1.9* and one could assert that in *Met. v.7* categorial being is called “per se” since, at least according to *Top. 1.9*, 103b36-38, all categories can serve as genuine or “per se” answers to what-it-is questions. Hence, in this regard, all categories represent genuine (or per se) kinds of beings, regardless of any association between them. The other sense of “per se being” is related to the (ontological) order of the categories in the *Categories*.

Concerning the accidental being of *Met. v.7*, there is a similar risk of confusion. Accidental being in this context does not refer to the categories 2–10 but to things that are accidental, or, to use another word, random, or randomly occurring, e.g. finding a treasure while digging a hole for a plant.<sup>464</sup> The treasure discovery is an accident for the digger. This happens neither necessary nor *mostly* – *ὡς ἐπὶ τὸ πολὺ*. In the same sense of “accident” the musical can be white (1025a19-20).<sup>465</sup> It is important that for those accidents, there is only an *indeterminate* – *ἀόριστον* cause. Aristotle explicitly excludes this kind of “accidental being” from the survey of the first philosophy because one cannot investigate things with indeterminate causes. I assume that the second way, accidents are described in *Met. v.30*, 1025a30-34 represents the “regular” in which “accidental being” is used, i.e. the use that addresses the categories 2–10.

In addition, another remark of Aristotle renders the many ways being is said even less restricted since it does not attempt to list “all” ways in which “being” is said. It is presented in *Met. VIII.2*, 1042b25. Matthews (1995: 233) examined these different approaches of which

<sup>464</sup> Cf. *Met. v.30*, 1025a14-17.

<sup>465</sup> This example is also given in *Met. v.7* for accidental being.

the last one strikes him: “Aristotle completely outdoes himself in telling us in how many ways ‘to be’ is said. ‘To be’ is said, he tells us there, in an indefinitely large number of ways. This claim is both startling and unsettling. I shall call it ‘the unsettling claim.’”

In addition, there is yet another approach listing many ways of being given in *Met.* IV.2, 1003b6-10 which I call the *pros hen list of being*.

*Met.* IV.2, 1003b6-10: τὰ μὲν γὰρ ὅτι οὐσίαι, ὄντα λέγεται, τὰ δ' ὅτι πάθη οὐσίας, τὰ δ' ὅτι ὁδὸς εἰς οὐσίαν ἢ φθοραὶ ἢ στερήσεις ἢ ποιότητες ἢ ποιητικὰ ἢ γεννητικὰ οὐσίας ἢ τῶν πρὸς τὴν οὐσίαν λεγομένων, ἢ τούτων τινὸς ἀποφάσεις ἢ οὐσίας.

Some things are called “beings” because they are substances, others because they are affections of substances, others because they are the way towards a substance or <they are> destructions or privations or qualities or productive or generative of a substance or they are of those things which are said to be in relation to a substance or because it is the negation of something of these things or of a substance <itself>.

As this list is a part of *Met.* IV.2, and as such, it is presumably the best candidate to give an answer to the two tasks of the guide for *pros hen* sciences of the same chapter. It provides a list of ways and further indicates their relation.

Unfortunately, this approach does not attempt to describe a “full” list of the ways in which being is said either. It seems to be exemplary for the possible relations things can have with substances as some categories – yet not all – are mentioned. Apparently, it is open-ended.<sup>466</sup> Thus, the examples given in that list only illustrate the multiplicity of ways things can be related to a substance, but a definite answer is not given and presumably not intended. In general, it is unlikely to be able to quantify “in how many ways is being said”. This would unnecessarily restrict Aristotle’s proposal. The disadvantage of this openness is that it is difficult to deal with borderline and spurious cases.<sup>467</sup> Yet, it is clear that this list contains more ways of being than the categorical approach as there are cases in this list mentioned that do not fit into the categorial scheme. There is, e.g. “the way towards a substance” and “the negation of a substance”, which do not refer to any of the catego-

<sup>466</sup> For “open-endedness” as a desirable feature of the account of the PHR cf. Shields (1999: 104ff.).

<sup>467</sup> This is a problem Shields tries to tackle with his CDH4 approach as mentioned earlier in section 6.1.1.5.

ries. Thus, although the *pros hen* list covers categorical being, its scope is not restricted to it.

I conclude that there is no answer to the question “which senses of being are relevant for the science of being?” in the form of a complete list. Aristotle’s guide gives the general answer to this question to *pros hen* sciences. Primarily relevant for any *pros hen* science are only those ways of being F that are *pros hen* related to their focal reference. Thus, there is no specific, but only a general answer.

Regarding *Met.* v.7 list of ways of being, it is clear that not all of these ways are part of the *pros hen* science of being. Presumably, it is only per se being. In *Met.* ix.1 Aristotle clearly states that it is this sense of being, which is related to substance since all accidental categories include the account of substance within them. Then he begins examining actual and potential being without any remark on the relation of these ways of being to substance. There is no explicit indication about these two ways of being that enables us to assess whether they are also *pros hen* related to substance or not. I guess that potential and actual being require *categorical* being as they are modes in which categorical being occurs and thus may be related to substance via their reference to categorical beings.

A more detailed analysis of this case could be object of a future study.

## 8.6 Conclusions

In this chapter, I address a variety of topics connected to the role of the PHR in the context of *Met.* IV. At the beginning of this chapter, I tried to invalidate several of Shields’s arguments he proposed to show that there is no Aristotelian doctrine of the multivocity of being. For example, he claims that things that are said non-synonymously are all incommensurable. I was able to demonstrate that Aristotle actually excludes those things from this rule that are related through priority relations. As this is the case for all things that are focally related, I was able to reject Shields’s claim.

In the second section of this chapter, I claimed that the real innovation of *Met.* IV is not merely the application of the PHR to being, but that Aristotle expands the ways in which sciences can be unified. Before *Met.* IV, Aristotle did not mention that the PHR can serve as a principle

unity for sciences. Because of this, I claimed in the third section that the main contribution of *Met. IV* to the notion of PHR is the introduction of this feature. This feature is relevant also to the topic of spurious homonyms as it is in line with my previous arguments from section 4.1. If spurious homonyms allowed a PHR, one should be able to examine them scientifically. I deemed this an absurdity.

In the fourth section, I entered a more detailed discussion on the so-called *kath hen* and *pros hen* unification of sciences. I argued that a *pros hen* science is not a science of the term that is said in many ways but a science that considers those things that are unified by the PHR. Thus, it is not necessary to assume that all ways in which “being” is said are part of the *pros hen* science of being. In the last section of this study, I examined this question in more detail. There are many passages where Aristotle lists different ways in which “to be” is said. I conclude that Aristotle’s *pros hen* science of being only cover those ways of being that are focally related to substance.

## General Conclusions

This thesis investigated Aristotle's notion of *pros hen* and its relation to the Aristotelian notions of *homonymy*, *synonymy* and *multivocity*. It examined what exactly these notions mean, explored how they are related, and discussed how these notions are displayed and assessed in contemporary literature. I stated that the notion of *pros hen* is primarily determined by logical priority and definitional dependence among polysemous multivocals. Moreover, I presented that Aristotle's notion of homonymy is narrower than usually assumed.

The first chapter showed that Aristotle's notion of multivocity itself requires a thorough analysis and interpretation. I concluded that a semantic account of multivocity is central to Aristotle's works. While a univocal term can be replaced by a single *logos* that determines its signification, there is a plurality of *logoi* that corresponds to a multivocal term. The second chapter was devoted to the notions of homonymy, synonymy and multivocity with a special focus on possible views on their relation. This study aimed at challenging the currently dominant view on the relation of these notions, which I labelled the InffH-view. It assumes that Aristotle's notion of homonymy is comprehensive and, *for the most part*, identical to the notion of multivocity. I argued that this view disregards several crucial aspects that are central to Aristotle's doctrine of these notions. While Aristotle never violates the dogma that all homonyms are multivocal, he often claims that some multivocals are not homonymous. This warrants that homonymy and multivocity are not co-extensive.

Nevertheless, they are closely related. I argue that the narrower notion of homonymy is a subcategory of multivocity and that this relationship more appropriately represents Aristotle's doctrine of homonymy, synonymy and multivocity. I called this thesis the DefH-view. It is a view that deflates the notion of homonymy from the perspective of its usual treatment. However, it inflates the notion of multivocity, which reflects Aristotle's use of these notions. I admitted that there are several limitations that come with the proposal of a narrower notion of homonymy. Yet, I argue that these limitations can be bypassed by adhering to a developmental thesis. In some earlier works, so it seems, Aristotle

did not distinguish between homonymy and multivocality while in later works it is beyond doubt that these notions do not coincide. The third chapter focused on the allegedly strict definitions of homonymy and synonymy found in the *Categories* 1. I analysed the difficulties of the two definitions that are common to both, and additionally, those that are related only to the definition of homonymy. In the case of homonymy, the *account* – *λόγος* of one thing called F is supposed to be different from the account of another thing called F. Central to this definition are the attributes *τῆς οὐσίας* and *κατὰ τοῦνομα* which both belong to *λόγος*. As there have been doubts about the authenticity of the *τῆς οὐσίας* part, I examined the possibility whether one of these attributes is dispensable with the result that both are necessary. Moreover, I discussed the conceptual scope of the definition of homonymy, i.e. whether it defines a narrow notion of homonymy or a comprehensive. The result of this analysis was that certain ambiguities within this definition prevent an answer free of doubt. However, I argue that the reasons to consider it a definition of a narrow notion of homonymy prevail.

In chapter four, I discussed the controversial topic of spurious homonyms, i.e. the class of examples of homonymy, which are concerned with living and dead things and with originals and copies. In each case, things have the same names; however, while it is clear that these things do not share their name by mere accident, it is not clear how they are defined. Since Aristotle does not express a distinct answer to this, the scholarly opinions diverge. I argued that Aristotle presumably defined them without overlap. Accordingly, I claimed that in such cases, a narrow notion of homonymy is applied. These examples also show that “accidental homonymy” might not be the best label for this case as there are reasons indicating that the copy bearing the same name as the original may not be by accident. Shields asserted that the only reason for these things bearing the same name is “custom and courtesy”. I agreed with him that this is an insufficient reason to assume definitional overlap between these cases.

Chapter five introduced the notion of polysemy attempting to fill the terminological gap between homonymous multivocals and those multivocals that are connected either by a PHR or by an analogy.

In chapter six, I explored polysemous multivocals in more detail. The core of this chapter dealt with polysemous multivocals that are connected by the PHR. I provided a discussion and critique of a selection of contributions relevant to this context. In that section, I argued that in contrast to some scholarly proposals, the PHR requires logical priority *only*. Often it is assumed that the focal reference is also prior in existence to the focally related entities, but I demonstrated with reference to several passages that there is no need to assume that. I reviewed the difficulties of Shields's attempt to define what he calls *core-dependent homonymy*. As Aristotle does not state a strict definition of the PHR, I proposed to consider the remarks on this notion that are scattered in the corpus synoptically. In most cases, the notion is applied but not explained in detail. Because of that, an effective way to approach this notion is considering its applications, i.e. considering in which situations the notion is relevant. I concluded that the PHR has more than one function. The primary function of this notion is to offer an explanation for the connection of certain multivocals as the PHR primarily occurs in those contexts. The PHR can satisfy this explanatory function since it may also be considered a principle of unity, an alternative to generic unity. Furthermore, the PHR is a principle of unity for sciences. This function is an innovation presented in *Met.* IV.2. Since not every principle of unity can feature as a principle of unity of sciences, this feature of the PHR is honourable and influential as it is the only alternative principle of unity of sciences beside genera. As the linguistic level is held to represent the factual level appropriately, I claim that although the PHR in Aristotle is tied to linguistic circumstances, it is not grounded by them.<sup>468</sup> I then stated that the key features of the PHR are logical priority and definitional dependence. In addition, through discussion of spurious homonyms, it was found that it is very difficult to determine which cases exhibit logical priority and which lack it. Shields saw that Aristotle's remarks do not enable us to distinguish proper from improper cases of association and tried to determine the missing criterion. He assumes that the focally related entities must be causally related to the focal reference. I argued that there are severe

468 This alludes to *SE* 165a6-10.

problems in Shields's approach. I claimed that Aristotle does not declare what Shields tries to attribute to him and that Aristotle does not offer strict criteria that would enable us to reconstruct a proper definition.

Nevertheless, I sought to define the PHR with a two-fold attempt. One definition corresponded to each of the two kinds of examples of the PHR. I distinguished between examples containing paronymy between the focal reference and the focally related entities such as "health" and "healthy" and those examples lacking paronymy as it is the case with "friendship". So far, this distinction is broadly neglected in the literature. In addition, in that section, I analysed how paronymy differs from the PHR and how the analogy is related to the PHR. In contrast to Shields, I proposed that the analogy is a real alternative to the PHR when it comes to the question of the explanation of certain multivocals.

In the seventh section of this study, I examined the relationship between p-series and the PHR as it has often been claimed to exhibit a tight relationship. I concluded that there is a far more remote connection between these cases than it is usually assumed. There are no reasons to assume that the priority and posteriority relations of *things ordered in series* – τὰ ἐφεξῆς rest upon logical priority. Additionally, I showed that in the case of focally related entities, the focal reference is not contained within the focally related entities, whereas this is the case in *things ordered in series*.

The eighth section discussed the PHR in the context of *Met.* IV. It revealed a discussion of the question about the most innovative feature of that book. The result indicated that Aristotle's modification of his notion of science plays a crucial role. However, this modification is only possible since Aristotle also ascribes a new feature to the PHR, namely, to function as a principle of unity for sciences. The section also scrutinises the alleged tension between "earlier" and "later" works of Aristotle concerning the question about the absence of the PHR as a tool to explain the unity of sciences, especially in the *EE* and *EN*. In addition, I claim that not all ways in which being is said are relevant for the science of *being qua being* but only some. This insight helps understand the relations between the various lists of the ways in which being is said, which are spread throughout the corpus.

Finally, in the prospect of further investigations, I would like to mention that there is an application of the notion of *pros hen* in *Met.* XII.10 that has not been addressed by this study. I omitted it because that application of the term “πρὸς ἓν” is certainly different from the one discussed within this study. It is concerned with the *causal* unification of being, which is addressed in *Met.* XII.4–5. In *Met.* XII.5 1071a4ff. Aristotle claims that the ultimate unmoved mover is numerically the same for all beings. In *Met.* XII.10, 1075a18-19 Aristotle calls the dependence of the whole cosmos on the (first) unmoved mover a *pros hen* unification. This application of the notion of *pros hen* does not imply a logical dependency of lower-level entities on the first unmoved mover. However, it implies a causal dependency on the first unmoved mover.



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This doctoral thesis addresses a group of conceptual instruments that are central to Aristotle's philosophy, namely, the concepts of *pros hen*, homonymy, synonymy and multivocity (a neologism for the phrase "to be said in many ways"). These instruments are crucial to many of Aristotle's works as he devotes himself to analysing the key notions in each of his investigations using these instruments.

Despite the undisputable importance of these instruments, they display severe interpretative problems, which this thesis critically evaluates. The currently established view on the relationship between homonymy and multivocity is discussed and then reassessed in order to approach the definition of the so-called *pros hen* structure. This approach takes into account a so-far undescribed distinction of types of examples Aristotle uses and sheds new light on the assessments of the role of the *pros hen* structure in Aristotle's philosophy and the theories on development in Aristotle's thought.

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18,60 €  
ISBN 978-3-95925-140-2

