#### ARISTOTLE'S EMENDATION OF ONTOLOGY\*

# Zdravko PERIC¹, Gianluigi SEGALERBA²

**Abstract:** In our inquiry, we investigate elements of the foundations of Aristotle's ontology. We concentrate our attention on aspects of the substance and the universal: we analyse the features which belong to substance qua substance and to universal qua universal, on the one hand, and the features which cannot belong to substance and universal, on the other hand. The mutual incompatibility between substance and universal and between the features which are respectively connected to substance and to universal are the central interest of our investigation. We furthermore inquire into the consequences of a wrong interpretation of the universal. The texts of Aristotle on which we base our study are Metaphysics Zeta 13, Zeta 14, and Zeta 16.

**Keywords:** substance, Aristotle, ontology, universal, Metaphysics, essence, idea, third man regress, genus.

#### 1) Introduction

In our investigation, we shall analyse aspects of Aristotle's foundations of ontology<sup>3</sup>. In order to introduce the readers to the subject of our inquiry, we would like to

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<sup>&</sup>lt;sup>1</sup> Filozofski fakultet Sveučilišta J. J. Strossmayera u Osijeku, Osijek, Hrvatska.

<sup>&</sup>lt;sup>2</sup> IEF – Instituto de Estudos Filosóficos, Universidade de Coimbra.

<sup>&</sup>lt;sup>3</sup> We would like to mention, in this context, three studies which gave us the foundations of our interpretation of Aristotle: Joan Kung's article Aristotle on Thises, Suches and the Third Man Argument (Phronesis XXVI, 3 (1981), pp. 207-247); Michael-Thomas Liske's book Aristoteles und der aristotelische Essentialismus: Individuum, Art, Gattung, and Edward Jonathan Lowe's book The Four-Category Ontology: A Metaphysical Foundation for Natural Science. In Kung's essay, we found the basis of our interpretation of Aristotle's strategy as the attempt to introduce in the doctrine of being different ontological types of entities and to find the foundations of the difference between the ontological types of entities: the distinction between individual entities and non-individual entities proves to be one of the pillars of Aristotle's ontology. Liske's inquiry introduced us to the connection between essence and biological dimension in Aristotle (see, for example, in part 2 of his book, chapter 2, Das dynamische Verständnis des formalen Wesens als Tätigkeit, pp. 236–259, chapter 3, Das τί ἦν εἶναι, pp. 260–283, chapter 4, Die Identität des τηε mit dem Einzelnen, pp. 284–332). Lowe opened for us a new way of interpreting Aristotle's manoeuvre of differentiation between entities in Categories 2 and a new way of connecting Aristotle's ontology to the discovery of models for natural sciences. As regards inquiries into the different theories of universals, we would like

quote a passage from Aristotle's Metaphysics Zeta 16. In this passage, Aristotle is synthesising the results of the investigation which he has been conducting throughout the chapters *Metaphysics Zeta* 13–16:

'Therefore, it is clear both that nothing which is said universally is substance (οὔτε τῶν καθόλου λεγομένων οὐδὲν οὐσία) and that no substance consists of substances (οὔτ' ἐστὶν οὐσία οὐδεμία ἐξ οὐσιῶν).' (Metaphysics Zeta 16, 1041a3-5)

The end of the chapter Metaphysics Zeta 16 summarises statements and concepts exposed by Aristotle in previous passages of Metaphysics Zeta:

- No universal is substance.
- No substance consists of substances.

The incompatibility between universal and substance is thereby stated; likewise, the impossibility that a substance is composed of substances is asserted. Aristotle's sentences express ontological norms. As the passage can somehow anticipate through the concepts expressed in it, we are going to direct our attention to some features belonging to substance qua substance and to universal qua universal. In passages of his works, Aristotle aims to explain the structures of reality such as for example - substance, quality, quantity, the further categories, form, matter, and universals4. Aristotle analyses these structures in order to determine the features which belong to these structures as such, on the one hand, and the features which cannot belong to these structures, on the other hand.

In our opinion, Aristotle's ontological purpose consists in showing the composition of the frame of reality, i.e., the way of functioning of the structures of reality independently of the determined entities which concretely exist in reality<sup>5</sup>. Likewise,

to mention the study of David Malet Armstrong, Universals & Scientific Realism, Volume I: Nominalism and Realism; Volume II: A Theory of Universals.

<sup>4</sup> In our opinion, Aristotle considers at least the biological universals as belonging to reality. In our view, Aristotle's objective does not consist in expelling the universals from reality but, on the contrary, in integrating the universals into reality by distinguishing between the level of reality represented by instances of properties and the level of reality represented by universal biological properties. Universal biological properties such as 'being man' exist as programmes of biological life and biological development for the individual entities which belong to the biological realm. An individual man is an instance of the biological programme 'being man': the individual man will realise during his life, throughout the particular circumstances in which he lives, the faculties entailed in being man, i.e., the faculties in which the essence of man consists. The life programme of every biological entity is given as regards the phases of development which the individual biological entities will have in their lives. The particular circumstances of life of any biological entity can of course be different from each other. The field of existence is not exclusively made up of individual entities: Aristotle introduces different kinds of entities and different levels of existence.

<sup>5</sup> For example, the analysis of the features belonging to the substance qua substance does not involve the analysis of a particular substance such as man. The aim of the analysis of the features of the substance qua substance consists in discovering those features which belong one of the goals of Aristotle consists in emendating the notions of the mentioned structures from the attribution of wrong features which could endanger not only these structures, in particular, but also the whole ontology, in general. Throughout this specific thread of inquiry, Aristotle aims to discover the norms which constitute the ontology as such, independently of the concrete entities which we can meet, and actually meet in reality. Through Aristotle's meditation on ontology, we can see that ontology represents a puzzle: if the constituents of the ontology are not put in their place, the puzzle cannot be solved. There is only one valid ontological combination for the elements of reality: unless this combination is found, the interpretation of reality cannot function.

In our study, we are going to investigate some aspects regarding the features attributed to substance and universal: we shall concentrate both on the features which, in Aristotle's view, belong to these structures of reality, on the one hand, and on the features which cannot be attributed to these same structures, on the other hand.

Aristotle's analysis of the universal entails the determination of the right ontological features of the universal. Furthermore, Aristotle's analysis entails the search for and the discovery of all the features which are mistakenly attributed to the universal6: the place of the universal within the ontology is threatened by the attribution, to the universal, of features which, on closer inspection, are incompatible with the constitution of the universal as such. If incorrect features are attributed to the universal, the universal as such is threatened within the ontology.

Throughout our inquiry, we shall see that wrong interpretations of the universal bring about ontological inconsistencies such as the following:

- the collapse of the plurality of entities to which a universal is referred,
- the third man regress.

The collapse of the plurality referred to a universal shows that the right interpretation of the universal is needed in order that a reduction of the plurality to an entity is avoided<sup>7</sup>. In the same way, the right interpretation of the universal is necessary in order that there is no multiplication of the entities. If the mentioned problems occur in an ontology, this ontology is irremediably damaged. In general, the attrib-

to the substance as substance, independently of the particular substances which exist. It does not matter what kinds of entities exist: through his ontological analysis, Aristotle shows that reality consists of substances, qualities, quantities, and so on.

<sup>&</sup>lt;sup>6</sup> For Aristotle's criticism of other interpretations of the universal, see, for example, Metaphysics Mu 9, 1085a29-1086b13.

<sup>&</sup>lt;sup>7</sup> At the same time, the assessment of the right interpretation of the universal is functional to the correct interpretation of the relations between entities which are not universals, on the one hand, and universals, on the other hand: hence, this assessment is functional to the possibility of explaining the way of existence of the entities which are not universals as regards their relation to the universal.

ution of false features renders the entity not acceptable in a healthy ontology: the attribution of false features brings about a situation in which an entity of the frame of reality invades the sphere of another entity. If the ontological norms are not respected, the mutual borders between entities of the frame of reality disappear: the whole ontology cannot function.

At the same time in which he exposes his analysis of the correct and incorrect features of the universal, Aristotle is leading an inquiry into the features which belong to the substance qua substance: the features of substance qua substance prove to be incompatible with the features of the universal qua universal. Substance and universal are mutually incompatible<sup>8</sup>. Conversely, to maintain the possibility of compatibility between substance and universal would directly endanger the position of the substance too: hence, to interpret falsely the universal causes damages to the substance too; a substance with false features is no more a substance. The precise determination of the features which belong to the substance qua substance and of the features which cannot belong to the substance qua substance turns out to be a constitutive part of Aristotle's ontological project. In general, the inquiry into the features which cannot belong to the substance as such and to the universal as such proves to be indispensable since a false interpretation of these features endangers the whole ontology.

The main texts of Aristotle on which we base our analysis are Metaphysics Zeta 13, 14, and 169; there will be nonetheless references to other texts of Aristotle<sup>10</sup>.

<sup>8</sup> Other incompatibilities which emerge are, for example, the incompatibility between universal, on the one hand, and this something (between being a this something), on the other hand, between this something, on the one hand, and such, on the other hand, and so forth. The connections which emerge regard the connection between separation and completion, or between the substance of something, on the one hand, and the feature 'peculiarly belonging', on the other hand, and so on. We shall see that the chapters turn out to be a system of connections, compatibilities, and incompatibilities: the chapters establish rules holding for the features of the different elements of the ontology.

<sup>9</sup> As regards the succession in the mention of editions, translations, and commentaries which we have consulted for our study, we shall follow the alphabetical order of the authors, regardless of the time of publication of their studies. We shall begin with the mention of the edition of Aristotle's works. For the Categories, we used the edition of Lorenzo Minio-Paluello, Aristotelis Categoriae et Liber De Interpretatione. Recognovit Brevique Adnotatione Critica Instruxit L. Minio-Paluello. For the De Anima, we used the edition of Robert Drew Hicks, Aristotle. De Anima. With Translation, Introduction and Notes by R. D. Hicks, and the edition of William David Ross, Aristotelis De Anima. Recognovit Brevique Adnotatione Critica Instruxit W. D. Ross. For Aristotle's De Generatione Animalium we used the edition of Hendrik Joan Drossaart Lulofs, Aristotelis De Generatione Animalium. Recognovit Brevique Adnotatione Critica Instruxit H. J. Drossaart Lulofs. For the De Generatione et Corruptione we used the edition of Immanuel Bekker, Aristotelis Opera, ex recensione Immanuelis Bekkeri; ed. Academia Regia Borussica; accedunt fragmenta, scholia, index aristotelicus/ addendis instruxit fragmentorum collectionem

#### 2) Definitions

In order to avoid misunderstandings, we would like to give some definitions and explanations connected to peculiar aspects of Aristotle's terminology and peculiar structures of Aristotle's ontology. The following concepts also express aspects of our interpretation of Aristotle's ontology which are independent of the particular contents exposed in this investigation. The definitions are related to aspects which we consider as foundational for Aristotle's ontology: correspondingly, we mention in the footnotes Aristotle's passages in which we think that the corresponding opinions are exposed11.

- a) The ancient Greek word "οὐσία" will be translated as "substance".
- b) The ancient Greek expression "τὸ τί ἦν εἶναι" will be translated as "essence".
- c) The ancient Greek expression "ἐντελέχεια" will be translated as "completion¹2".
- d) The ancient Greek expression "τόδε τι" will be translated as "this something" <sup>13</sup>. We interpret the first part of the expression, tóde, as a demonstrative pronoun.

retractavit Olof Gigon. For the Metaphysics we used the edition of Werner Jaeger, Aristotelis Metaphysica. Recognovit Brevique Adnotatione Critica Instruxit W. Jaeger, and the edition of William David Ross, Aristotle's Metaphysics. A Revised Text with Introduction and Commentary by W. D. Ross, 2 vols. Furthermore, we used the text of the book Zeta of the Metaphysics which is contained in the commentary of Michael Frede – G. Patzig (Aristoteles, Metaphysik Z'. Text, Übersetzung und Kommentar. Erster Band Einleitung Text und Übersetzung. Zweiter Band Kommentar. As regards the text of the Metaphysics, we shall generally follow, for the direct quotations of Aristotle's text, the edition of Werner Jaeger, unless otherwise indicated within our study. For the Posterior Analytics, we used the edition of William David Ross, Aristotelis Analytica Priora et Posteriora. Recensuit Brevique Adnotatione Critica Instruxit W. D. Ross. Praefatione et Appendice Auxit L. Minio-Paluello. For the Physics, we used the edition of William David Ross, Aristotelis Physica. Recognovit Brevique Adnotatione Critica Instruxit W. D. Ross. For the Topics and the Sophistical Refutations, we used the edition of William David Ross, Aristotelis Topica et Sophistici Elenchi. Recensuit Brevique Adnotatione Critica Instruxit W. D. Ross.

- <sup>10</sup> We have decided not to deeply analyse within this inquiry the positions of other interpreters since a deep analysis of the positions of all the other interpreters could let the readers lose the red thread of our interpretation. In this essay, our aim consists in concentrating our attention on our interpretation with as few interruptions as possible. We shall nonetheless accurately analyse other interpretations in a future study.
- 11 We believe that we ought to express these positions in order that the presuppositions of our specific interpretation of Aristotle's passages are clear. For example, to explain the compresence of the values of 'substance' and of 'substance of' is necessary in order to illustrate the alternation which is present in Aristotle's argumentation between the two values.
- 12 We adopted the translation "completion" for the term "ἐντελέχεια" since we aimed to reserve the term "actuality" for "ἐνέργεια".
- 13 For interpretations of the expression "τόδε τι", we deeply recommend the article of J. A. Smith, Tóde ti in Aristotle (Classical Review, Vol. 35, No. 1/2 (Feb. - Mar., 1921), p. 19), and the commentary of David Bostock, pp. 83–85.

We interpret the second part, ti, as the indefinite pronoun representing common names such as "man", "horse" or "tree", which refer to properties such as being man or being horse. The  $\tau\iota$  represents a kind of variable for the property  $\iota^{14}$ ;  $\tau\delta\delta\epsilon$  attests to the occurred individualisation of the property in its instance. The expression  $\tau\delta\delta\epsilon$   $\tau\iota$ , as regards the passages taken into consideration for the present analysis, refers to an individual entity as an instance of something: it, therefore, depicts the fundamental feature of the individual entity. Through the expression corresponding to the  $\tau\iota$  (for example, man or animal), the individual entity is identified as regards his belonging to a species – man – or to a genus – animal. To belong to a species or a genus implies to instantiate, i.e., to concretise a determined essence – man – or a part of a determined essence – animal, which is an element of the essence of man  $\iota$ 5.

e) Property is, within this study, a biological property such as being man<sup>16</sup>: this biological property entails a biological programme, i.e., a programme for the life development of the instances of the property. Aristotle considers, in our opinion, all the biological properties as properties belonging to reality (i.e., they are not instruments of classifications invented by speaking subjects). Therefore, the property "being man" exists; it does not exist, though, at the same ontological level as the ontological level at which the instances of this property exist<sup>17</sup>. Any

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<sup>&</sup>lt;sup>14</sup> Instead of property, we could have used also, for example, "characteristic", "attribute", "feature" (in this study, we use "feature" in another context). With the use of the term "property" we exclusively aim to say that there are contents of dispositions, of faculties, of capacities which determine a species or a genus. The individual man, who instantiates the property "being man", has dispositions, faculties, and capacities which are contained in the complex of characteristics composing being man. We do not assign to property any other sense than this.

 $<sup>^{15}</sup>$  The mentioned meaning of τόδε τι is not the only meaning which the expression "τόδε τι" can have. It is exclusively the meaning which is relevant for our investigation.

<sup>&</sup>lt;sup>16</sup> We use for every property the expression "being" followed by the name of the property – such as, for example, "man", "horse" or "animal" –, in order to differentiate this expression from the expression "man", from the expression "horse" or from the expression "animal", which represent a specific or a generic universal. For Aristotle's mentions of properties such as being man or being animal, we refer, for example, to *Metaphysics Gamma* 4, 1007a20–33 and to *Metaphysics Zeta* 6, 1031a21, 1031a32.

<sup>&</sup>lt;sup>17</sup> We do not consider any fictitious property within our study. The properties which we consider are properties belonging to the objective reality – for example, they are properties belonging to the biological domain. Consequently, the properties which we consider are properties such as 'being man' or 'being animal', which correspond to natural species and to natural genera –. These properties exist independently of their being acknowledged, or of their being thought, or of their being known by a (thinking, speaking, knowing) subject. In the case of biological properties, these properties have precise contents: these contents define and determine the life development of the entities which are instances of the biological properties. Biological properties make up the laws of the biological domain since the in-

biological property such as being man is a biological programme concretised by its instances – for example, by the concrete men –. Since any biological property holds of all instances, it holds of them universally: therefore, it is a universal entity<sup>18</sup>. Within this ontology, the universal entity will fulfil a function which is different from the function fulfilled by the individual entities.

- a) The way of existence of the individual biological entities consists in instantiating a complex of biological properties: this complex determines a biological species or a biological genus. Every entity such as a man is an instance of the biological property "being man". The particular man realises throughout his own life the faculties which are contained in the property "being man" (the property contains a programme of biological development for the individual man).
- b) Any biological property corresponds to a possible individual biological entity. The way of existence of any biological property consists in being a programme of development of the instances of the properties. The complex of all the universal biological properties constitutes the range of the possible individual biological entities: an individual biological entity does not necessarily need to be an instance of a definite biological property; an individual biological entity must, nonetheless, be the instance of a biological property of the complex of properties determining the biological world. In other words, the range of the possible entities is represented by the existing species and the existing genera: an individual entity will necessarily belong to one of the given species and, correspondingly, to one of the given genera.
- c) In our opinion, within Aristotle's interpretation of substance, substance has many values<sup>19</sup>. A value for substance (οὐσία) is:
- Individual entity belonging to the biological domain and being able to independently exist, such as an individual man, an individual horse, and an

stances of the biological domain follow the programmes contained in the biological properties.

18 We believe that in Aristotle's texts universals are either names for the properties - the universal man is the name of the property being man -, or they directly coincide with the properties. Since, as Aristotle states in Posterior Analytics I 4, 73b26–28, the universal belongs to every case, in itself, and as such (to the entities to which it belongs), the universal is tied to the entities to which it belongs through the special relationship expressed by the mentioned ways of belonging. The universal belongs, therefore, from necessity to the entities to which it belongs. The universal is not simply an entity said of a plurality of entities: it has a precise relation with them which derives from the way in which the property corresponding to the universal is connected to the entities of which the universal is said. The universal expresses either an essential property of the entities to which it belongs or a property deriving from the essential properties of the entities to which it belongs.

<sup>19</sup> In De Anima II 1, 412a6-11 we have an example of the plurality of values for substance: in this text, substance can be matter, form, and compounded entity.

individual tree<sup>20</sup>. This value of substance corresponds to the members of biological species and biological genera. We define this value of substance as "one-place substance". We believe that this value for substance is adopted and never abandoned by Aristotle in his works21.

A further value which substance possesses in Aristotle's works is the following:

form, essence<sup>22</sup>, and nature<sup>23</sup> of any individual entity which belongs to the biological domain. In this case, substance is the factor which directs the individual entity in its own life and leads the whole individual entity to its development<sup>24</sup>. Within the biological domain, form and essence<sup>25</sup> correspond to the soul of the entity. The soul is the function centre of the particular biological entity: it is the internal factor of the entity which contains the programme of life development of the living entity. The soul leads – under normal circumstances – the entity to the realisation of the faculties which are contained in the programme of the soul<sup>26</sup>. In order to differentiate this value of substance from the value previously mentioned of "one-place substance", we define this value of substance as "substance of something" since this sort of substance is the essence of the entity. Soul as form and essence of the living entity – as the soul is described in De Anima II 1 –, is the substance of the one-place substance, i.e., of the living entity: the soul as form and essence of the living entity directs the concrete, living substance in its own life and lead the whole substance - the living entity – to its development<sup>27</sup>. Form and essence, when they are the soul of an individual, are moreover a programme for the biological development of the

<sup>&</sup>lt;sup>20</sup> We refer, for this value of substance, to Categories 4, 1b27–28 (man and horse), to Categories

<sup>5, 2</sup>b13–14 (tree), and to Metaphysics Zeta 7, 1032a18–19 (man and plant).

<sup>&</sup>lt;sup>21</sup> See, for example, *De Anima II 1, Metaphysics Zeta 1, Metaphysics Eta 1, 1042a26–30.* 

<sup>&</sup>lt;sup>22</sup> For the value of substance as form and essence, see, for example, the whole chapter De Anima II 1.

<sup>&</sup>lt;sup>23</sup> For the value of substance as nature, we refer, for example, to Metaphysics Delta 4, 1014b35-1015a19, and to Metaphysics Zeta 17, 1041b28-31. For the connection between substance and nature, we refer to De Generatione et Corruptione II 6, 333b13-18.

<sup>&</sup>lt;sup>24</sup> As regards this value of substance we refer to the chapters *De Anima* II 1, II 2, and II 4.

<sup>&</sup>lt;sup>25</sup> Form and essence are considered as mutually equivalent in *De Anima* II 1. For the equivalence between form and essence, we refer also to Metaphysics Zeta 7, 1032b1-2, and Zeta 10,

<sup>&</sup>lt;sup>26</sup> The soul of a man directs the whole life development of this man and contains the programme of this development. Hence, the soul is the essence of the individual man.

<sup>&</sup>lt;sup>27</sup> We mention these two values for substance since we think that they correspond to the two basic values for substance. Furthermore, we think that these two values are equally central for Aristotle: there is no prevalence of the first value over the second value, or vice versa.

faculties of the individual<sup>28</sup>: since the soul possesses faculties, the presence of the soul in the individual means that the individual will reach determined faculties during his life development<sup>29</sup>.

- d) We believe that Aristotle considers the individual biological entities as entities which follow a biological programme. Since the development which the biological entities of a species have during their own life is - at least tendentially – identical, the contents of the programme are the same. The contents of the biological development represent a programme which constitutes the biological world and is, therefore, part of the biological world. Individual biological entities are always instances of a definite programme of biological development.
- e) In our opinion, Aristotle contends that the domain of biological instances always consists of individuals. The whole domain of existence consists, however, in Aristotle's view, both of individuals as instances of biological properties, on the one hand, and of biological properties, on the other hand, even though the way of existence of the biological properties is different from the way of existence which belong to the instances of properties. Individuals, on the one hand, and universal properties, on the other hand, exist on mutually different ontological levels: they correspond to different ontological types. We have, therefore, a two-district ontology:
- i)The realm of the biological instances is constituted by individual entities (by entities which are numerically one). Any entity which is numerically one is the instance of a biological property such as being man. For an entity which is numerically one, to be is to be the instance of a biological property<sup>30</sup>.
- ii)The whole realm of existence, the realm of all the existing entities, contains

<sup>28</sup> For example, in the human soul the vegetative part of the soul contains some faculties, the sensitive part of the soul contains other faculties, and the intellective part of the soul contains further faculties.

<sup>29</sup> We believe that some passages from the chapters Metaphysics Zeta 7 and Zeta 8, from the chapter De Generatione et Corruptione II 6, and from the chapters Physics II 1, 7, 8 show that Aristotle considered essence, form, or nature as factors which are common to all the members of a biological species. The existence of a final cause for the biological development means that a common - universal - programme is established for all the entities belonging to a biological species. A common biological property dictates a precise developmental process for all the members of a species corresponding to this common biological property. This biological property is identical for all the members of a species. Therefore, the members of a species are not simply similar to each other; they are instances of an identical nature.

30 The chapter Categories 2 exposes the presence, in the instantiated reality, of entities which belong to the category of substance, and which are numerically one, on the one hand, and of entities which do not belong to the category of substance, and which are, nevertheless, numerically one, on the other hand.

both individuals (individual entities) and universal biological properties31 (universal entities)32.

# Metaphysics Zeta 13: incompatibility between substance and universal

We shall now begin to analyse some aspects of the chapter Metaphysics Zeta 1333. The chapter as a whole turns out to be, in our opinion, an analysis of the ontologi-

31 Of course, particular properties exist too: they are the instances of the universal properties. The individual man represents an individualisation, a concretisation, a particularisation of the universal property 'being man'. Therefore, the individual man represents a particular case of the property.

32 In De Generatione Animalium II 1, 731b24–732a1 Aristotle exposes the thesis of the eternity of the genus. Aristotle seems to consider the biological genera as eternal. Since the biological genera are eternal, the properties too which delimit each genus are eternal. Therefore, every individual biological entity will not necessarily be a member of a definite genus, but it will necessarily be a member of one of the eternal genera (see also De Anima II 4, 415a22-b7).

33 We shall not analyse the whole chapter: we shall concentrate our analysis of the chapter on the passages in which Aristotle exposes the incompatibility between substance and universal, on the one hand, and the features belonging to the substance qua substance and to the universal qua universal, on the other hand. Before beginning the analysis of the chapter, we would like to point out that we consider as being mutually equivalent the expressions:

- the universal (τὸ καθόλου) see Metaphysics Zeta 13, 1038b3 –,
- that which is said universally (τὸ καθόλου λεγόμενον) see Metaphysics Zeta 13, 1038b9 –,
- that which belongs universally (τὸ καθόλου ὑπάρχον) see Metaphysics Zeta 13, 1038b34 –,
- that which is predicated in common (τὸ κοινῆ κατηγορούμενον) see Metaphysics Zeta 13, 1039a1 –. We consider these expressions as mutually equivalent since they all belong to a discussion in which Aristotle concentrates his attention on the question whether the universal can be substance and on the features of the universal qua universal. The subject of the discussion is directed to the universal and to its features throughout the different argumentations exposed in the chapter. We believe that these terms, despite their mutual differences, nonetheless refer to the same entity, i.e., to the universal: it is, therefore, our conviction that, within Metaphysics Zeta 13 and 16, Aristotle uses these terms as mutually interchangeable ways to refer to the universal. Thus, we agree with the observations which James Lesher has exposed in his study Aristotle on Form, Substance and Universal: A Dilemma (Phronesis, Vol. XVI, No. 2 (1971), pp. 169–178), and with the observations which David Bostock has exposed in his commentary on the books Zeta and Eta of Aristotle's Metaphysics (see pp. 185–207). In his study, Lesher supports the equivalence between universal (καθόλου) and universally predicated (καθόλου λεγόμενον); Bostock refers to different expressions used by Aristotle in Metaphysics Zeta and Eta, all of which, according to Bostock, are to be related to the universal. Hence, we do not adopt the observations expressed by Michael John Woods who, in his study Problems in Metaphysics Z, Chapter 13, distinguishes between καθόλου and καθόλου λεγόμενον in order to support the thesis that Aristotle in Metaphysics Zeta 13 exclusively aims to state the incompatibility between substance, on the one hand, and that which is universally predicated – τὸ καθόλου λεγόμενον –, on the other hand; the chapter does not state the mutual incompatibility between substance and universal. Although we do not agree with Woods' position, we firmly contend that Woods exposes an interesting and bril-

cal conditions which a correct interpretation of the substance and a correct interpretation of the universal must fulfil. These ontological conditions hold independently of the particular substance or of the determined universal which is being considered: they are the features which every substance qua substance and every universal qua universal must possess34. Although the chapter itself exclusively deals with the concepts of substance, with the concept of the universal and with their mutual relations, the entire ontology is at risk if a false interpretation of substance and universal is given:

- If any universal whatsoever is interpreted as the substance of an entity, the plurality of entities which is connected to the universal dealt with collapses as regards its being a plurality.
- If the universal is interpreted as a this something and, consequently, as an individual entity which can be counted together with the other individual entities, the regress of the third man comes about: reality collapses due to an infinite multiplication of entities.

These results are unacceptable. The first quotation which we take from the text expresses the incompatibility between universal and substance<sup>35</sup>. Aristotle states:

'For it seems impossible that any of the entities which are universally said should be substance (ἔοικε γὰρ ἀδύνατον εἶναι οὐσίαν εἶναι ὁτιοῦν τῶν καθόλου λεγομένων).'<sup>36</sup> (Metaphysics Zeta 13, 1038b8–9)

The statement expresses that being universal is incompatible with being substance. Aristotle then begins to explain the grounds of this incompatibility:

liant interpretation of Metaphysics Zeta 13, which as such deserves a long and thorough anal-

- 34 When we speak of the features of substance, we refer to the features belonging to the substance independently of its being a particular substance such as, for example, a man.
- 35 One of the problems to be faced throughout the analysis of the chapter *Metaphysics Zeta* 13 consists, in our opinion, in Aristotle's using both the value of substance qua substance of something and the value of substance as one-place substance. Both substance of something and one-place substance prove to be incompatible with the universal.
- <sup>36</sup> We consulted the following translations of Aristotle's Metaphysics we exclusively mention the translations of Aristotle's works from which we quote passages in our study -: for the whole Metaphysics, we consulted the translation of William David Ross (contained in Barnes, Jonathan. The Complete Works of Aristotle. The Revised Oxford Translation. Edited by Jonathan Barnes. Volume Two) and the translation of Hugh Tredennick (contained in Aristotle in 23 Volumes, Vols.17, 18, translated by Hugh Tredennick); for the book Zeta of the Metaphysics, we consulted the translation of David Bostock (Aristotle Metaphysics Book Z and H. Translated with a Commentary by David Bostock); for the Sophistical Refutations, we consulted the translation of Arthur Wallace Pickard-Cambridge (contained in Barnes, Jonathan. The Complete Works of Aristotle. The Revised Oxford Translation. Edited by Jonathan Barnes. Volume One). We consulted these translations, though, without entirely following any of them: we always tried to find our translation of the texts of Aristotle quoted in our inquiry.

'For in the first place substance of each entity is the substance which is peculiar to each entity, which does not belong to another entity (οὐσία ἑκάστου ἡ ἴδιος ἑκάστω, ἣ οὐχ ὑπάρχει ἄλλω), but the universal is common (τὸ δὲ καθόλου κοινόν): for this is called universal which naturally belongs to many entities (τοῦτο γὰρ λέγεται καθόλου ο πλείοσιν υπάρχειν πέφυκεν).'37 (Metaphysics Zeta 1038b9-12)

The substance is peculiar to an entity and does not belong to any other entity. Anything common to a plurality of entities cannot be peculiar to an entity: thus, anything common cannot be substance since it cannot be an entity which does not belong to anything else. The incompatibility between being universal and being substance emerges, therefore, from the first sentence of the passage, since being common and being peculiar to an entity exclude each other.

The substance of an entity forms a unity with the entity of which the substance is substance. The passage serves as a specification of the statement regarding the incompatibility between universal and substance. In order to explain the grounds of the incompatibility between substance and universal, Aristotle analyses the features of substance and universal; he defines some constitutive features of the substance of something qua substance of something. The features which belong to substance qua substance are as follows:

- The substance is peculiar to the entity whose substance it is. i)
- ii) The substance does not belong to another entity, i.e., any substance whatsoever exclusively belongs to the entity of which it is the substance.

From the mentioned features of substance, we can already gain essential elements: the substance of an entity forms a unity with the entity of which it is the substance. The entity which is the substance of an entity is as such, i.e., qua substance of an entity, peculiar to the entity of which it is the substance: therefore, the substance of an entity does not belong to any other entity; it cannot belong to any other entity. These features exclude that the substance of something can be referred to a plurality of entities.

We can already infer from this feature that the substance of something cannot be common to a plurality of entities. The substance of something qua substance of something cannot possess the features of the universal: the substance of an entity is peculiar to that particular entity and, consequently, it cannot be common to a plu-

<sup>&</sup>lt;sup>37</sup> We used the following commentaries of Aristotle's Metaphysics – we mention only the commentaries of those works of Aristotle from which we quote passages in our study: for the whole Metaphysics, we used the commentary of William David Ross (Aristotle's Metaphysics. A Revised Text with Introduction and Commentary by W. D. Ross, 2 vols.); for Metaphysics Zeta, we used the commentary of David Bostock (Aristotle Metaphysics Book Z and H. Translated with a Commentary by David Bostock), the Notes on Book Zeta of Aristotle's Metaphysics edited by Myles Burnyeat (Burnyeat, Myles, et. Al. Notes on Book Zeta of Aristotle's Metaphysics, being the record of a seminar held in London, 1975-1979), and the commentary of Michael Frede -Günther Patzig (Aristoteles ,Metaphysik Z '. Text, Übersetzung und Kommentar. Erster Band Einleitung Text und Übersetzung. Zweiter Band Kommentar).

rality of entities – it could not be common to two entities either –. Any entity which is the substance of something must follow these ontological norms. Immediately thereafter, Aristotle expresses some features concerning the universal qua univer-

- i) The universal is common (i.e., qua universal it is common to a plurality of entities).
- ii) The universal naturally belongs to a plurality of entities.

The incompatibility of substance and universal is therewith clear: the substance of an entity is peculiar to that entity, whereas the universal is common to a plurality of entities. Those who consider the universal as the substance of something show with their assertions that they have not understood anything of the features belonging to the universal, on the one hand, and to the substance, on the other hand: they are unifying with each other elements of reality which have mutually incompatible features.

# 4) A note on Metaphysics Alpha 9, 991b1-3

Let's see the argument exposed in Metaphysics Alpha 9, 991b1-3 for the impossibility that an entity which is the substance of another entity should exist separately from the entity of which it is the substance:

'Furthermore it would seem impossible that the substance and that of which it is substance should exist separately (ἔτι δόξειεν αν ἀδύνατον εἶναι χωρὶς τὴν οὐσίαν καὶ οδ ἡ οὐσία), so that how could the ideas, if they are substances of the things, exist separately? (ὅστε πῶς ἂν αἱ ἰδέαι οὐσίαι τῶν πραγμάτων οὖσαι χωρὶς εἶεν;)'

Aristotle refuses the hypothesis that an entity exists separately from the entity of which it is the substance: the argument is used against ideas, which should be the substances of the entities but should at the same time exist separately from the entities of which they are the substance. The ontological norm states that the substance of something is inseparably united to the entity of which it is the substance. Aristotle cannot accept the concept of an entity which is the substance of another entity but is separated from the entity itself since, at least as regards the biological entities, he considers the substance of an entity as an active factor within the entity of which the substance is substance. For example, the soul as substance cannot be separated from the entity of which the substance is the substance since the soul is operative within the entity. If the soul as substance were separated from the entity of which the soul is substance, the entity would not exist.

As regards, generally, the contraposition between ideas and universals, it could be said, in our opinion, that Aristotle's assertions can give us some traces concerning the diversity between Plato's and Aristotle's ontology, even though Aristotle's criticism need not be necessarily accepted. In Plato, ideas show the existence of a dimension which is other than the sense dimension. Ideas are signs of the existence of a dimension which is different from the sense dimension. Aristotle does not consider the universals as signs of the existence of a dimension of reality

which is different from the sense dimension. Hence, ideas accomplish a different function from the function which universals fulfil. One of the differences between ontologies consists in Plato's maintaining that the foundation of an entity can be both transcendent in relation to the entity and immanent in the entity, on the one hand, and in Aristotle's considering the foundation of an entity as being exclusively immanent in the entity, on the other hand. Some passages from the *Phaedo* can show that the discovery of ideas is always connected to the discovery of a dimension which is different from the sense dimension. We think that in the section of Phaedo 69e6–107b10 Plato supports the existence of a difference between the realm of Being, to which ideas belong, and the realm of the sensible concretisations: to become aware of the existence of ideas means becoming aware of the existence of a dimension which is different from the sense dimension.

#### 5) Metaphysics Zeta 13: no universal can be the substance of an entity

Aristotle thereafter analyses the question of the incompatibility between the substance of something and the universal. In order to give an argument for the incompatibility between the universal and the substance of something, he considers the hypothesis that the universal is the substance of something. The strategy of Aristotle's argument consists in showing the absurd result which this hypothesis entails:

'Of which entity then will this be substance (τίνος οὖν οὐσία τοῦτ' ἔσται;)? For either of all entities or of no entity<sup>38</sup> ( $\mathring{\eta}$  γὰρ πάντων  $\mathring{\eta}$  οὐδενός)<sup>39</sup>, but it is also impossible that it is the substance of all (πάντων δ' ούχ οἷόν τε): but if it is the substance of one entity will be also all (ἐνὸς δ' εἰ ἔσται, καὶ τἆλλα τοῦτ' ἔσται): for entities whose substance is one and whose essence is one are also themselves one<sup>41</sup> (ὧν γὰρ μία ἡ οὐσία καὶ τὸ τί ἦν εἶναι ἕν, καὶ αὐτὰ ἕν).' (Metaphysics Zeta 13, 1038b12-15)

38 If the universal were substance of no entity, there would be no problem. The problems begin when the universal is considered as the substance of an entity. It seems that Aristotle implicitly assumes that in this position the universal is the substance of all the entities to which it is referred - i.e., it is the substance of any entity to which it is referred. Since the universal qua universal is common to a plurality of entities, the universal is the substance of the entities of the plurality. Since that which is the substance of an entity is peculiar to the entity of which it is the substance, the universal is peculiar to the entities of which it is the substance: it forms a kind of unity with any of them. Therefore, all entities coincide with each other.

<sup>&</sup>lt;sup>39</sup> I.e.: For the universal will be the substance of all entities or of no entity.

<sup>&</sup>lt;sup>40</sup> Or: all the other entities too will be this entity.

<sup>&</sup>lt;sup>41</sup> See for a similar expression *Metaphysics Zeta* 16, 1040b17. We interpret the being one of the entities belonging to the plurality as a numerical (therefore not as a specific) being one. Likewise, we interpret the being one in substance and the being one in essence of the entities of the plurality as being numerically one in substance and in essence (therefore, we do not consider it as being a specifically one in substance and in essence). We adopt this interpreta-

The root of all problems is already contained in the features attributed to the universal within the argument: the universal qua universal is considered as being common. Moreover, the universal is regarded, qua substance, as being peculiar to the entity of which it is the substance and as not belonging to anything else. The notion of universal as substance cannot function, therefore, from the very beginning: if these elements are considered, it becomes immediately clear that the universal cannot be substance.

The hypothesis that the universal is the substance of something brings about a constellation in which the plurality of entities to which the universal is referred is reduced to the universal. The argument functions, in our view, as follows42:

- i. The entity  $\alpha$  is a universal.
- ii. The universal is qua universal common to many entities.
- iii. The universal  $\alpha$  is common to entity a and to entity b.
- iv. The universal  $\alpha$  is the substance of the entity a.
- v. If a universal is referred to a plurality of entities and is the substance of a member of the plurality, the universal is the substance of all the other members of the plurality.

tion because, in our opinion, Aristotle aims to point out the emergence of an ontological inconsistency which occurs when the universal is interpreted as the substance of an entity. The ontological inconsistency is that the complex of all the entities of which the universal is substance will be numerically one since all the entities to which the universal is referred will be reduced to one another. In our opinion, no problem would emerge for the existence of the plurality if the being one of the entities - i.e., in this context, the being one of the substance and the being one of the essence - were interpreted as a specific being one. A plurality of entities (e.g., a plurality of men) has the same essence, whereas this identity in essence is not a numerical identity corresponding to the concretisation of a numerically identical essence. Aristotle discusses the notion of one in chapter Metaphysics Delta 6. In particular, in Metaphysics Delta 6, 1016a24-32 Aristotle states that entities such as horse, man, and dog are one because they are all animals (i.e., they are one because they belong to the same genus). This result does not represent a problem since the reciprocal being one of these particular entities depends on their belonging to the same genus - it is not, therefore, a kind of numerical oneness -. Moreover, in Metaphysics Delta 6, 1016b31-1017a3 Aristotle describes the kinds of being one: one in number, one in species, one in genus, and one by analogy. In Topics Alpha 7, 103a6-14 Aristotle exposes the different kinds of being identical: he distinguishes between being identical in number, being identical in species and being identical in genus. The passage Metaphysics Iota 3, 1054a32-b3 too should be mentioned for the discussion of the identical: the kinds of entities being identical are identical in number, identical both in form and in number, and identical if the formula of the first substance is identical. Among other things, Aristotle's analyses show that the correct determination of the senses of being one is essential: a false determination of this sense could lead to the destruction of a plurality.

<sup>42</sup> In our view, the presupposition which is necessary for the functioning of the argument consists in the fact that the universal, if it is the substance of an entity, is at the same time the substance of all other entities to which it is related as a universal.

- vi. The universal  $\alpha$ , which is the substance of entity a, is the substance of entity b too.
- vii. Since the substance of an entity is peculiar to the entity of which it is the substance, the universal  $\alpha$  is peculiar both to entity a and to entity b.
- viii. The entities whose substance and essence are one, are one<sup>43</sup>.

The consequences are as follows:

- ix. The entities a and b are numerically one with each other, i.e., they coincide with each other since both entities coincide with the universal the universal is the substance both of a and of b –.
- x. Since the universal is the same for all the entities of the plurality to which the universal is referred, all the entities of the given plurality are one<sup>44</sup>.
- xi. Consequently, the plurality of entities to which the universal is referred is destroyed.
- xii. All the entities are the entity a, or the entity a is all the other entities.

The universal, which is, as universal, an entity common to a plurality of entities, cannot be the substance of any entity whatsoever:

- if the universal were the substance of an entity, since the substance of something is peculiar to the entity of which the substance is substance, the universal as substance would be peculiar to this entity;
- since the universal qua universal is a common entity, the universal would be the substance of a plurality of entities<sup>45</sup>, so that the same entity would be peculiar to a plurality of entities;
- as a result, a plurality of entities would form a unity with an entity which is peculiar to everyone of them, so that the members of the plurality would coincide with the same entity;
- the plurality of the entities to which a universal is referred as the substance of the members of that plurality would be destroyed<sup>46</sup>.

<sup>44</sup> The logic of the argument can be reconstructed in the following way too:

- Entities whose substance and essence are one are one.
- The universal is the substance of an entity.
- The universal is the substance of a plurality of entities.

#### It follows:

- The entities of which the universal is substance are one with each other.

<sup>45</sup> I.e., we would have an entity which is peculiar to an entity, but which is common to a plurality of entities, so that it is peculiar to a plurality of entities.

<sup>46</sup> In the passage *Metaphysik Beta* 4, 999b12–23, which belongs to the eighth aporia, Aristotle considers as absurd the situation in which the substance of a plurality of entities is one since, if the substance of a plurality of entities is one, all the entities whose substance is one will be one. The misinterpretation of the entities which are considered as being the substance of something and the misinterpretation of the features belonging to the entities which are considered as being the substance of something leads to the impossibility of explaining the existence of a plurality.

<sup>43</sup> See also Metaphysics Zeta 16, 1040b16-17.

We can see that the false interpretation of the universal brings about the disappearance of the plurality to which the universal is referred<sup>47</sup>. The example shows that the use of the universal in the ontology must correctly explain the features of the universal since a false interpretation of the universal could destroy the plurality connected to the universal. This kind of universal becomes a particular entity – since, being peculiar, it coincides with a particular entity - which is common to many, thus destroying the plurality to which it is referred. On closer inspection, the analysis reveals a complete misunderstanding of the universal. The universal has been transformed into something particular: anything which is peculiar to an individual entity must be individual<sup>48</sup>. Aristotle adds then a further reason for the incompatibility between substance and universal:

'Furthermore, substance is said that which is not said of a subject, but the universal is always said of some subject (ἔτι οὐσία λέγεται τὸ μὴ καθ' ὑποκειμένου, τὸ δὲ καθόλου καθ' ὑποκειμένου τινὸς λέγεται ἀεί).' (Metaphysics Zeta 13, 1038b15–16)

A feature of substance consists in not being said of a subject, whereas the universal is always said of a subject. The incompatibility between the feature of substance, on the one hand, and of universal, on the other hand, is clear: hence, no confusion between the two kinds of entities is allowed. The universal cannot be peculiar. The substance must be peculiar. If something is common, cannot be substance. If something is substance, cannot be common. The two entities cannot be confused with each other: they belong to mutually different domains of reality<sup>49</sup>.

# 6) Metaphysics Zeta 13: no space for universal as substance

Up to now, we have seen a first series of arguments which show the incompatibility between substance and universal. Within the previous passage, Aristotle has exposed the incompatibility between substance and substance of something, on the one hand, and universal, on the other hand. In the following passage, Aristotle exposes further grounds for the incompatibility between substance and universal<sup>50</sup>:

<sup>&</sup>lt;sup>47</sup> I.e., not of any plurality whatsoever.

<sup>&</sup>lt;sup>48</sup> If we correctly understand, the interpretation which we propose of this passage is similar to the interpretation which is proposed in the Notes on Book Zeta of Aristotle's Metaphysics (see

<sup>&</sup>lt;sup>49</sup> In order to better explore the role of the universal, the passages Metaphysics Delta 6, 1016a25-32, Metaphysics Delta 6, 1016b31-1017a3, Metaphysics Nu 1, 1087b34-1088a14 could be interesting. Although in these passages the universal is not mentioned, there seem to be analogies between the roles which are fulfilled by the entities which are considered as units of measures with the role which the universal accomplishes in other passages. We shall inquiry into the concept of unit of measure in a future study.

<sup>&</sup>lt;sup>50</sup> Some concepts of this part of the chapter are related, in our opinion, to the seventh aporia of Metaphysics Beta. In this aporia, Aristotle discusses the question whether the first genera –

'But perhaps, on the one hand, it is not possible that it<sup>51</sup> should be substance in the way in which essence is52, but on the other hand is present in this (ἐν τούτω δὲ ἐνυπάρχει), as animal is present in the man and horse? Then it is clear that there will be a formula of it. It makes no difference even though there is not a formula of all the elements which are in the substance: for nonetheless this will be substance of something (οὐδὲν γὰρ ἦττον οὐσία τοῦτ' ἔσται τινός), as man is substance of the man in whom it is present (ὡς ὁ ἄνθρωπος τοῦ ἀνθρώπου ἐν  $\tilde{\phi}$  ὑπάρχει), so that the same will happen again ( $\check{\omega}$ στε τὸ αὐτὸ συμβήσεται πάλιν): for there will be a substance of that, as animal<sup>53</sup> will be the substance of the species in which it is present as peculiar (οἷον τὸ ζῷον, ἐν ῷ εἴδει ὡς ἴδιον ὑπάρχει). Furthermore, it is both impossible and absurd that the this and substance (τὸ τόδε καὶ οὐσίαν), if they consist of some elements, should not consist of substances nor of the this something (μὴ ἐξ οὐσιῶν εἶναι μηδ' ἐκ τοῦ τόδε τι), but of quality (ἐκ ποιοῦ); for both that which is not substance (μὴ οὐσία) and the quality will be prior to substance and to the this (τοῦ τόδε). This is impossible, however: for it is not possible that the affections  $(\tau \dot{\alpha} \pi \dot{\alpha} \theta \eta)$  should be prior to the substance either in formula or in time or in coming to be; for they will exist separately too. Furthermore, in Socrates there will be a substance (τῷ Σωκράτει ἐνυπάρξει οὐσία), so that it will be the substance of two entities (δυοῖν ἔσται οὐσία). In general, it then follows, if the man and all the entities which are said in this way are substances (εἰ ἔστιν οὐσία ὁ ἄνθρωπος καὶ ὅσα οὕτω λέγεται), that none of the elements in their formula is substance of anything ( $\mu\eta\theta$ èν τῶν ἐν τῷ λόγ $\phi$  εἶναι  $\mu\eta\delta$ ενὸς οὐσίαν), and that it does not exist separately from them nor in anything else (μηδὲ χωρὶς ὑπάρχειν αὐτῶν μηδ' ἐν  $\mathring{a}\lambda\lambda\phi$ )<sup>54</sup>; I mean, for example, that no animal exists in addition to the particular animals<sup>55</sup>, and that no one else of the elements present in the formulas exists apart ( $\lambda \acute{\epsilon} \gamma \omega$ δ' οἷον οὐκ εἶναί τι ζῶον παρὰ τὰ τινά, οὐδ' ἄλλο τῶν ἐν τοῖς λόγοις οὐδέν).' (Metaphysics Zeta 13, 1038b16-34)

i.e., the most extended ones - or the genera which are predicated of the individuals are the principles of the entities (see Metaphysics Beta 3, 998b14–999a23).

<sup>51</sup> I.e.: the universal.

<sup>&</sup>lt;sup>52</sup> I.e.: in the way in which essence is substance.

<sup>&</sup>lt;sup>53</sup> We adopt Ross' text. Ross maintains the presence of τὸ ζῷον in Aristotle's text. Jaeger eliminates the expression.

<sup>54</sup> It seems that, in this section, Aristotle is confirming a position which he had mentioned in Metaphysics Beta 3, 999a10-12: in this passage, Aristotle contends that there are no genera which exist in addition to the species.

<sup>55</sup> I.e.: there is no animal in addition to the particular animals. Since Aristotle is dealing with the parts of the formula, we believe that the meaning of this passage is that no animal as a genus exists apart from the particular species of animal. There is, in particular, no genus 'animal' which exist separately from the species of animal; there is, in general, no genus which exist separately from its species. Nonetheless, the sentence could also mean that no animal exists apart from the particular animals. Since Aristotle throughout this section of the chapter has been speaking of the elements of the formula, we believe that the term 'animal' is to be understood as the genus in its relation to the particular species of animal.

We divide the passage in the following way:

- The thesis of those who want to defend the universal as substance is exposed in the passage 1038b16-19.
- Aristotle's objections are exposed in the passage 1038b19–3056.

The proposal for saving the universal as substance functions as follows: the universal is present in the essence as animal is present in man. In this case, the universal could be the substance of elements of the formula. Aristotle's arguments against this hypothesis are as follows:

- The more extended universal cannot be the substance of the further parts of the essence. If the universal were the substance of the further parts of the essence, the same problem as in the argument of the previous passage would occur again: the further parts of the essence would be reduced to the universal. The defender of the position that universal is substance contends that the more extended universal - such as the universal "animal" - could be the substance of the narrower universal - such as the universal "man" -. Aristotle denies the validity of this position by showing that, in this case too, the thesis of universal's being substance cannot be accepted (Metaphysics Zeta 13, 1038b19–23)57.
- Since the universal is a quality, it cannot be the substance of something. If it were the substance of a substance, the substance would consist of quality: consequently, that which is not substance and the quality would be prior to the substance and to the this (Metaphysics Zeta 13, 1038b23-29)58.
- If the universal is substance as an element of the essence, the universal will be the substance of two entities: for example, the universal will be the substance of Socrates, on the one hand, and of the essence of Socrates, on the other hand (*Metaphysics Zeta* 13, 1038b29–30).

In our opinion, the argumentation of the defenders of ideas as substances is as follows:

The proof functions as follows:

<sup>&</sup>lt;sup>56</sup> We propose this division of the passage. The sections in which the passage is organised vary corresponding to the different interpretations. We shall describe the different interpretations in a future study.

<sup>&</sup>lt;sup>57</sup> Since the substance of something is peculiar to that something, the universal cannot be the substance of the elements of the essence, since, qua substance of one element, it should be peculiar to an element alone. We believe that this part of the argument is related to some concepts expressed by Aristotle in Metaphysics Zeta 14.

<sup>&</sup>lt;sup>58</sup> See *Metaphysics Zeta* 1, 1028a29–33 for the priority of substance over the other categories.

The this and substance must be composed of substance and of this.

ii. Universal is not substance.

iii. Universal is a quality.

iv. Therefore, the this and substance cannot be composed of the universal.

The universal cannot be an element in the substance.

- As man is the substance of man,
- so animal is the substance of man.

In this case, the most extended element of the essence is the substance of further elements of the essence. Aristotle refuses the hypothesis since he contends that no element of the formula is the substance of something, and that no element exists in addition to the species. Those who support the interpretation of the universal as substance of something turn out to have, actually, a false conception of the elements of the definition since no element of a definition can exist in addition to the other elements. Elements of the formulas are not the substance of something and do not exist separately from the species. Animal does not exist apart from the particular species of animals; no elements of the formulas exist separately from or in addition to the other elements<sup>59</sup>.

# 7) Metaphysics Zeta 13: the third man regress as the consequence of the false interpretation of the universal

Aristotle's analysis of the problems connected to the interpretation of universal as substance goes on. The third man regress<sup>60</sup> turns out to be one of the consequences of the misinterpretation of the universals:

'For those who reflect from these standpoints it is, then, clear both that none of the entities which belong universally is substance (φανερὸν ὅτι οὐδὲν τῶν καθόλου ὑπαρχόντων οὐσία ἐστί), and that none of the entities predicated in common signifies a this something<sup>61</sup> (ὅτι οὐδὲν σημαίνει τῶν κοινῆ κατηγορουμένων τόδε τι), but a

The alternative translation is:

"... and this is clear also from the fact that none of the entities predicated in common signifies a this something, but a such ..."

Within this alternative proposal, the second sentence is not a conclusion put on the same level as the level of the first sentence. It rather expresses a ground for the content expressed in the first sentence. The alternative proposal of translation follows the structure of the translation proposals of Hugh Tredennick, of William David Ross, and of David Bostock. We are not convinced by these proposals, since we think that both sentences:

"it is clear that none of the entities which belong universally is a substance"

<sup>&</sup>lt;sup>59</sup> Within the first argument (1038b8–16), Aristotle excludes that the universal is the substance of something. Within the second argument (1038b16–30), Aristotle excludes that the most extended universal is the substance of something within the essence.

<sup>&</sup>lt;sup>60</sup> In this study, we are not going to deal with the reconstruction of the third man argument. We follow the reconstructions of the argument proposed by Sheldon Marc Cohen in his study *The Logic of the Third Man*, and by Gail Fine in her book *On Ideas: Aristotle's Criticism of Plato's Theory of Forms*.

<sup>&</sup>lt;sup>61</sup> We present an alternative translation for the passage:

<sup>&</sup>quot;... and it is clear that none of the entities predicated in common signifies a this something, but a such ...".

<sup>&</sup>quot;and it is clear that none of the entities predicated in common signifies a this something"

such (ἀλλὰ τοιόνδε) $^{62}$ . If this is denied, both many other inconsistencies and the third man occur (ἄλλα τε πολλὰ συμβαίνει καί ὁ τρίτος ἄνθρωπος).' (Metaphysics Zeta 13, 1038b34-39a3)

This passage presents interesting aspects. The following assertions are to be noted:

- Nothing which belongs universally is substance.
- Nothing which is predicated in common signifies a this something.
- The entity which is predicated in common signifies a such<sup>63</sup>.

If these ontological norms are not respected, many inconsistencies come about; in particular, the third man regress is brought about.

The list of ontological incompatibilities is, therefore, extended:

- To belong universally is incompatible with being substance.
- To be predicated in common is incompatible with being a this something.

Since the entity which is predicated in common cannot be interpreted as being a this something, the entity which is predicated in common must be placed on a different ontological level from the level which is peculiar to any entity which is substance. Aristotle interprets what is predicated in common as a such because what is predicated in common expresses the such, i.e., the way of being of a substance:

- a) instances of properties, on the one hand, and
- b) entities which correspond to the way of being of instances, on the other hand, should not be confused with each other within a healthy ontology 64.

The key to Aristotle's interpretation of Metaphysics Zeta 13 regarding the construction of ontology is, in our opinion, the mention of the third man argument.

derive as results from the preceding reflections of Aristotle. Likewise, we do not think that the second sentence serves as an argument for the confirmation of the validity of the first sentence. Nonetheless, since we are aware that our proposal corresponds to a minority position as regards the translation of Aristotle's text, we have decided to describe the logic of the alternative translation.

- 62 Analogies can be found between the present text and Categories 5, 3b10-23: in this last text, Aristotle exposes some elements regarding the differences between the first substance and the second substance. Aristotle attributes to the first substance the feature of being a this something and of being numerically one, whereas he resolutely denies that the second substance is a this something and numerically one. Any second substance is a poión, a quality within the category of substance.
- 63 Passages of Aristotle's works which are relevant for Aristotle's distinction between types of entities are, for example, the following: De Interpretatione 7, 17a38-17b1; Sophistical Refutations 22, 178b36-179a10; Prior Analytics I 27, 43a25-36; Posterior Analytics I 11, 77a5-9, I 24, 85b15-22; Metaphysics Beta 4, 999b33-1000a1, Beta 6, 1003a5-17, Zeta 8, 1033b19-1034a8, Zeta 15, 1039b20-27, Iota 2, 1053b9-24.
- 64 Since substance is a this something, to consider that which belongs universally as substance has the consequence of considering that which belongs universally as a this something.

The consequence of the attribution of the feature 'this something' to the entity which is predicated in common is the third man regress. In order that the third man is avoided, the domain of that which is predicated in common must be held rigidly separated from the domain of all entities which have the feature of being a this something. In general, that which is universal cannot be considered as being an instance of a property, since it cannot be counted together with the instances: it should be put in another domain of reality.

The correct interpretation of the universal is indispensable in order to avoid the third man regress. The universal cannot be considered as being an individual entity alongside the other individual entities: the universal man is not an instance of the property man. When Aristotle denies the universal the status of substance, he means, in our view, that the universal is not an instance of the property which it represents. In doing so, however, he does not aim to expel the universal from reality: he aims to introduce a second domain of reality, i.e., the domain of the such. To be a such means being the content of a property being referred to the contents of a property.

Aristotle does not aim, in our opinion, to eliminate the universal from the domain of the existing entities. He rather aims to assign the universal to a domain of reality which is not the domain of the individual entities. Therewith, Aristotle extends the domains of the existing entities:

- one domain is the domain of the individual entities, of the instances;
- the other domain is the domain of the properties as programmes, which are named by universals.

Thus, in our opinion, Aristotle's aim does not consist in avoiding a multiplication of entities when he exposes the incompatibility between universal and substance. His aim rather consists in avoiding a multiplication of individual entities, i.e., of instances of properties. If universals were considered as instances, the result would be the multiplication of individual entities. In order to avoid a multiplication of individual entities which would be caused by the mistaken interpretation of universals as instances, Aristotle states that universals are not instances. Universals do not possess the ontological status of this something; they possess the ontological status of such. Universals are not these somethings. Universals are suches.

Universals' not being instances does not imply, though, that universals do not exist at all. In our opinion, through his manoeuvre, Aristotle exclusively aims to deny that universals are instances of the properties which they represent. Aristotle avoids a multiplication of individual entities through the assignment of the universals to the right ontological place. In other words, it is, in our opinion, not the case that Aristotle regards universals as not existing. He regards universals as not being individual entities, i.e., as not being instances. He does not eliminate universals from the realm of the existing entities; Aristotle eliminates universals from the domain of the individual entities, while assigning them to another domain of existence. Reality consists of dimensions which differ from one another: in reality there

is not only the dimension of concretisation of properties. The dimension of instances is not the whole reality. When Aristotle contends that nothing of what is predicated in common is a this something, but a such, he introduces an ontological space which is peculiar to the correctly interpreted universal:

· Reality consists both of the realm of this something, i.e., of the entities which have within the ontology the position of these somethings, and of the realm of such, i.e., of the entities which have within the ontology the position of suches<sup>65</sup>.

An ontology which were not able to distinguish between entities which are a this something, on the one hand, and entities which are not a this something, on the other hand, would be an ontology which would not be able to determine what is an instance and what is not an instance. Hence, being exposed to the regress of the third man proves to be a complete condemnation for an ontology<sup>66</sup>.

65 In Metaphysics Beta 6, 1003a5-17, Aristotle states the incompatibility between the substance, on the one hand, and the universal and the common, on the other hand. In order to show this incompatibility, Aristotle expresses the correlation between the substance and the this something: substance is a this something ( $\tau \acute{o}\delta \epsilon \tau \iota$ ). All which is common – which in this context is dealt with by Aristotle as equivalent to universal - is not a this, but a such (τοιόνδε). If that which is predicated in common (τὸ κοινῆ κατηγορούμενον) were a this something and one, Socrates would be many entities, i.e., himself, man, and animal. Within this context, Aristotle is contending that the consequence of being a this something and a one implies, for any entity, to be an independent entity, i.e., an entity which is delimitated from the other entities: the himself, the man, and the animal are mutually independent entities constituting the being of Socrates.

66 In Sophistical Refutations 22, 178b361-79a10 Aristotle expresses the cause of the regress of the third man:

'Again, there is the argument that there is a third man in addition to himself and in addition to the particular men (καὶ ὅτι ἔστι τις τρίτος ἄνθρωπος παρ' αὐτὸν καὶ τοὺς καθ' ἔκαστον): for man and every common name do not signify a this something (τὸ γὰρ ἄνθρωπος καὶ ἄπαν τὸ κοινὸν οὐ τόδε τι), but a such (τοιόνδε τι), or quantity, or relation, or something of such sort. Likewise in the case of Coriscus and Coriscus the musician – are they the same or different? For, on the one hand, the one signifies a this something, on the other hand, the other signifies a such, so that it is not possible to isolate it; to isolate, though, does not cause the third man, but to grant that it is a this something (οὐτὸ έκτίθεσθαι δὲ ποιεῖ τὸν τρίτον ἄνθρωπον, ἀλλὰ τὸ ὅπερ τόδε τι εἶναι συγχωρεῖν)· for it is not possible that what man is (ὅπερ ἄνθρωπός ἐστιν) too should be a this something, as Callias is. Nor does it make any difference if one says that the isolated element is not a this something, but a quality: for there will be the one in addition to the many (ἔσται γὰρ τὸ παρὰ τοὺς πολλοὺς ἕν τι), such as, for example, man. It is clear then that it cannot be conceded that what is predicated in common of all is a this something (οὐ δοτέον τόδε τι εἶναι τὸ κοινῆ κατηγορούμενον ἐπὶ πᾶσιν), but that it must be said that it signifies either a quality, or a relation, or a quantity, or something of that sort.' The mistake which leads to the third man regress consists in considering that which is predicated in common as a this something, i.e., - in this specific case - as an instance: to consider that

Thus, we do not think that Aristotle's intention, when he affirms that that which is predicated in common is not a this something, but is a such, consists in stating that that which is predicated in common is not an element of the objective reality: it is exclusively an element of the mind classifications. In our opinion, to say that an entity is a such implies that this entity indicates the way of being of the instances. Man, as universal, indicates the way of being of the particular men. To be a such means existing on another level of reality than the level on which the entities which are a this something<sup>67</sup> exist.

## 8) No substance is present in completion in the substance

Coming to the analysis of the notion of substance, Aristotle shows that some features cannot be attributed to the substance. The notion of substance shows precise incompatibilities, as the following passage testifies:

'The issue is clear in this way too. For it is impossible that a substance consists of substances present in it in completion (ἀδύνατον γὰρ οὐσίαν ἐξ οὐσιῶν εἶναι ἐνυπαρχουσῶν [ὡς] ἐντελεχεία): for the entities which are two in completion in this way (τὰ γὰρ δύο οὕτως ἐντελεχεία) are never one in completion (οὐδέποτε εν ἐντελεχεία), but if they are potentially (δυνάμει) two, they will be one (as, for example, a line which is double certainly consists of two halves which exist potentially (δυνάμει): for the completion separates (ἡ γὰρ ἐντελέχεια χωρίζει)), so that, if a substance is one, it will not consist of substances present in it in this way too (...)' (Metaphysics Zeta 13, 1039a3–8)

The feature of substance which we can gain from this passage is the following:

 No substance consists of substances present in the substance in the condition of completion.

We gain a feature regarding completion too:

completion separates.

To possess the ontological condition of completion implies, for an entity, to be existentially independent of the other entities. An entity which is in the ontological condition of completion is circumscribed, definite, and delimitated in relation to all the other entities. To be in the condition of completion means being an entity which is completely constituted: thus, the entity which finds itself in the condition

which is predicated in common as a this something means considering the entity which is predicated as an independently existing entity, therewith bringing about an infinite multiplication of entities. An interesting article on the quoted passage from the *Sophistical Refutations* is the article of Nicholas P. White, *A Note on Ěκθεσις* (Phronesis, Vol. XVI, No. 2 (1971), pp. 164–168): in his investigation, White points out that the cause of the regress of the third man does not consist in isolating that which is predicated in common, but in considering that which is predicated in common as a this something.

67 We refer to *Metaphysics Beta* 6, 1003a5–17 for the opposition between τόδε τι and τοιόνδε; we refer to *Metaphysics Zeta* 8, 1033b19–1034a8 for the opposition between τόδε τοιόνδε and τοιόνδε.

of completion is independent of the other entities. If an entity is in the condition of completion, it has reached the realisation, so that it is separated from the other entities.

Connected to the feature of completion is, therefore, the feature of separation. The presence of completion in a substance brings about the separation of the substance from the other substances. Aristotle mentions the case of the line: a line can be considered as being composed of two lines potentially. If the two lines are in the ontological condition of completion, they are independent; they cannot be regarded as being simply potential parts of the line. Thus, we can see that to be separated is constitutively connected to the condition of completion, whereas the ontological condition of potentiality is - at least as regards the examples of the line -, to be connected to an ontological condition of not being separated.

Coming back to the analysis of the features belonging to the universals, the attribution of completion to any universal entity must be refused: no universal can be an entity which finds itself in the condition of completion, for in that case it would also exist independently, and it would be separate. No universal can then be considered as an entity which is present in the condition of completion in the entities of which it is predicated.

#### 9) Metaphysics Zeta 14: incompatibility between idea and genus

We shall now direct our attention to some passages contained in Metaphysics Zeta 14: this chapter too can deliver essential elements as regards Aristotle's project of emendation of ontology. The central problem of the chapter consists in the analysis of the consequences which occur when the genus is construed as an idea: the genus is regarded as an entity which is numerically one. The chapter Metaphysics Zeta 14 is mainly dedicated to the analysis of the incompatibility between genus and idea. A genus cannot have the features of an idea; if a genus had the features of an idea, it would have incompatible properties: therefore, it could not be accepted in a healthy ontology. Aristotle exposes his interpretation of ideas:

- Ideas are substances and separate.
- Ideas have the ontological constitution (structure) of this something.
- Ideas are ontologically complete entities68.

The chapter is, therefore, relevant in order to understand some elements of Aristotle's way of considering ideas. The incompatibility between genus and idea is exposed throughout the chapter. Through this investigation, it becomes clear what features can never be attributed to a genus. Whatever entity performs the function of the genus, this entity can never be a separate entity, a this something and one in

<sup>68</sup> The attribute 'complete' means in this context that the entity to which the attribute belongs is complete in all attributes. The idea 'animal', for example, should be complete in all attributes, so that it could not be at the same time two-footed and many-footed, as Aristotle explains in the passage of *Metaphysics Zeta* 14 which we are going to quote.

number. Certain requirements must be met by any entity performing the function of the genus: Aristotle, through his investigation, provides the framework of the genus qua genus. Thanks to this chapter several elements can be found for understanding Aristotle's ontological project. The logic of the arguments seems to be the following:

- The genus is interpreted as a form.
- If the genus is the same for the different species which belong to the genus, this interpretation of the genus will not function since the genus should possess mutually incompatible properties.
- If the genus is not the same for the species, this interpretation of the genus will likewise not function since a multiplication of genera would come about.

Therefore, the genus cannot be interpreted as a complete entity. The genus is an incomplete entity as regards the characteristics which compose the genus: it must be completed through the characteristics which determine the particular species. These characteristics mutually differentiate the species. The genus is common to the species since it is incomplete: the species represent the last step as regards the completion of the characteristics which will then be concretised by the particular instances of the species.

'Thus it is clear from these very considerations what occurs also to those who say both that the ideas are separate substances (τοῖς τὰς ἰδέας λέγουσιν οὐσίας τε χωριστὰς εἶναι), and at the same time make the form (τὸ εἶδος) consist of the genus (τοῦ γένους) and the differentiae (τῶν διαφορῶν). For if the forms (εἴδη) exist, and the animal is present in the man and the horse, it  $^{69}$  is either one and the same in number or different (ήτοι εν καὶ ταὐτὸν τῷ ἀριθμῷ ἐστὶν ἡ ἔτερον); for it is clear that it is one in formula: for he who states the formula delivers the same formula in each case (τῷ μὲν γὰρ λόγω δῆλον ὅτι ἔν· τὸν γὰρ αὐτὸν διέξεισι λόγον ὁ λέγων ἐν ἑκατέρω). Therefore, if there is a man himself who is a this something and separate (αὐτὸς καθ' αὑτὸν τόδε τι καὶ κεχωρισμένον), it is necessary that also the elements of which he consists such as, for example, the animal and the two-footed should signify a this something and should be entities existing separately and substances (τόδε τι σημαίνειν καὶ εἶναι χωριστὰ καὶ οὐσίας), so that animal too must be of this sort. Therefore, if that which is in the horse and in the man is one and the same, as you are one and the same with yourself (εί μεν οὖν τὸ αὐτὸ καὶ εν τὸ ἐν τῷ ἴππω καὶ τῷ ἀνθρώπω, ὥσπερ σὑ σαυτῷ), how will that which is in the entities which exist separately  $^{70}$  be one ( $\pi \widetilde{\omega}$ ς τὸ ὂν ἐν τοῖς οὖσι χωρὶς εν ἔσται), and why will this animal not exist also separately from itself<sup>71</sup> (καὶ διὰ τί οὐ καὶ χωρὶς αὐτοῦ ἔσται τὸ ζῷον τοῦτο)? Furthermore, if it will participate in two-footed and many-footed, something impossible occurs (ἔπειτα εἰ μὲν μεθέξει τοῦ δίποδος καὶ τοῦ πολύποδος, ἀδύνατόν τι συμβαίνει), for contrary attributes will belong at the same time to it although it is one

<sup>70</sup> Or: "in the entities which are separate".

<sup>&</sup>lt;sup>69</sup> I.e., the animal.

<sup>71</sup> Or: "why will this animal not be also separate from itself".

and a this something (τάναντία γὰρ ἄμα ὑπάρξει αὐτῷ ἐνὶ καὶ τῷδέ τινι ὄντι); if it does not, what is the sense when one says that the animal is two-footed ( $\delta'\pi\sigma\nu\nu$ ) or has feet ( $\pi \epsilon \zeta \acute{o} v$ )? But perhaps these are put together and are in contact or are mixed: but all these<sup>72</sup> are absurd. But it is different in each species: then there will be practically an infinite number of entities whose substance is animal; for it is not by accident that man is derived from animal. Further, animal-in-itself will be many...' (Metaphysics Zeta 14, 1039a24-b9)

These are, in our opinion, the main points of this passage:

- The idea is considered as a substance.
- The idea is considered as an entity which exists separately.
- The idea is considered as an entity which is one in number<sup>73</sup>.
- The idea is considered as a this something.
- The idea as a species is interpreted as an entity made up of genus and differences.
- Either the idea 'animal' will be one in number, or there will be a plurality of ideas of animal.
- Man himself is separate: consequently, animal and biped must also be a this something, must exist separately, and must be substance.
- Animal is present in horse and man: consequently, animal cannot be one in num-
- Animal is present in horse and man: consequently, it must be separate from itself.
- Animal is present in horse and in man: consequently, if animal is interpreted as a complete entity, animal must have mutually incompatible properties such as being two-footed and being many-footed.

Animal would have to be the genus of the species man and of the species horse. Since man and animal have mutually incompatible properties, the consistency of the ontological system requires the existence of two genera of animal. The existence of two ideas of animal destroys the unity of the idea: it thus negates the reason for introducing the ideas. The idea is introduced into the ontological domain to find an explanation concerning the ground why an entity or a plurality of entities has a determinate property<sup>74</sup>. This entity must be one since one and only one entity must be the factor due to which a plurality of entities possesses a determined

<sup>&</sup>lt;sup>72</sup> I.e.: all these hypotheses.

<sup>73</sup> According to this passage, Aristotle seems to interpret Plato's idea as an entity which is one in number.

<sup>74</sup> In Phaedo 100c3-e4, ideas are introduced in the ontology in order to justify and explain the ground why a plurality of entities has the same property: ideas guarantee the uniformity of cause due to which a plurality of entities has the same property. If more than an idea is needed in order to explain the ground why a plurality has a property - as it happens in the case of animal –, then the very ground for introducing ideas is contested; ideas cannot give a uniform explanation - at least in all cases in which ideas correspond to genera -.

property. In case that two or more ideas are assumed to exist, the unity of explanation disappears: a plurality of ideas corresponding to the same property arises. In the specific context of *Metaphysics Zeta* 14, a plurality of ideas of animal arises<sup>75</sup>.

We could express this through the following scheme:

- i. The genus has the features of the idea.
- ii. Either the genus possesses mutually incompatible properties, or a plurality of genera emerges.
- iii. Both constellations are wrong: hence, the genus cannot possess the features of the idea.

Aristotle's criticism of the position which supports the existence of ideas consists in showing that both if the idea, which should correspond to a property, possesses mutually incompatible properties, and if there is a plurality of ideas, the ontological scheme of ideas becomes useless<sup>76</sup>.

As regards the interpretation of the genus, the genus is to be completed through the differences up to the species. It cannot be thought out as an idea, i.e., as a complete entity.

#### 10) Metaphysics Zeta 16: no substance consists of universals

We are now going to consider some passages of the chapter *Metaphysics Zeta* 16. These passages can be functional to the confirmation of some contents which we have already met in the previous paragraphs:

'Since the one is said in the same way as that which is (ἐπεὶ δὲ τὸ εν λέγεται ὅσπερ καὶ τὸ ὄν), and the substance of that which is one is one (καὶ ἡ οὐσία ἡ τοῦ ἑνὸς μία), and entities whose substance is numerically one αre numerically one (καὶ ὧν μία ἀριθμῷ εν ἀριθμῷ), it is clear that it is not possible that either the one or that which is should be the substance of the entities as it is impossible that being an element or being a principle should be<sup>77</sup> ...' (Metaphysics Zeta 16, 1040b16–19)

One and that which is cannot be the substance of the entities: if they were the substance of the entities, since they are common to many entities, and since entities whose substance is numerically one are numerically one, there would be a reduction to one entity. The fact that something which is numerically one is the substance of a plurality of entities cannot be accepted since, if an entity which is numerically one is the substance of a plurality of entities, all entities whose substance

<sup>&</sup>lt;sup>75</sup> It could be said that both the hypothesis of a genus corresponding to the same property (i.e., being animal) and the hypothesis of the plurality of genera also corresponding to the same property (i.e., being animal) must be rejected.

<sup>&</sup>lt;sup>76</sup> See *Topics Zeta* 6, 143b11–32 for a similar argument against ideas.

<sup>&</sup>lt;sup>77</sup> A similar argument is exposed by Aristotle in *Metaphysics Iota* 2, 1053b16–24.

is numerically one would be reduced to that entity78. Aristotle is not searching for the reduction of reality to few principles: at least as regards the formal principle, the essence of the entities should distinguish the entities from each other: the difference between entities would be therewith lost.

Therefore, of these entities that which is  $(\tau \grave{o} \mathring{o} v)$  and one  $(\grave{e}v)$  are more substance than the principle, the element and the cause, but not even these are substance, since nothing else which is common is substance (εἴπερ μηδ' ἄλλο κοινὸν μηδὲν οὐσία); for substance does not belong to anything but to itself and to that which has it, of which it is substance (οὐδενὶ γὰρ ὑπάρχει ἡ οὐσία ἀλλ' ἢ αὐτῆ τε καὶ τῷ ἔχοντι αὐτήν, οὖ ἐστίν οὐσία)<sup>79</sup>. Furthermore the one<sup>80</sup> cannot be in many places at the same time (τὸ εν πολλαχῆ οὐκ ἂν εἴη ἄμα), but that which is common is present in many places at the same time (τὸ δὲ κοινὸν ἄμα πολλαχῆ ὑπάρχει), so that it is clear that no universal exists separately in addition to the particular entities 81 (500 m)ότι οὐδὲν τῶν καθόλου ὑπάρχει παρὰ τὰ καθ' ἔκαστα χωρίς).' (Metaphysics Zeta 16, 1040b21-27)

The following ontological norms can be extracted from the passage:

<sup>78</sup> Aristotle refuses the thesis that being and unity are the substance of the entities in Metaphysics Beta 4, 1001a4-b25. In general, the substance of something cannot be functional to the reduction of the plurality to few principles.

<sup>79</sup> In our opinion, we have here the two values of substance which we mentioned in our paragraph 'Definitions': we can see that in this passage of Metaphysics Zeta 16 Aristotle is mentioning the substance as substance of something, on the one hand, and the entity which possesses this substance, on the other hand. We interpret these entities in the following way: a particular man is, for example, the substance which possesses the substance, whereas the soul of the particular man is the substance of the particular man. Substance can exclusively belong to two entities which are not independent of each other. The substance of something belongs exclusively to itself, since, for example, qua substance, it cannot be referred to entities which are not substances. The substance of something belongs then exclusively to the entity which possesses it, since, for example, the soul of Socrates as substance of Socrates cannot belong to any other entity than to Socrates himself. The soul of Socrates cannot be the soul of another entity; it is so to speak circumscribed to the entity in which it is active. The passage is similar to Metaphysics Zeta 13, 1038b9-10 in which the substance is described as being peculiar to a determined entity and as not belonging to another entity.

<sup>80</sup> I.e.: that which is one.

<sup>81</sup> Aristotle's way of proceeding represents a reversal in comparison to other ways of interpreting the universal. For example, in Metaphysics Beta 3 Aristotle exposes an interpretation of the universal which contends that the existence of something which is predicated universally and is predicated of all entities legitimates the assumption of the existence of an entity in addition to the particular entities: according to this interpretation, the universal, precisely because it is universal, should exist in addition to the particular entities. Aristotle supports the opposite thesis: the universal, precisely because it is universal, cannot exist in addition to the particular entities.

- Nothing which is common is substance. Being common and being substance are mutually incompatible.
- Substance exclusively belongs to itself and to the entity which has it, of which substance is the substance. It cannot be interpreted as a common entity.
- That which is one cannot be in many places at the same time; an entity which is numerically one, i.e., which is an instance cannot be present in many places at the same time.
- That which is common is present in many entities at the same time.

No universal exists separately from the individual entities since the universal is not a separate entity.

If the universal is numerically one, something which is one is, as a consequence of its being universal, in many places at the same time. The features which define the universal are incompatible with being numerically one since to be numerically one is interpreted by Aristotle as a feature of instances and exclusively of instances. If the universal existed apart from the particular entities the universal would be numerically one: the universal itself would be an instance. If the universal had this feature, something which is one would be in many places at the same time since the universal is common. This situation cannot be accepted in a healthy ontology: therefore, the universal does not exist as a particular entity in addition to the further particular entities. A healthy ontology ought to be able to assign particular entities to a domain of entities, on the one hand, and universals to another domain of entities, on the other hand, thus showing that it is able to recognise that the two domains are different from each other.

Aristotle then analyses the false identification of the imperishable entities which has been committed in other interpretations of reality:

'But those who say the forms exist (τὰ εἴδη λέγοντες), in one respect say rightly, when they separate them (χωρίζοντες αὐτά), since they are substances; but in another respect they do not say rightly, because they say that the one over many is a form (τὸ εν ἐπί πολλῶν εἶδος λέγουσιν). The reason is that they cannot explain what the imperishable substances of this sort are in addition  $to^{82}$  (παρὰ) the particular and sensible substances: therefore, they make them the same in form as the perishable entities (for we know these), man himself and horse itself, adding to the sensible entities the word 'itself'. Yet even if we had not seen the stars, nonetheless, I think, would exist eternal substances in addition to (παρὰ) those which we have known, so that now too if we do not know what they are, it is still in like manner necessary that some should certainly exist.' (*Metaphysics Zeta* 16, 1040b27–1041a3)

Entities which are one over many cannot be forms if forms are substances. They cannot be forms since any entity which has the constitution of being one over many cannot be a substance. The one over many is as such a common entity, whereas the substance is never a common entity. The mistake which those who

<sup>82</sup> I.e.: which exist in addition to.

support the existence of separate forms commit consists in considering the one over many as an entity which, in so far as the one over many is a form and, therefore, is substance, can be separate. Aristotle's argumentation seems to function in the following way:

- i. If form is substance, form is separate.
- The one over many is common.
- That which is common cannot be separate; it cannot exist separately in addiiii. tion to the particular entities.
- iv. The one over many cannot be separate.
- Therefore, the one over many cannot be a form.

There has been a false identification of entities: those who support the existence of forms have identified the forms with the imperishable entities83. Those who support the existence of forms have believed that the eternal entities were the entities such as man himself and horse himself. Imperishable entities which exist apart from the individual and sensible substances exist but are not the forms: the imperishable entities are the entities such as the stars. Aristotle concludes the chapter with the passage which we quoted at the very beginning of our investigation:

'Therefore, it is clear both that nothing which is said universally is substance (οὔτε τῶν καθόλου λεγομένων οὐδὲν οὐσία) and that no substance consists of substances (οὔτ' ἐστὶν οὐσία οὐδεμία ἐξ οὐσιῶν).' (Metaphysics Zeta 16, 1041a3-5)

As anticipated at the beginning of the present inquiry, we can observe that Aristotle states ontological norms:

- That which is said universally is no substance.
- No substance consists of substances.

#### 11) Results

Aristotle's observations show that, if there is no clarity regarding universal and substance, the whole ontology is compromised, since universal and substance are central to the organisation of ontology. The features belonging to substance and universal must be correctly interpreted. The following features of substance and universal, and the following incompatibilities between substance and universal have been pointed out by Aristotle:

- That which is universally said is not substance (Metaphysics Zeta 13, 1038b8–9).
- The universal is not the substance of an entity (Metaphysics Zeta 13, 1038b9–11).
- The substance of an entity is peculiar to that same entity and does not belong to any other entity (Metaphysics Zeta 13, 1038b9-11).
- The universal is common to the entities to which it belongs (Metaphysics Zeta 13, 1038b9-12).
- The universal is that which belongs to several entities (Metaphysics Zeta 13, 1038b11-12).

<sup>83</sup> For a similar strategy of argumentation see Metaphysics Beta 2, 997a34-b12.

- The substance is not said of a subject, whereas the universal is always said of a subject (*Metaphysics Zeta* 13, 1038b15–16).
- The universal is not present in the essence (*Metaphysics Zeta* 13, 1038b16–23).
- Substance cannot consist of quality (*Metaphysics Zeta* 13, 1038b24–25).
- Nothing of what belongs universally is substance (*Metaphysics Zeta* 13, 1038b35).
- Nothing of what is predicated in common means a this something (*Metaphysics Zeta* 13, 1038b35).
- That which is predicated in common means a such (*Metaphysics Zeta* 13, 1038b35–1039a2).
- Substance does not consist of substances which are present in it in completion (*Metaphysics Zeta* 13, 1039a3–8, 1039a16–17).
- No substance consists of the universals, since the universal means a such and not a this something (*Metaphysics Zeta* 13, 1039a14–16).
- The entities whose substance is one are one (*Metaphysics Zeta* 16, 1040b17).
- One and being are not the substance of the entities (*Metaphysics Zeta* 16, 1040b21–22).
- Nothing which is common to many entities is substance (*Metaphysics Zeta* 16, 1040b23).
- Substance belongs to itself (*Metaphysics Zeta* 16, 1040b23–24).
- Substance belongs to that which has it, of which it is substance (*Metaphysics Zeta* 16, 1040b23–24).
- No universal exits separately from the particular entities (*Metaphysics Zeta* 16, 1040b26–27).
- Nothing which is said universally is substance (*Metaphysics Zeta* 16, 1041a3–4).
- No substance consists of substances (*Metaphysics Zeta* 16, 1041a4–5).

## 12) Appendix

We do not agree with the positions supporting the presence of a caesura between Aristotle's interpretation of substance in the *Categories*, on the one hand, and Aristotle's interpretation of substance in the central books – *Zeta*, *Eta*, and *Theta* – of the *Metaphysics*, on the other hand. The interpretations which maintain that there is a caesura in Aristotle's conception of substance contend that the value of substance is, in the *Categories*, the biological entity such as man whereas, in their view, the primary value of substance in the *Metaphysics* is the form of the individual (biological) entity. Within these interpretations, a shift regarding the entity to which the primary value of substance is to be attributed comes about between *Categories* and *Metaphysics*: the value of primary substance has shifted from the value of individual entity to the value of form of the individual entity. In our opinion, the value of substance as individual entity belonging to the biological domain is never abandoned by Aristotle as a primary value for substance: it remains a primary value for substance.

Our interpretation is furthermore different both from the interpretations

which support the being universal of forms and from the interpretations which maintain that forms are particular. On the one hand, we believe that the forms of the instances – such as the form of the particular man – are always particular. On the other hand, in our opinion, the contents of the forms, since they hold of all the instantiated forms, are universal. Since all which is an instance is particular, the instantiated forms too are particular: for example, the form of Socrates is particular since it belongs to Socrates and cannot belong to another entity. This point becomes evident if we consider that the form of Socrates is Socrates's soul: Socrates's soul cannot belong to another entity, since Socrates's soul is the biological principle which directs the biological development of Socrates. Since the soul is active in Socrates, the soul cannot be the soul of something else. Since Aristotle considers the soul as an active principle directing the ensouled entity, he cannot regard the soul as something which belongs to other entities. The content of the form - for example, the programme of development of the biological entity contained in the soul - is common to all the entities which have the same form: since this content holds universally of all the instantiated forms, this content is universal. The forms of the entities which we meet in our average experience are always particular, since they are instances – for example, the form of Socrates is a particular form since it is an instance -. The forms as programmes are common to all their instances: hence, they are universal – for example, the form of man is common to all men: therefore, it is universal -.

Consequently, we do not think that adopting the strategy of interpretation on the basis of which Aristotle's forms should be either particular or universal is the right way to interpret the question of the features of the forms. In our opinion, a different strategy of interpretation could and should be adopted. We do not need to adopt the point of view that forms can and must be either particular or universal. The determination of the being particular or universal of the forms depends on the level of reality which is being considered. Inasmuch as they are instances, forms are particular. The form of a particular man is particular (for example, the soul of Socrates is particular; it cannot be the soul of two or more entities). Inasmuch as they are programmes which direct the life development of the entities belonging to the corresponding biological species, forms are universal: every instance will have a development which holds universally for all instances of the same biological property – the examples can be extended to forms of artefacts too -.

We refer to Metaphysics Zeta 8, 1034a5-9 for a passage in which Aristotle asserts the identity in form of Socrates and Callias. We also refer to Metaphysics Lambda 5, 1071a20-29 for Aristotle's distinction between the numerical difference in matter, form, and efficient cause of the entities belonging to the same species, on the one hand, and the identity in the formula of these entities, on the other hand. Furthermore, we refer to Metaphysics Mu 10, 1087a15-25 for Aristotle's distinction between the levels of reality of universals and individuals, on the one hand, and

for Aristotle's interpretation of the particular entity as the instance of something, on the other hand.

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