Gianluigi Segalerba

IEF – Instituto de Estudos Filosóficos, Faculdade de Letras, Universidade de Coimbra

Segalerba, G., Features of Ontology in Aristotle, in: «Revue Roumaine de Philosophie», Vol. 64, Issue 1, January–June 2020, pp. 39–71.

FEATURES OF ONTOLOGY IN ARISTOTLE^{*}

GIANLUIGI SEGALERBA

Abstract. In my contribution, I deal with some aspects concerning the textures, which, in my opinion, represent the bearing structures of Aristotle's ontology.

Throughout my investigation, I show that, within Aristotle's ontology, the basic status of any individual/particular entity consists in its being an instance of a property or of a complex of properties: individual/particular entities are, constitutively, concretised properties. Neither bare entities, nor entities which could be neutral to all their properties, are admitted into Aristotle's ontology; at least some properties represent the very framework of the individual/particular entities. Hence, essences do exist. Aristotle's interpretation of individual/particular entities is an immediately essentialist one.

I show thereafter the presence, within Aristotle's ontology, of features which constitutively determine the status of substance and of universal. The complex of the features related to substances and to universals implies the existence of ontological rules making up the framework of any substance as such and of any universal as such. These ontological rules precede the properties belonging to the particular concrete substances as members of a particular species or of a particular genus. Among the ontological rules which govern substances and universals, the rules stating the incompatibility between substance and universal deserve particular attention, since any transgression committed against these rules can provoke the collapse of the whole ontology.

Gianluigi Segalerba ⊠ aka – Arbeitskreis Kulturanalyse, Universität Wien / working group cultural analysis, University of Vienna, Vienna, Austria; e-mail: gianluigisegalerba@gmail.com

^{*} I would very much like to thank Magistra Kathrin Bouvot, MA BA BA, for her valuable suggestions, her careful corrections, and her inestimable support. I wish very much to thank Professor Cornel-Florin Moraru, Professor Dragoş Popescu, and the whole editorial board of the Revue Roumaine de Philosophie for letting me participate in the project "In search of a new Aristotle – Ethics, ontology and metaphysics" as a contributor and guest co-editor. The responsibility for the interpretation which I expose in my paper is, of course, mine alone.

Rev. Roum. Philosophie, 64, 1, p. 39-71, București, 2020

My analysis ends with the description of some facets regarding the role of the essence within the biological field. For this purpose, the soul as essence of biological entities is described in its function as principle of development of the living entities. I base my inquiry on passages taken from the *Metaphysics Mu* and *Zeta*, the *Posterior Analytics*, the *De Caelo*, the *Categories* and the *De Anima*.

Keywords: Aristotle; instance; Categories; Metaphysics; substance

1. INTRODUCTION

In my contribution, I shall analyse aspects of those ontological dispositions which I define as the bearing structures of Aristotle's ontology. Examples of bearing structures of Aristotle's ontology are, in my opinion, the categories and their own features, the relations holding between the different categories, the realm of particulars/individuals and the realm of universals, the principle of contradiction¹, the notions of essence, form, matter, potentiality, actuality, completion, the status represented by "being this something" or by "being this such", the status represented by "guality/such"², the connections, the implications, the compatibilities and the incompatibilities holding between the bearing structures of the ontology, and so on.

The complex of the bearing structures of ontology corresponds to the whole feature system of Aristotle's ontology, since it constitutes foundations, rules, and prohibitions governing Aristotle's ontology; it is the very framework of Aristotle's ontology. The framework of ontology³ precedes the actual appearance of the concrete entities of the average reality like men⁴, colours⁵, lengths⁶ and so forth. At the level of the framework, it does not matter which (kinds of) entities concretely exist; it does matter, though, which structures exist before the actual appearance of these entities, since these structures constitute the whole texture pre-existing to the appearance of the concrete entities. In this framework, the concrete entities find their own place. The concrete entities follow the rules determining this framework space.

The correct determination of the framework and of the features belonging to the elements of the framework is vital for the ontology. Any transgression

⁶ Concrete examples for quantities.

¹ As regards the global strategy of my interpretation of the principle of contradiction, I would like to state that I do not consider the principle of contradiction as an exclusively logical principle. In my opinion, the principle of contradiction is an ontological principle, too. For further details on my interpretation of the principle of contradiction, I refer to my work *Ohne Satz vom Widerspruch keine Entität. Der Satz vom Widerspruch als Strukturformel der Realität* (The Journal of Ancient Philosophy, Vol 5, No 2 (2011), pp. 1–57).

² I shall then illustrate the ancient Greek expressions corresponding to some of these words.

³ Aristotle's framework ontology could, in my opinion, be defined also as a formal ontology. In his investigations, Aristotle individuates and discovers the forms of ontology, the basic structures of ontology, i.e. those textures without which ontology as such simply does not exist and cannot exist. I shall not use the expression "formal ontology" in this draft, however, since this expression could become a source of confusion for the notion of Aristotle's forms.

⁴ Concrete examples for substances.

⁵ Concrete examples for qualities.

whatsoever perpetrated against the rules of the framework ontology immediately has irremediable consequences for the ontology itself: for example, an interpretation of the entities which belong universally as though they were substances, and of the entities which are predicated in common as though they had the status of this something ($\tau \acute{O} \delta \epsilon \tau \iota$), directly leads to the Third Man regress and, therewith, to the collapse of the whole ontology⁷. Hence, ontological prudence, circumspection, and caution are indispensable attitudes in the determination of the features of the bearing structures of ontology. Aristotle's very watchful way of investigation witnesses his own being completely aware that one false step within this kind of analysis is, always – unfortunately – a false step too much.

In the present work, I shall concentrate my attention on features which, in my opinion, Aristotle is pointing out as constitutive for the status of particulars/ individuals, of substances, and of universals. The cardinal feature of this section of Aristotle's ontology consists, in my opinion, in the fact that Aristotle considers every concretised entity⁸ as an instance of a property or, put differently, as an instantiated property⁹: universal properties are individualised in their instances. No individual entity has only the status of being individual; it is always an individual "such", an individual "something". Through this interpretation of the individual entities, Aristotle finds, in my opinion, the way of relation, that is, he finds a kind of mediation between particular/individual and universal in the reality. I shall then illustrate Aristotle's process of differentiation between the realms of reality consisting, respectively, of entities having the status of this something ($\tau \delta \epsilon \tau \iota$, i.e. numerically one entities), and entities having the status of quality ($\pi o i \dot{o} v$, i.e. not numerically one entities). The next subject of analysis will be the incompatibility holding between entities that belong universally and entities that are predicated in common, on the one hand, and entities having the status of substance and of $\tau \delta \epsilon \tau_1$, on the

⁷ See *Metaphysics Zeta* 13, 1038b34–1039a3. The Third Man is mentioned by Aristotle in this context as the direct consequence of a false interpretation of the entities which belong universally and of the entities which are predicated in common. The Third Man regress is not simply a problem for an ontology. The Third Man regress means the destruction of ontology, since it produces an infinite multiplication of individual entities whenever a predication of a property referred to a plurality of entities takes place.

⁸ With the concept "concretised entities" I mean the entities making up the average reality: individual men, individual trees, individual horses.

⁹ Everything which is present in the concrete reality is individual. Any living entity, for example, is individual; there is no universal living entity. The concrete reality is composed exclusively of individual, particular entities. The question is whether these entities are, as to their own ontological status, exclusively individual. In my opinion, for Aristotle every individual entity is an "individual something" or an "individual such" ("something" and "such" represent properties). In particular, for a biological entity, to be is to be the instance of a biological property corresponding to a biological species or to a biological genus. Besides, the question is whether, in Aristotle, the realm of the concrete reality exhausts the whole reality. I believe that this is not the case; the realm of reality is made up, for example, both of the instances of properties (the individual man) and of the universal properties (being man) of which the individual entities are instances. Properties and the connections between properties entail laws governing the manifestations peculiar to the different instances.

other hand: this incompatibility will bring about, as immediate consequence for all the positions which do not respect this incompatibility, the Third Man regress. Besides, I shall expose aspects of the ontological rules and ontological prohibitions originating from the distinctions between realms of reality. A short investigation on the feature of essence (as soul) in the biological world as the directing factor of every life aspect of the living entities will then close my inquiry.

2. CRITERIA

In this paragraph, I would like to describe the main principles of my interpretation of Aristotle's ontology. Moreover, I would like to illustrate my own translation of some bearing concepts of Aristotle's ontology:

- a. In this text the term "particular" and "individual", when they refer to the realm of the instances and of the numerically one entities, are reciprocally interchangeable.
- b. In this text with "rule" or "ontological rule" I mean the regulations governing, in Aristotle, the bearing structures of ontology, their features, their connexions, compatibilities and incompatibilities. Examples of rules are "the substance of each entity is the substance peculiar to each entity, which does not belong to any other entity" (*Metaphysics Zeta* 13, 1038b10), or "none of the entities that belong universally is substance" (*Metaphysics Zeta* 13, 1038b35), or "no substance is compounded of substances" (*Metaphysics Zeta* 16, 1041a4–5).
- c. In this text with "law" I mean a regulation governing concrete entities. Examples of laws are "every triangle has its angles equal to two right angles" (*Metaphysics Mu* 10, 1086b35–36), or "every man is animal" (*Metaphysics Mu* 10, 1086b36–37).
- d. In this text, the ancient Greek word "o $\dot{\upsilon}\sigma\dot{\iota}\alpha$ " will be translated with "substance".
- e. In this text, the ancient Greek expression " $\tau \acute{0}\delta \epsilon \tau \iota$ " will be translated with "this something"¹⁰. I interpret the first part of the expression, $\tau \acute{0}\delta \epsilon$, as a demonstrative pronoun, the second part, $\tau \iota$, as the indefinite pronoun representing the common name like "man" or "horse" which corresponds to properties such as being man or being horse¹¹. The $\tau \iota$ represents a kind of

¹⁰ For interpretations of the expression "τόδε τι", I deeply recommend the article of J. A. Smith, "Tóde ti in Aristotle" and the commentary of David Bostock, pp. 83–85. Smith reconstructs the expression in different ways and opts for a different interpretation from the interpretation I personally propose.

¹¹ It ought to be said that the expression " $\tau \acute{0}\delta \epsilon \tau \iota$ " does not always have this meaning. See, for example, *Metaphysics Zeta* 4, 1030a1–7, where the status of $\tau \acute{0}\delta \epsilon \tau \iota$ is opposed to the status of $\ddot{\alpha}\lambda\lambda \circ \kappa \alpha \tau$ ' $\ddot{\alpha}\lambda\lambda \circ \upsilon$ expresses the status of an entity which is compounded of categorically mutually different components, as it is the case of white man (which is compounded of substance and quality), whereas entities having the status of $\tau \acute{0}\delta \epsilon \tau \iota$ are not compounded of categorically mutually different components.

variable for the property; $\tau \acute{o} \delta \epsilon$ attests the individualisation of the property in the instance. The expression $\tau \acute{o} \delta \epsilon \tau \iota$ in the whole, as regards the passages taken into consideration for the present analysis, refers to an individual entity as an instance of something: it depicts the fundamental feature of the individual entity. The term which corresponds to the $\tau \iota$, to the general property, in case of biological entities, enables the identification of an individual entity as belonging to a species or to a genus, thus distinguishing this individual entity from other individual entities either numerically, if the entities belong to the same species, or specifically, if the entities belong to the same genus, or generically, if the entities do not belong to the same genus. Through the expression corresponding to the $\tau \iota$ (for example, "man"), the entity can be considered, identified, and distinguished as an entity delimitated in itself from the rest of the reality. Only by virtue of the definition referred to through the $\tau \iota$ can an individual entity be differentiated from other entities as an instance of a determined property.

- f. In this text, the ancient Greek expression "ἐντελέχεια" will be translated with "completion"¹².
- g. In this text, the ancient Greek expression "ἐνέργεια" will be translated with "actuality".
- h. In this text, the ancient Greek expression "τὸ τί ἦν εἶναι" will be translated with "essence".
- i. Property is, within this study, universal property. An example of a universal property is the universal biological property "being man"¹³, which corresponds to a universal biological programme, i.e. a programme for realisation and life development of the instances, which holds of all its instances and which is not, as such, an instance¹⁴. Examples of such properties are the mentioned property "being man", or the property "being horse", as regards properties corresponding to species in these cases, to the species "man" and to the species "horse" –,

¹² The decision regarding the translation to adopt for the term "ἐντελέχεια" was not an easy one to take. In the concept "ἐντελέχεια", a plurality of factors is, in my opinion, contained. The term "ἐντελέχεια" means, in general, the realising factor of an entity. For example, the soul of any biological entity is defined as "ἐντελέχεια", since the soul is the factor of the individual which gives life to the whole individual and which directs the development of the whole individual. Hicks (p. 49; p. 51), Ross (p. 166–167), and Hamlyn (p. 8–9) translate "ἐντελέχεια" with "actuality". In his commentary on *De Anima*, Ross, nonetheless, speaks of the possibility of translating "ἐντελέχεια" with "completion" (see p. 167). I decided to adopt the translation "completion", since I think that the function of the soul consists in its bringing to completion, i.e. to the realisation of all life manifestations, the entity of which the soul is the realising factor. I believe, however, that the expression "ἐντελέχεια" is difficult to translate with only a word (also Ross points out the difficulty to translate the concept; see p. 167).

¹³ I use for any property the expression "being" followed by the name of the property like, 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, in my own use of them, represent a specific or a generic universal.

¹⁴ Of course, it can be instantiated in the particular living entities.

and the property "being animal", as regards properties corresponding to the genus "animal".

- j. Aristotle considers, in my opinion, all the biological properties as properties belonging to reality (i.e. they do not correspond to mere instruments of classifications invented by speaking subjects). The property "being man" exists, even though it does not exist at the same ontological level as the ontological level at which the instances of this property exist¹⁵.
- k. As regards the biological world, Aristotle sees, in my opinion, a world of instantiated properties. Aristotle considers the reality of the individual entities as a dimension of concretised essences. Biological properties like "being man" have a determined content, which, if instantiated, will give rise to an individual with such and such faculties. The content of the biological properties is determined; any instance of a biological species will have the faculties and life development which are dictated by the biological properties. These properties individuate and differentiate the biological species from each other. There is no change and no evolution in the content of the properties like "being man" is identically transmitted through the generation process¹⁶.
- 1. The way of existence of the individual biological entities consists in instantiating this or that biological complex of properties.
- m. The way of existence of any biological property consists in representing a programme of development. The complex of biological properties belonging to an individual entity will build the individual entity itself during the whole life of the individual entity.
- n. Any biological property exists as a member of the set including all the biological properties which, all together, compose the biological world. Aristotle's reference to the eternity of biological species and genera makes me think that he considers the biological world as a given field, a field which is already complete. Hence, no new kind of biological species and biological

¹⁵ By using the concept "property" within my paper, I do not include and do not refer to fictitious properties. The properties that I consider are properties belonging to the objective reality. These properties exist independently of their being acknowledged, or of their being thought, or of their being known by a (thinking, speaking, knowing) subject; this kind of properties exists independently of whichever subject. Biological laws are composed of universal properties.

¹⁶ See, on this subject, the interesting observations of Klaus Oehler in his book *Ein Mensch zeugt einen Menschen. Über den Mißbrauch der Sprachanalyse in der Aristotelesforschung*. Vittorio Klostermann, Frankfurt am Main, 1963 (see especially pp. 37–65). The programme of life development of the living entity, under normal circumstances, is determined; the contents of development are fixed. Like any ontological law, biological laws are not biological entities; they are biological structures governing the life aspects of the biological entities. In case of the generation of man, for example, the corresponding biological law establishes that man begets man (see, for example, *Metaphysics Zeta* 7, 1032a25, *Zeta* 8, 1033b32). Biological laws establish the tracks which are gone through by biological entities. There are different roles in ontology: the role of the laws is different from the role of the individual entities.

genus appears; likewise, no actual kind of biological species and genus disappears. There is no evolution in the content of the biological properties. The variety of the biological properties is already given, and, therewith, the variety of species and genera is already given. The only entities which appear and disappear are biological individuals: individuals are, as such, instances of biological properties corresponding to species and to genera¹⁷.

- o. In my opinion, in Aristotle's interpretation of substance, substance does possess many values¹⁸. A value for substance ($o\dot{\upsilon}\sigma\dot{(\alpha)}$) is¹⁹:
 - i. Individual entity belonging to the biological field and being able to independently exist, like an individual man, an individual horse, and an individual tree²⁰. This value of substance corresponds to the members of biological species and biological genera. I define this value of substance as "one-place substance".

I believe that this value for substance is assumed and never abandoned by Aristotle in his different works.

In other works of Aristotle, substance can either have the just mentioned value²¹ or assume the following value:

¹⁷ For Aristotle's considerations on the eternity of biological species and genera, see *De Generatione Animalium* II 1, 731b24–732a1.

¹⁸ In *De Anima* II 1, 412a6–11 we have an example of the plurality of values for substance, since, in this text, substance can be matter, form, and compounded entity:

"Now, we say that substance is one genus of what it is; we say, then, that a value of this (my own addition: of substance) is as matter (\emph{U} λην), which, in itself ($\kappa \alpha \theta' \alpha \emph{U} \tau \emph{O}$), is not this something ($\tau \emph{O} \delta \epsilon \tau \iota$), we say, then, that another value is shape and form ($\mu \rho \rho \phi \` \aleph \kappa \alpha \imath \epsilon \emph{I} \delta \rho \varsigma$), in virtue of which an entity is actually called this something ($\tau \emph{O} \delta \epsilon \tau \iota$) (alternative translation: in virtue of which this something is actually said), and we say, then, that a third value is the entity which is compounded of these ($\tau \emph{O} \epsilon \kappa \tau \circ \upsilon \tau \omega \nu$). Then, matter is, on the one hand, potentiality ($\delta \emph{U} \alpha \mu \iota \varsigma$), form is, on the other hand, completion ($\mathring{\epsilon} \nu \tau \epsilon \lambda \acute{\epsilon} \chi \epsilon \iota \alpha$); and this in two ways, one as knowledge, the other as the activity of reflecting."

¹⁹ Of course, matter is not to be forgotten as a value for substance. The values for substance that are mentioned here are not the only ones that Aristotle's concept assumes in his own works. I refer to my study *Semantik und Ontologie: Drei Studien zu Aristoteles*. Peter Lang Verlag, Bern, 2013, for my positions regarding the different values which, in my opinion, substance has.

²⁰ See, for this value of substance, *Categories* 4, 1b27–28 (man and horse), *Categories* 5, 2b13–14 (tree), and *Metaphysics Zeta* 7, 1032a18–19 (man and plant).

²¹ I disagree with all the positions which maintain 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. Interpretations maintaining the presence of a caesura in Aristotle's conception of substance contend that the value of substance is, in the *Categories*, the biological entity like man, while at least the primary value of substance in the *Metaphysics* is the form of the individual (biological) entity. Hence, there is, within this position, a shift, as to the primary value for substance and as to the entity to which the primary value of substance ought to be assigned, from the individual entity to the form of the individual entity. As previously said, I personally do not agree with these positions. The value of substance as individual entity belonging to the biological field is, in my opinion, never given up by Aristotle as a primary value for substance; it does remain a primary value for substance. I refer, for the analysis of these themes, to my study *Semantik und Ontologie: Drei Studien zu Aristoteles*.

- ii.form, essence²², and nature²³ of an individual entity belonging to the biological field. Substance assumes in this case the value of the factor that directs the individual entity in its own life and leads the whole individual entity to its own development²⁴. In the biological field, form and essence²⁵ correspond to the soul of the entity. Soul is the function centre of the particular biological entity. It is the internal factor of the compounded entity which entails and realises the programme of life development of the living entity; the soul brings - under normal circumstances - the entity to the realisation of its own faculties²⁶. In order to differentiate this value of substance from the value previously mentioned of "one-place substance", I define this value of substance as "substance of something", since this kind of substance is the essence of the entity. For example, form and essence as soul, as they are described in De Anima II 1, are the substance of the oneplace substance, in the sense that they direct the concrete, living substance in its own life and lead the whole substance to its own development 27 .
- p. By distinguishing between entities that have the ontological status of "this something $(\tau \acute{0}\delta \epsilon \tau \iota)^{*28}$ and of "this such $(\tau \acute{0}\delta \epsilon \tau \circ \iota \acute{0} v \delta \epsilon)^{*29}$, on the one hand, and entities that have the ontological status of "quality $(\pi o \iota \dot{o} v)^{30}$ or,

²² For the value of substance as form and essence, see, for example, the whole chapter De

Anima II 1. ²³ For the value of substance as nature see, for example, *Metaphysics Delta* 4, 1014b35– ²⁴ For the value of substance and nature, and nature, and nature, and nature, and nature. 1015a19, and Metaphysics Zeta 17, 1041b28-31. For the connection between substance and nature, see De Generatione et Corruptione II 6, 333b13-18.

See, for this value of substance, the chapters *De Anima* II 1, II 2 and II 4.

²⁵ Form and essence are considered as mutually equivalent in *De Anima* II 1. For the equivalence between form and essence, see also Metaphysics Zeta 7, 1032b1-2, and Zeta 10, 1035b32.

²⁶ For example, the soul of man directs the whole life development of every man. Hence, the soul is the essence of the individual man. In Aristotle's view, soul is a kind of self-realising programme: the soul of men entails the whole programme of the life development of the individuals.

²⁷ I mention these two values for substance since I think that they correspond to the two basic values for substance. Furthermore, I think that these two values are equally central for Aristotle: there is no prevalence of the one over the other, or vice versa.

²⁸ See *Categories* 5, 3b10–21.

²⁹ See *Metaphysics Zeta* 8, 1033b23–24: the ontological status expressed by the formula "τόδε τοιόνδε" opposes the ontological status expressed by the formula "τοιόνδε" in the same way, in my opinion, as the way in which the ontological status expressed by the formula "τόδε τι" opposes the ontological status expressed by the formula "ποιόν" in Categories 5, 3b10-21. Instances, and entities which are not instances, should not be confused with each other (the difference between the two texts lies in the fact that in Metaphysics Zeta 8 the opposition between entities is contained in a context in which the relationships between matter and form are investigated, whereas in Categories 5 matter and form are absent). Besides, in Metaphysics Beta 6, 1003a8-9 and in Metaphysics Zeta 13, 1039a1-2, the ontological status expressed by τόδε τι opposes the ontological status expressed by τοιόνδε. The instance of a property is to be differentiated from the property as a programme for instantiation. The realms of reality to which the two kinds of entities belong are mutually different and should not be confused with each other.

³⁰ See *Categories* 5, 3b10–21.

alternatively, of "such" $(\tau \sigma \iota \delta \nu \delta \epsilon)^{"31}$, on the other hand, Aristotle is, in my opinion, aiming to draw a distinction between the fields of existence represented, respectively, by instances and by essential properties taken in general³². Likewise, he is aiming to assign the entities to their own realm of reality³³.

- q. The realm of $\tau \acute{0}\delta \epsilon \tau \imath$ and of $\tau \acute{0}\delta \epsilon \tau \imath \acute{0}\acute{0}\delta \epsilon$ is the realm of the instances of properties. Within the biological field, the dimension of $\pi \imath \acute{0}\acute{0}$ and of $\tau \imath \acute{0}\acute{0}\delta \epsilon$ is the dimension of properties as programmes for instantiation. These programmes compose and exhaust the variety of possible instances. For every instance that exists, this instance will be the concretisation of this or of that property. It is not necessary that an instance is the concretisation of a determined property; it is necessary, however, that the individual entity is the concretisation of a property. Every individual biological entity is the instance of a biological property such as being man, or being horse, or being tree, and so forth³⁴.
- r. In my opinion, Aristotle contends that the field of biological instances always consists of individuals; the whole field of existence consists, however, in Aristotle's view, of both individuals and universal biological properties, even though the universal properties' way of existence is different from the way of existence possessed by the instances of properties. Individuals and universal properties exist on different levels, they correspond to different ontological types. We have a two-district ontology:
 - i. The realm of instances is constituted by individual entities (by numerically one entities). Any numerically one entity whatsoever is the instance of a property: for a numerically one entity, to be is to be the instance of a property.
 - ii. The whole realm of existence, the realm of all the existing entities, contains both individuals (individual entities) and universal properties (universal entities).

The expression "realms of reality" means a general division of the dimensions of entities. The realm of reality of the individual is the realm of reality composed by instances of properties and by particular cases of laws; the realm of reality of the

³¹ See, for example, *Metaphysics Beta* 6, 1003a5–17, *Metaphysics Zeta* 8, 1033b19–1034a8, and *Metaphysics Zeta* 13, 1038b34–1039a3.

³² The instance of the property "being man" belongs to a different realm of reality than the realm of reality of the property "being man" taken generally.

³³ In my opinion, Aristotle is thereby not aiming at an exclusion either of universal properties or of universals from the field of existence. Aristotle is not distinguishing between what belongs to reality and what does not belong to reality; rather he is investigating the question of which entity is an instance and which entity is not an instance. Both entities having the status of instance, and entities not having the status of instance belong to reality. The problem of the existence of the biological universal should not be reduced to the existence of universals. The central question is, in my opinion, whether a universal biological property exists or does not exist, that is, whether a property like being man, which is identical in all the individual men, exists or does not exist. The existence of the universal "man" would be a consequence of the existence of this property.

³⁴ A biological property like "being man" entails or, actually, is a complex of properties like having a determined soul with determined faculties.

universal is the realm or reality composed by universal properties and by the laws existing as a result of the connections, compatibilities, and incompatibilities holding between universal properties. The two realms of reality should not be confused with each other. Otherwise, the damages for the ontology resulting from this confusion cannot be repaired³⁵ because in case of confusion, the ontology, as such, would completely collapse.

3. *METAPHYSICS MU* 10 AND *DE CAELO* I 9: INSTANCES, ESSENCES, PARTICULARS, AND UNIVERSALS

In order to begin my discussion of the problems regarding the relations holding between particulars/individuals and universals and regarding the relations holding between instances and properties, I would like to quote and analyse the chapter *Metaphysics Mu* 10 and a passage from *De Caelo* I 9^{36} . The chapter *Metaphysics Mu* 10, among other things, delivers, in my opinion, a solution for the relation between particulars/individuals and universals; particular entities are interpreted as being instances of universals (of universal properties). Thereby, universals and particulars find a kind of reciprocal union. The passage from *De Caelo* I 9 describes Aristotle's interpretation of individual entities as particularised, individualised, concretised essences. The two passages show, therefore, in my

³⁵ An example of the damages resulting from this confusion is, as it has been previously mentioned, the regress of the Third Man.

³⁶ As regards the succession in the mention of editions, translations, and commentaries which I have consulted for my draft, I shall follow the alphabetical order of the authors, regardless of the time of composition of their own studies. The editions of Aristotle's works that I used for this paper are the following ones: for the Categories I used the edition of Lorenzo Minio-Paluello (Aristotelis Categoriae et Liber De Interpretatione. Recognovit Brevique Adnotatione Critica Instruxit L. Minio-Paluello. Oxford University Press, Oxford, 1949); for the De Anima I used the edition of Robert Drew Hicks (Aristotle. De Anima. With Translation, Introduction and Notes by R. D. Hicks. University Press, Cambridge, 1907; Nachdruck der Ausgabe Cambridge 1907, Georg Olms Verlag, Hildesheim – Zürich – New York, 1990) and the edition of William David Ross (Aristotelis De Anima. Recognovit Brevique Adnotatione Critica Instruxit W. D. Ross. Oxford University Press, Oxford, 1956); for the De Caelo I used the edition of Donald James Allan (Aristotelis De Caelo Libri Quattuor. Recognovit Brevique Adnotatione Critica Instruxit D. J. Allan. Oxford University Press, Oxford, 1955); for the Metaphysics I used the edition of Werner Jaeger (Aristotelis Metaphysica. Recognovit Brevique Adnotatione Critica Instruxit W. Jaeger. Oxford University Press, Oxford, 1957), and the edition of William David Ross (Aristotle's Metaphysics. A Revised Text with Introduction and Commentary by W. D. Ross, 2 vols. Oxford University Press, Oxford, 1924). Furthermore, I used the text of the book Zeta of the Metaphysics which is contained in the commentary of Michael Frede - G. Patzig (Aristoteles "Metaphysik Z⁴. Text, Übersetzung und Kommentar. Erster Band Einleitung Text und Übersetzung. Zweiter Band Kommentar. Verlag C. H. Beck, München, 1988); for the Posterior Analytics I 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. Oxford University Press, Oxford, 1964). As regards the text of the Metaphysics, I shall generally follow, for the direct quotations of Aristotle's text, the edition of Werner Jaeger, unless otherwise indicated.

opinion, that individual entities are, as regards their own ontological status, instances of properties (they are instantiated properties).

Beginning now with the text of *Metaphysics Mu* 10, problems, strategies, and solutions of the chapter are the following ones:

- If elements are particular and not universal, entities resulting from these elements will be as many as the elements; if principles are universal, either the substances compounded by those principles are universal, or that which is not substance will be prior to substance. Present in both positions are great problems for ontology: within the first position, the possibility of explaining the existence of the plurality beyond the existence of the elements appears to be highly compromised. Within the second position, inconsistencies in the relationships between principles and substances emerge. If principles are universal, the substances resulting from these principles will be universal, too or that which is not substance the principle will be prior to substance. These ontological situations cannot be accepted, since a substance cannot be prior to substance.
- Aristotle is trying to find an ontological conciliation between being individual/particular and being universal in order that both elements of the ontology could find a place in ontology and in the process of knowledge. Without a correct conciliation, there is no possibility of finding a healthy ontology; likewise, there is no possibility to find the conditions for knowledge.
- The interpretation of the entities as having the status of "this something" (i.e. this colour, this alpha) represents the act of acknowledgment of the status of individual entities: individual entities are instances of something. Particulars are instances of universals, so that the universal exists, particularised, in them³⁷.
- The chapter proposes an alternative model of ontology, a new ontology, which is explicitly presented as being an alternative to the ontology of ideas³⁸. There is no need of a separated entity, which exists apart from

³⁷ Actually, the chapter gives an answer to different problems raised by Aristotle in *Metaphysics Beta*, such as the eight problem, whether something exists or not apart from particulars (cf. *Metaphysics Beta* 4, 999a24–b24); the nineth problem, whether principles are one in species or in number (cf. *Metaphysics Beta* 4, 999b24–1000a4); and the fifteenth problem, whether principles are universal or particular (cf. *Metaphysics Beta* 6, 1003a5–17).

³⁸ I would like to mention, in this context, four studies which I consider as fundamental for my way of analysing Aristotle's ontology: Roman Ingarden's book *Der Streit um die Existenz der Welt (I Existentialontologie.* Max Niemayer Verlag, Tübingen, 1965; *II/2 Formalontologie 2. Teil Welt und Bewusstsein.* Max Niemayer Verlag, Tübingen, 1965; *III Über die kausale Struktur der realen Welt.* Max Niemayer Verlag, Tübingen, 1974; 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* (Verlag Karl Alber, Freiburg (Breisgau)/

many; there is no need of an entity as alpha or beta itself (the scheme can be extended, in my opinion, to all entities: there is no need of an entity which has the status of "entity itself").

In chapter *Metaphysics Mu* 10 we can, furthermore, observe a modification in the interpretation of the members of ontology. At the beginning of the chapter, we have only particulars and universals. At the end we have particular entities constitutively possessing the status of "this alpha" and "this colour". We have entities being, as regards their ontological constitution, instances of something³⁹. A mediation between individual/particular and universal has been found throughout the chapter. Particulars have the status of individual something, they are particularised universals or particularised universal properties, they are not simply particulars. Universals are not extraneous to particulars. The text of the chapter *Metaphysics Mu* 10 is as follows⁴⁰:

München, 1985); and Edward Jonathan Lowe's book *The Four-Category Ontology: A Metaphysical Foundation for Natural Science* (Oxford University Press, Oxford, 2006). Ingarden's books gave me the suggestion that Aristotle's investigation could be interpreted as a formal ontology, that is, as an analysis of the features and status of the entities which precede the concrete entities of reality (see, for example, in the first volume of Ingarden's book, *Existentialontologie*, the chapter 6, *Weitere Charakterisierung der philosophischen Probleme*, pp. 33–53). Kung's article opened up for me a new view of Aristotle through her investigation of the presence of a typological ontology in Aristotle. Liske's book gave me new perspectives regarding the aspects that can be assigned to Aristotelian essences as vital forces (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 ην είναι*, pp. 260– 283, chapter 4, *Die Identität des τηε mit dem Einzelnen*, pp. 284–332). Lowe's inquiry taught me, among other things, through his interpretation of a four-category ontology, 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.

³⁹ In this context, I shall not deal with the whole content of chapter *Metaphysics Mu* 10: I shall limit my investigation to the aspects of the relation between particular and universal. For an analysis of mine regarding the whole chapter *Metaphysics Mu* 10, I refer to my article *Das Manifest für eine neue Ontologie: Metaphysik My* 10 (Revue Roumaine de Philosophie, Volume 52, Issue 2, July–December 2015, pp. 209–237).

⁴⁰ I consulted the following translations of Aristotle's works: for the *Categories* I consulted the translation of John Lloyd Ackrill (Aristotle's Categories and De Interpretatione. Translated with Notes by J. L. Ackrill. Oxford University Press, Oxford, 1963); for the De Anima I consulted the translation of Robert Drew Hicks (Aristotle. De Anima. With Translation, Introduction and Notes by R. D. Hicks. University Press, Cambridge, 1907; Nachdruck der Ausgabe Cambridge 1907, Georg Olms Verlag, Hildesheim - Zürich - New York, 1990) and the translation of J. A. Smith (contained in Barnes, Jonathan. The Complete Works of Aristotle. The Revised Oxford Translation. Edited by Jonathan Barnes. Volume One. Princeton University Press, Princeton, N.J., 1984); for the second and third book of De Anima I consulted the translation of David Walter Hamlyn (Aristotle's De Anima. Books II and III (with passages from Book I). Oxford University Press, Oxford, 1968); for the De Caelo I consulted the translation of John Leofric Stocks (contained in Barnes, Jonathan. The Complete Works of Aristotle. The Revised Oxford Translation. Edited by Jonathan Barnes. Volume One. Princeton University Press, Princeton, N.J., 1984); for the whole Metaphysics I 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. Princeton University Press, Princeton, N.J., 1984) and the translation of Hugh Tredennick (contained in Aristotle. Aristotle

"Let us now speak about a subject which presents a certain difficulty both to those who maintain the existence of the Ideas and to those who do not maintain the existence of Ideas, and which was mentioned at the beginning among the problems. For, if, on the one hand, one does not suppose that the substances are separated (κεχωρισμένας), and in this way⁴¹ in which it is said that the particular entities are⁴², he will do away with the substance as we want to interpret it; if, on the other hand, one supposes that substances exist separately ($\chi \omega \rho \iota \sigma \tau \dot{\alpha} \zeta$), how will be suppose that the elements and the principles are? For, if these are particular ($\kappa\alpha\theta$ ' $\xi\kappa\alpha\sigma\tau\sigma\nu$) and are not universal ($\mu\dot{\eta}$ $\kappa\alpha\theta\dot{\alpha}\delta\lambda\omega$), the entities will be as many as the elements. and the elements will not be knowable (for let, on the one hand, the syllables in speech be substances, and let, on the other hand, the elements of them be elements of the substances: it is, then, necessary that the ba is one and that each of the syllables is one, if they are not universal and if they are not the same in species⁴³ (τῶ εἴδει), but each is numerically one (τῶ ἀριθμῶ) and it is a this something (τόδε τι) and is not homonymous (δμώνυμον); again, they suppose that each syllables are that way, also the entities of which they consist will be so: therefore, there will not be more alphas than one (oùk ểσται ἄρα πλείω ἄλφα ἑνός), nor any of all the other elements⁴⁵ on the same ground on which, of all the other syllables the same is not this and that⁴⁶; but, if this is so, there will not be other entities besides the elements, but there will be only the elements; furthermore, the elements, then, will not be even knowable; for the elements will not be universal (καθόλου), but the knowledge is of universal (ἡ δ' ἐπιστήμη τῶν καθόλου); this is clear both from the demonstrations and from the definitions: for the conclusion $(\sigma υ \lambda \lambda o \gamma i \sigma \mu \delta c)$ that this triangle is equal to two right angles⁴⁷ does not come into

in 23 Volumes, Vols.17, 18, translated by Hugh Tredennick. Harvard University Press, Cambridge, MA; William Heinemann Ltd., London, UK, 1933, 1989); for the book Zeta of the Metaphysics I consulted the translation of David Bostock (Aristotle Metaphysics Book Z and H. Translated with a Commentary by David Bostock. Oxford University Press, Oxford, 1994); for the books Mu and Nu of the Metaphysics I consulted the translation of Julia Annas (Aristotle's Metaphysics. Books M and N. Translated with Introduction and Notes by Julia Annas. Oxford University Press, Oxford, 1976); for the Posterior Analytics I consulted the translation of Jonathan Barnes (Aristotle's Posterior Analytics. Translated with Notes by Jonathan Barnes. Oxford University Press, Oxford, 1975; second edition, Oxford University Press, Oxford, 1994). I would add that I consulted these translations without entirely following any of them: I always tried to find my own translation of the texts of Aristotle which are quoted in my study. ⁴¹ I.e. in this way separated.

⁴² I.e. are separated.

⁴³ Alternative translation: are not the same in form.

⁴⁴ This formula refers to the status of the ideas.

⁴⁵ I.e. will be more than one.

⁴⁶ That is, in case of all the other syllables, too, the one and same syllable cannot have different instances

⁴⁷ Aristotle's sentence is very synthetical. Actually, the statement should be: "the sum of the angles of this triangle is equal to two right angles".

being, if not every triangle has two right angles, nor the conclusion that this man is animal comes into being, if not every man is animal); but, if the principles are universal ($\kappa \alpha \theta \delta \lambda o \upsilon$), either the substances too which consist of these are universal (και αι έκ τούτων ούσίαι καθόλου), or that which is not substance will be prior to substance (ἔσται μὴ οὐσία πρότερον οὐσίας)⁴⁸: for the universal is not substance (τὸ μὲν γὰρ καθόλου οὐκ οὐσία), but the element and the principle are universal (τὸ δὲ στοιχεῖον καὶ ἡ ἀρχἡ καθόλου), and the element and the principle are prior to the entities of which they are principle and element (πρότερον δὲ τὸ στοιχεῖον καὶ ἡ ἀρχἡ ὧν ἀρχἡ καὶ στοιχεῖόν ἐστιν). And now, all these difficulties follow with good reason, whenever they make the Ideas out of elements (ὅταν ἐκ στοιχείων τε ποιῶσι τὰς ἰδέας) and maintain that a separated unity exists apart from the substances which have the same form $(\pi\alpha\rho\dot{\alpha}\tau\dot{\alpha}\zeta\tau\dot{o}$ αὐτὸ εἶδος ἐχούσας οὐσίας [καὶ ἰδέας] ἕν τι ἀξιῶσιν εἶναι κεχωρισμένον); but if, as in the case of the elements of speech ($\omega \sigma \pi \epsilon \rho \, \epsilon \pi \, i \, \tau \tilde{\omega} v \, \tau \tilde{\eta} \varsigma \, \phi \omega v \tilde{\eta} \varsigma$ στοιχείων), nothing prevents that many alphas and betas exist (πολλά εἶναι τά αλφα και τα βητα), and if nothing prevents that no alpha itself and no beta itself exist apart from these many⁴⁹ (μηθέν είναι παρά τὰ πολλὰ αὐτὸ ἄλφα καὶ αὐτὸ βῆτα), in consequence of this there will be infinite similar⁵⁰ syllables⁵¹ (ἔσονται ἕνεκά γε τούτου ἄπειροι αι ὅμοιαι συλλαβαί)⁵². The statement that all knowledge is universal (καθόλου), so that it is necessary both that the principles of entities ($\tau \dot{\alpha} \zeta \tau \tilde{\omega} v \sigma \tilde{v} \tau \omega v \dot{\alpha} \rho \gamma \dot{\alpha} \zeta$) are universal ($\kappa \alpha \theta \delta \lambda \sigma v$) and are not separated substances (οὐσίας κεχωρισμένας), presents indeed, of all the points that were mentioned, the greatest difficulty, nonetheless the statement is, in a sense, true, but, in a sense, it is not true. For knowledge, like knowing, has two senses ($\dot{\eta} \gamma \dot{\alpha} \rho$ έπιστήμη, ὥσπερ καὶ τὸ ἐπίστασθαι, διττόν), one of which is in potentiality (τὸ μὲν δυνάμει), the other of which is in actuality (τὸ δὲ ἐνεργεία). The potentiality, being, as matter, universal and indefinite, deals, then, with the

⁴⁸ For this interpretation of the second side of the alternative, which corresponds to the passage *Metaphysics Mu* 10, 1086b37–1087a1, I am not following the reconstruction of Aristotle's text given by Jaeger. Jaeger eliminates from Aristotle's text the first part of the second side of the alternative, that is, that substances resulting from universal principles would be universal (see in Jaeger's edition *Metaphysics Mu* 10, 1086b37–1087a1). Ross, on the contrary, maintains this part of the second side of the alternative and connects it with *Metaphysics Mu* 10, 1087a21–22, where it is said that it is necessary that, if the principles are universal, the entities resulting from them are universal, too (see the critical apparatus of Jaeger's edition, p. 291; see the II volume of Ross' commentary, pp. 464–465). The text of Ross of the passage *Mu* 10, 1086b37–1087a1 is: "ἀλλὰ μὴν εἴγε καθόλου αἱ ἀρχαί, η̈ καὶ αἱ ἐκ τούτων οὐσίαι καθόλου <η̈́> ἔσται μὴ οὐσία πρότερον οὐσίας".

⁴⁹ I.e. apart from these many alphas and betas.

⁵¹ Alternative translation: "the similar (same) syllables will be infinite".

⁵² Since the elements of the syllables as alpha and beta are a plurality, there will be a plurality of ba, too, that is, of compounded entities. The model can be extended, in my opinion, to every kind of compounded entity.

⁵⁰ Alternative translation: "same".

universal and indefinite⁵³ (ἡ μὲν οὖν δύναμις ὡς ὕλη [τοῦ] καθόλου οὖσα καὶ ἀόριστος τοῦ καθόλου καὶ ἀορίστου ἐστίν); but the actuality, being definite, deals with a definite entity, being a this something, it deals with a this something⁵⁴ (ἡ δ' ἐνέργεια ὡρισμένη καὶ ὡρισμένου, τόδε τι οὖσα τοῦδέ τινος)⁵⁵; sight, accidentally, sees universal colour, though, because this colour which it sees is colour (ἀλλὰ κατὰ συμβεβηκὸς ἡ ὄψις τὸ καθόλου χρῶμα ὁρῷ ὅτι τόδε τὸ χρῶμα ὅ ὁρῷ χρῶμά ἐστιν)⁵⁶, and this alpha which the grammarian studies is an alpha (καὶ ὃ θεωρεῖ ὁ γραμματικός, τόδε τὸ ἄλφα ἄλφα); since, if it is necessary that the principles are universal (καθόλου), it is necessary that the entities too which derive from these (τὰ ἐκ τούτων καθόλου) are universal (καθόλου), as it happens in case of the demonstrations: but, if this is the case, nothing, not even substance, will separately exist (χωριστὸν), But it is clear that the knowledge in a certain sense is universal (καθόλου), in sense it is not."⁵⁷

⁵³ The potentiality of knowledge, which is interpreted as the universal and indefinite act of knowledge, is directed to the universal field (for example, it is directed to the contents of the sentence: "the sum of the angles of every triangle is equal to two right angles").

⁵⁴ The actuality of knowledge, which is interpreted as a particular act of knowledge, is directed to a particular field (for example, it is directed to the contents of the sentence: "the sum of the angles of this triangle is equal to two right angles").

⁵⁵ The sense in which the knowledge of universals is potential is that this knowledge, being directed to a universal, has the potentiality of acknowledging the individual case as a case of the universal law. I do not think that the sense of "potential" is to be interpreted as though the knowledge of universals were not an actual knowledge. It is, in my opinion, an actual act of knowledge of universals which is a potential act of knowledge of individuals.

⁵⁶ In *Posterior Analytics* II 19, 100a16–b1, it is said that perception is of the universal man: "for, on the one hand, the particular is perceived, but, on the other hand, the perception is of the universal, for example of man, but not of Callias man (και γαρ αισθάνεται μέν το καθ' ἕκαστον, ή δ' αἴσθησις τοῦ καθόλου ἐστίν, οἶον ἀνθρώπου, ἀλλ' οὐ Καλλίου ἀνθρώπου)." As we can see, universal is in the perception. The position of this passage does not represent, in my opinion, a discrepancy in relation to Aristotle's assertion, expressed, for example, in De Anima II 5, 417b22-24, that perception is of particulars. Perception is of particulars; Callias, the entity perceived, is a particular. Nonetheless, perception includes universal elements, since any particular entity is, after all, always the instance of a universal. There is a mediation between particulars and universals: the mediation is represented by particulars' being instances of universals. The discrepancy, if there is any, rather regards the difference between the mentioned text of Posterior Analytics II 19 and the objects of perception listed and exposed in *De Anima* II 6, in which there is no mention at all that the activity of perception can have, as its own objects, an entity like man, since an entity like man, as a kind of perceived entity, belongs neither to the special objects of the senses, nor to the common objects of the senses, nor to the indirectly, incidentally perceived objects. It seems, therefore, that Aristotle's interpretation of the objects which are the objects of perception is not univocal in the different works.

⁵⁷ I used the following commentaries of Aristotle's works: for the *Categories* I used the commentary of John Lloyd Ackrill (*Aristotle's Categories and De Interpretatione. Translated with Notes by J. L. Ackrill.* Oxford University Press, Oxford, 1963) and the commentary of Klaus Oehler (*Aristoteles Kategorien. Übersetzt und Erläutert von Klaus Oehler. Zweite, durchgesehene Auflage.* Akademie-Verlag, Berlin, 1986); for *De Anima* I used the commentary of Robert Drew Hicks (Aristotle. *De Anima. With Translation, Introduction and Notes by R. D. Hicks.* University Press, Cambridge, 1907; Nachdruck der Ausgabe Cambridge 1907, Georg Olms Verlag, Hildesheim – Zürich – New York,

In the quoted passage, Aristotle's strategy is first of all directed to showing that a plurality of similar syllables exists and to refusing the hypothesis that an alpha itself and a beta itself exist apart from a plurality of many alphas and of many betas. The ontological rules that Aristotle is giving in order to avoid the difficulties presented in the chapter are the following ones:

- a) There is no separate entity apart from the entities which have the same form: there is no need of further entities which are the principles of the entities and are separated from the particular entities.
- b) There are many alphas and many betas; there is a plurality of elements.
- c) There is no alpha itself and there is no beta itself: there is no isolated element which should have a privileged ontological position.

Aristotle is trying to explain the very possibility of the existence of the plurality. In order to reach this result, he refuses the hypothesis that principles and elements exist apart from the entities of which they are the principles and the elements⁵⁸. As regards the individual entities, the individual entity is treated as an instance of a universal: every entity is a $\tau \delta \delta \epsilon \tau \iota$, a this something, in the sense that it is an instantiation ($\tau \delta \delta \epsilon$) of a property ($\tau \iota$). The decisive, fundamental sentences for the mediation between particulars and universals are the following ones:

"... sight, accidentally, sees universal colour, though, because this colour which it sees is colour (ἀλλὰ κατὰ συμβεβηκὸς ἡ ὄψις τὸ καθόλου χρῶμα

⁵⁸ One of the activities of knowledge is directed to the application of these rules to the individual cases. There is, in other words, an activity of knowledge directed to the discovery of general laws: this is the dimension of universals. There is, though, an activity of knowledge consisting in the application of the general rule to the individual case.

¹⁹⁹⁰⁾ and of William David Ross (Aristotle De Anima, Edited, with Introduction and Commentary, by Sir David Ross. Oxford University Press, Oxford, 1961); for the books II and III of De Anima I used the commentary of David Walter Hamlyn (Aristotle's De Anima. Books II and III (with passages from Book I). Oxford University Press, Oxford, 1968); for the whole Metaphysics I used the commentary of William David Ross (Aristotle's Metaphysics. A Revised Text with Introduction and Commentary by W. D. Ross, 2 vols. Oxford University Press, Oxford, 1924); for Metaphysics Zeta I used the commentary of David Bostock (Aristotle Metaphysics Book Z and H. Translated with a Commentary by David Bostock. Oxford University Press, Oxford, 1994), 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. Study Aids Series, Monograph 1, University of Oxford, Sub-Faculty of Philosophy, Oxford, 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. Verlag C. H. Beck, München, 1988); for the books Metaphysics Mu and Nu I used the commentary of Julia Annas (Aristotle's Metaphysics. Books M and N. Translated with Introduction and Notes by Julia Annas. Oxford University Press, Oxford, 1976); for the Posterior Analytics I used the commentary of Jonathan Barnes (Aristotle's Posterior Analytics. Translated with Notes by Jonathan Barnes. Oxford University Press, Oxford, 1975; second edition, Oxford University Press, Oxford, 1994).

ὑρῷ ὅτι τόδε τὸ χρῶμα ὃ ὑρῷ χρῶμά ἐστιν), and this alpha which the grammarian studies is an alpha (καὶ ὃ θεωρεῖ ὁ γραμματικός, τόδε τὸ ἄλφα ἄλφα)."

Every individual entity is a concretised, individualised, particularised universal. The example of the individual colour and of the individual alpha can be extended, in my opinion, to every instance which belongs to reality; every instance constitutes a realisation, a concretisation of a property. The particular alpha is an alpha, the particular colour is a colour. Hence, within this ontological scheme, the particular man is man, that is, the particular man is an instance of the universal man. The universal is singularised in and through the instance. The formulas " $\tau \delta \delta \epsilon \tau \delta$ $\ddot{\alpha} \lambda \phi \alpha$ " are formulas showing that the individual is an instance of a universal. The individual colour is colour; the individual alpha is alpha; individuals are not only individuals⁵⁹. Every instance has the structure of a $\tau \delta \delta \epsilon \tau \delta$ $\ddot{\alpha} \lambda \phi \alpha$: it is a particular instance of a common property⁶⁰.

Generally speaking, the dimension of universals is a dimension of indefiniteness, since universals are not temporally and spatially delimited. The dimension of material particulars is a dimension of definiteness, since material particulars are temporally and spatially delimited. Both dimensions exist, in my opinion, for Aristotle, in spite of the fact that their own ways of existence are different from each other.

In the case of the particular entities, the object of knowledge is always an individual entity instantiating a universal (a universal property): the grammarian knows an alpha, that is, an instance of a property which is common to all the particular alphas. Sight is able to see, and, consequently, to reach the universal content, since the individual colour, the instance of colour, the instantiated colour

⁵⁹ Laws of reality are universal. Every occurrence of the law is particular. Aristotle is working, in my opinion, on a distinction between laws and principles of the reality, on the one hand, and occurrences and concretisations of these laws and principles, on the other hand. Individuals are always realisations of properties connected to laws of reality. The individual man is, for example, the instance of the property "being man", which is connected to all the laws of the development of man.

⁶⁰ Aristotle's positions could be compared, in the contemporary ontology, to David Wiggins' interpretation of the status of entities: Wiggins states that "Everything that exists is a this such" (see *Sameness and Substance*. Basil Blackwell, Oxford, 1980, p. 15; see *Sameness and Substance*. Renewed. Cambridge University Press, Cambridge, UK, 2001, p. 22). Wiggins contends that the status, the constitutive structure of the individual entity is a this such: Individual entities are instances of properties. The main tread of Wiggins' book is represented by the thesis – and by the defence of the thesis – of the Sortal Dependency of Individuation against the positions pleading for the Relativity of Identity. In spite of the similarities between these positions, the differences in the aims of the two thinkers should not be forgotten. When Aristotle exposes the thesis of the status of the entities like this such or this something, he rather develops, unlike Wiggins, at least in my opinion, a general strategy aiming to introduce and defend the distinction between instance and not-instance. This distinction is fundamental in order to avoid any danger of confusing the realms of entities, since a confusion between realms of reality would lead to the regress of the Third Man and to the consequent collapse of the whole ontology. There are, therefore, great similarities between the two positions, but the differences in strategy should not be forgotten.

is, anyway, nevertheless, colour, that is, is the instance of a universal. In case of alpha and of colour, the universal is individualised in the particular. Universal and particular do not constitute two kinds of entities which were completely heterogeneous to each other. They do belong, as such, to different realms of reality: they should not be confused with each other; particulars are to be treated as particulars, and universals are to be treated as universals. Notwithstanding, there is a mediation between them: particulars are particularised universals. The entity that is perceived, or that is analysed, is⁶¹, constitutively, an instance of something, an instantiated something. Moreover, particular entities like a particular colour and a particular alpha prove to be particular somethings: they are not bare entities. Their ontological constitution consists in being an instance of something. The knowledge of universals will, therefore, entail the potentiality for the knowledge of particulars, since particulars, being instances of universals, bring, thereby, universals in themselves⁶².

The relationship between the knowledge of universal and the knowledge of particular is already expressed in the following passage *Metaphysics Mu* 10, 1086b34–37:

"... for the conclusion $(\sigma \upsilon \lambda \lambda \sigma \gamma i \sigma \mu \dot{\sigma} \zeta)$ that this triangle is equal to two right angles does not come into being, if not every triangle has two right angles, nor the conclusion that this man is animal comes into being, if not every man is animal ..."

Knowledge of particulars can be reached only through the knowledge of universals. This becomes clear if we consider that universals, as they are defined in *Posterior Analytics* I 4, necessarily belong to the entities to which they belong, since they are connected to properties which belong to the entities as regards what these entities, in themselves, are. For example, the property "having the sum of the angles equal to two right angles" belongs to every triangle as a triangle: therefore, the universal corresponding to this property belongs to the triangles necessarily. It cannot be the case that a triangle does not have this property, and, consequently, it cannot be the case that the universal corresponding to this property does not belong to the triangle⁶³.

Universal expresses a complex relation: universal is not only an entity predicated of a plurality or of a totality of entities; it has a property connection to

⁶³ The same can, for example, be said about animal and man. Animal as property belongs to man in what man is, since man is, as such, animal (the property "animal" with all its implications is contained in the property "man"). Hence, the universal "animal" belongs necessarily to man. A man that were not animal would not have properties belonging to man as such: it would simply not be a man.

⁶¹ It might be said, in my opinion: Any entity we meet in the average reality.

⁶² In *De Anima* II 5, 417a27–29, we have the description of the actual knower, who actualises the general knowledge in a single act directed to a single entity. The actual knower is the knower of this particular alpha. Aristotle interprets the particular act of knowledge as the application of the act of knowledge to the particular entity. The application of the general knowledge of grammar to the individual case represents the actualisation of the general knowledge of grammar.

the entity to which is referred: this property regards the entity as such. The properties corresponding to universals express either the essence of the entities of which they are referred to through the predication of the universals, or they are properties derivable from the essence of the entities they are referred to through the universals. If determined essences of determined entities have determined contents, all the instances of these essences will have these property contents. In the same way, if the properties derived from these determined essences have determined contents, all the instances of these properties will have these property contents.

A triangle has in virtue of its essence determined properties. Since the essence of a triangle has determined contents, every triangle has and will have these contents, i.e. any triangle whatsoever we can find, see, or analyse, will have, then, determined properties. Universals corresponding to these properties will, therefore, of necessity belong to every triangle as triangle. Further properties, which correspond to the properties which are "accidents in themselves"⁶⁴, are derivable from the essential properties of the triangle as such.

All these properties are connected to the triangle in itself and belong, therefore, of necessity to the triangle; hence, they are not properties which can belong, and not belong to the triangle. The fact that these universals belong to the triangle is a consequence of the triangle's having determined contents in itself. Universals are consequences of the properties that the triangle as such has. In other words, any triangle as a triangle possesses determined properties; therefore, every time there is a triangle, there will be these properties, too (otherwise, there would not be a triangle). Aristotle, in my opinion, sees fixed contents making up properties. Therefore, every time we have an instance of a property, we shall have all the contents connected to this property. Universals are the (language) ascertainment of the presence of these properties; they are consequences of properties and of state of affairs.

If we know the properties which the triangle in itself possesses, we shall know the reasons why every particular triangle of necessity, has determined properties and does not have – at least does not have of necessity – other properties. Exclusively the knowledge of the essence and of the properties deriving from the essence can give us the knowledge why a triangle is the way it is and cannot be any different. Universals correspond to essences and properties derivable from essences⁶⁵. They are the consequence of the contents of the essences and of the properties derivable from the properties derivable from the essences.

⁶⁴ The notion of "accidents in themselves" will be explained in one of the coming footnotes.

⁶⁵ In *Posterior Analytics* I 4, 73b25–28, Aristotle defines the universal as that which belongs to every case (κατὰ παντός), in itself (καθ' αὐτὸ) and as such (ἢ αὐτό) in relation to the entities to which it is referred (of which it is predicated). Aristotle adds that, hence, the universal belongs from necessity (ἐξ ἀνάγκης) to the entities to which it belongs. Also *Posterior Analytics* I 4, 73a34–37 is to be considered, where the status of belonging in itself (in one of the senses of belonging in itself which are analysed by Aristotle in *Posterior Analytics* I 4) to an entity is defined as belonging to the elements which compose that which the entity is; that which belongs to an entity in itself is connected, in other words, to the what it is of this same entity. Hence, among the features defining the constitution of the universal as universal, we do not find only that the universal is predicated of every The knowledge that triangles have their angles equal to two right angles does not simply depend on the demonstration of different cases which all regard the same (kind of) entity and which all deal with a determined property. For example, an enumeration of different cases of triangles having a determined property would not be sufficient for us to say that the triangle as such possesses that determined property, no matter how great the number is of the triangles taken into consideration. Knowledge is not a question of a number of triangles. The knowledge which is to be arrived at is the knowledge of the triangle as such and of the properties deriving from the triangle as such. The knowledge that must be reached is the knowledge that the triangle as a triangle has this property⁶⁶. In order to reach this knowledge, we must know the essence and the properties derivable from the essence of the entities. In this way, we can know that these properties necessarily belong to the entities. If there is knowledge of essence and of the properties derivable from the as a babe to know why a particular case is one way and not a different way.

The particular triangle, being an instance of the essence of triangle, is, as such, all the properties of the essence of triangle: the particular triangle follows all the laws governing the essence of triangle. These laws originate in the essential properties of the triangle as such: their basis is the essence of every triangle. These laws also originate in the properties derivable from the essential properties of the triangle. The example of the triangle illustrates what Aristotle aims at: there are laws and there are individual cases⁶⁷. The laws govern the ways the individuals

member (of a given class, of a given plurality). Of course, among the features of the universal compares the feature that a universal is predicated of a totality of entities; nonetheless, the universal is predicated of a totality under certain relationships with the members of the totality. There is, in other words, a reason because of which the universal belongs to a totality of entities, and because of which, furthermore, the universal necessarily belongs to a plurality of entities. It is not sufficient that an entity belongs to every member of a class in order that that entity may be regarded as a universal. In my opinion, a universal's belonging to a totality is a consequence of its belonging - to the entities to which it is attributed -, in itself and as such. In order to be a universal, an entity must have these last features. It is, in my opinion, due to the fact that the universal belongs in itself and as such to the entities to which it belongs, that we have the guarantee that the universal will be predicated of every member of a plurality. If the property (and the corresponding universal) "having angles equal to two right angles" belongs to the triangle in itself and as such, there is the guarantee that this property will belong to every triangle. Furthermore, in Posterior Analytics I 7, 75b1, Aristotle speaks of the properties which are accidents in themselves (τὰ καθ' αὐτὰ συμβεβηκότα; see also Posterior Analytics I 22, 83b19-20 and Metaphysics Beta 1, 995b19-20). Aristotle's explains in Metaphysics Delta 30, 1025a30-34 that these properties, although they do not belong to the substance of the entities to which they belong, nonetheless belong to these entities as regards what these entities are in virtue of themselves. As an example of these properties, Aristotle mentions in Metaphysics Delta 30, 1025a30-34 the property of having angles equal to two right angles. The property "having angles equal to two right angles" belongs to the triangle as such, but it does not belong to its substance, that is, to its essence.

⁶⁶ See, for instance, *Posterior Analytics* I 5, 74b25–32.

⁶⁷ The results of the chapter *Metaphysics Mu* 10 should be read together, in my opinion, with the statements exposed respectively in *Metaphysics Lambda* 5, 1071a19–24: "Those universals,

actually are. Universal laws are not apart from the individuals. They are the directives which are followed by the instances. Laws belong to another realm of reality than that to which the instances belong. Individual entities are applications, realisations, concretisations of universal laws and universal rules. They follow the contents of universal laws. It is, for example, a kind of universal law that men have this and that development in their own lives. This law does not exist at the level of individual men, as though it were a further instance to be counted with individual men. It exists in the sense that it is the content, rooted in the reality, of the development of individuals⁶⁸. It is therefore realised and repeated in every instance of man⁶⁹.

As regards the features of the universals present in the chapter *Metaphysics* Mu 10, I believe that the universal which we have at the end of the chapter is not the universal which we have at the beginning of the chapter. The universal is, in the first part of the chapter, either a separated entity, so that it is prior to the substance, or is a sort of ingredient, a sort of component of the individual entities. The

therefore, do not exist (ἐκεῖνα μὲν οὖν τὰ καθόλου οὐκ ἔστιν): for the particular is the principle of the particulars (ἀρχὴ γὰρ τὸ καθ' ἕκαστον τῶν καθ' ἕκαστον); for man is the principle of man universally (ἀνθρωπος μὲν γὰρ ἀνθρώπου καθόλου), but there is none (my own addition: there is no universal man) (ἀλλ' οὐκ ἔστιν οὐδείς), but Peleus is the principle of Achilles (ἀλλὰ Πηλεὺς ᾿Αχιλλέως), and your father of you (σοῦ δὲ ὁ πατήρ), and this particular b of this particular ba (καὶ τοδὶ τὸ B τουδὶ τοῦ BA), but b in general is the principle of ba taken without qualification (ὅλως δὲ τὸ B τουδ ἀπλῶς BA)", and in *Metaphysics Lambda* 5, 1071a27–29: "… and those (my addition: causes and elements) of entities in the same species are different, not in species, but since the cause of different particulars is different (καὶ τῶν ἐν ταὐτῷ εἴδειἕτερα, οὐκ εἴδει ἀλλ' ὅτι τῶν καθ' ἕκαστον ἄλλο), your matter and form and moving cause are different from mine, but in their universal notion they are the same (ἥ τε σὴ ὕλη καὶ τὸ εἶδος καὶ τὸ κινῆσαν καὶ ἡ ἐμὴ, τῷ καθόλου δὲ λόγῷ ταὐτά)."

All principle, causes, and elements are particular: those belonging to the same species are identical, though, since their formulas are identical. Every particular, however, is always an instance which is identical in form to other instances of the same species. Being a particular does not exclude that this particular is an instance of an essence whose contents are identical for all its instances.

⁶⁸ When Aristotle says, in *Metaphysics Zeta* 8, 1034a5–8 that Socrates and Callias are the same in form, he means, in my opinion, that the programme, the content of the forms of Socrates and of Callias are identical. In this sense, the contents of the form are universal, since they are identical for Callias and for Socrates. Every entity belonging to the human species will have, in the opinion of Aristotle, a determined form, the soul, which is the principle of life and of development of the entity belonging to the species man. The programme of the development of the human entity is dictated by the form. Biological instances can realise the programme with a greater or lesser precision, but the programme is identical for every members of the species. Form entails a programme of development. Biological properties are universal because they contain a universally holding programme of development for all the entities instantiating that programme. The property "being man" is universal in the sense that it holds in the same way for all instances of man. A property like being man is a general, common, universal programme, since it is a programme whose contents are identical for every instance: the difference in the realisation depends on the matter.

⁶⁹ Aristotle's background vision as regards the biological field corresponds, in my opinion, to a regulated, orderly reality. The biological reality is not organized accidentally. There is a complex of laws governing biological entities. In particular, within the biological field, entities are regulated by precise laws determining faculties and development of the entities.

conception of universals is modified in the chapter in correspondence with the modification of the particulars. As the particular is interpreted as an instance of the universal, so the universal is no longer interpreted as an entity existing apart from the individual or as an entity which functions as a sort of component, of an ingredient of the individual entity. Through the specification of the features of universals, it cannot be maintained any longer that entities are compounded of universals or that universals can be prior to substance. Certain features of universals are eliminated so that the universal present at the end of the chapter is different from the universal present at the beginning of the chapter. The universal is emendated from wrong features, so that, at the end of the fact that the determination of the features of the universal is not the primary question of *Metaphysics Mu* 10, it becomes notwithstanding clear, in my opinion, throughout the chapter, that the universal cannot be prior to the substance, and that the universal cannot be a component of the individual entity: universals are something else.

In the passage of *Metaphysics Mu* 10 we have observed the status of individuals as instances of something. In the passage from *De Caelo* I 9 we can observe Aristotle's differentiation between essence in general and particularised essence. Individual entities appear to be, in my opinion, immediately concretised essences. The text *De Caelo* I 9, 277b27–278a21 says:

"Let's say not only that the heaven is one, but also that it is impossible that a plurality of heavens exists, and, furthermore, that, since it is uncorruptible and unborn, it is eternal, by going, first of all, through the questions concerning it. To all those who investigate in this way, it would seem impossible that it should be one and unique: for, in all the entities compounded and generated both of nature and of art, the shape $(\mu o \rho \phi \dot{\eta})$ in itself $(\alpha \dot{\upsilon} \tau \dot{\eta} \kappa \alpha \theta' \alpha \dot{\upsilon} \tau \dot{\eta} \nu)$ and the shape mixed with matter (μεμιγμένη μετά τῆς ὕλης) are different from each other; for example, the form $(\epsilon \delta \delta \delta c)$ of the sphere, and the gold and the bronze sphere, are different from each other, and, again, the shape $(\mu o \rho \phi \dot{\eta})$ of the circle, and the bronze and wooden circle are different from each other; for, when we state the essence ($\tau i \tilde{\eta} v \epsilon \tilde{i} v \alpha i$) of the sphere or circle, we shall not mention in the definition ($\dot{\epsilon} v \tau \tilde{\omega} \lambda \dot{\sigma} \gamma \omega$) gold or bronze, because they do not belong to its substance ($\tau\eta\zeta$ o $\dot{\upsilon}\sigma\dot{\iota}\alpha\zeta$); but if we are speaking of the copper or gold sphere, we shall mention them, even though we cannot conceive or apprehend anything else beside the particular entity ($\dot{\alpha}\lambda\lambda o$ τι παρὰ τὸ καθ' ἕκαστον). For sometimes nothing prevents that this happens, as though, for example, only one circle were apprehended; for being circle (τὸ κύκλ ϕ εἶναι) and being this circle (τ ϕ δε τ ϕ κύκλ ϕ) will nonetheless be different from each other, since the one is form $(\epsilon \delta \delta \delta \zeta)$, the other is form in matter (εἶδος ἐν τῆ ὕλη) and belongs to the particular entities (τῶν καθ' ἕκαστον). Now, since the heaven is perceptible, it would belong to the particulars: for every perceptible entity subsisted in matter (ἐν τῆ ὕλη ὑπῆρχεν). But if it is a particular (τῶν καθ' ἕκαστον), there will be a distinction between being this heaven (τῶδε τῷ οὐρανῷ εἶναι) and being a heaven without qualification (οὐρανῷ ἁπλῶς). Therefore, being this heaven (ὅδε ὁ οὐρανὸς) and heaven without qualification (οὐρανὸς ἁπλῶς) are different from each other, and the one is form and shape (εἶδος καὶ μορφή), the other form and shape mixed with matter (τῆ ὕλη μεμιγμένον). Of all the entities of which there are a shape and a form, either there is a plurality of particulars, or it is possible that there is a plurality of particulars. For it is necessary that this results both if forms (εἴδη) exist, exactly as some assert, and equally if none of such separately existing entities (χωριστὸν)⁷⁰ exists: for in all such cases in which the substance is in matter (ἡ οὐσία ἐν ὕλη), we observe that the entities of like form (τὰ ὁμοιοειδῆ) are several or infinite in number. Hence, either there is a plurality of heavens, or it is possible that there is a plurality of heavens."

The point which interests me in this context concerns the difference between being form and shape, on the one hand, and being a particular entity, on other hand. We have a distinction between the following entities:

- Shape / Shape in matter.
- Being circle / Being this particular circle.
- Form / Form in matter (particular entity).
- Being heaven without qualification / Being this heaven.
- Form and shape / Form mixed with matter.

In this text, Aristotle considers, as particulars entities, only the entities concretised in matter: to be form or shape mixed with matter is equivalent to being an instance. Aristotle differentiates between being circle and being this circle, that is, between essence and instantiation of the essence. The same kind of difference holds between being this heaven and being heaven without qualification, since the first one is form mixed with matter, whereas the second is form and shape. Aristotle is introducing a difference between the individual being heaven, and the essence which, as such, does not represent an instance. The property "being heaven" is differentiated from the instantiation of being heaven. Interesting is the use of the formulas:

- τὸ κύκλῷ εἶναι, οὐρανῷ ἁπλῶς, οὐρανὸς ἁπλῶς
 on the one hand, and
- τῷδε τῷ κύκλῳ, τῷδε τῷ οὐρανῷ εἶναι, ὅδε ὁ οὐρανὸς

on the other hand. The formulas "τῷδε τῷ κύκλῷ" and "τῷδε τῷ οὐρανῷ εἶναι" appear to correspond to individual entities, to particularised

⁷⁰ I think that the sentence should be translated in the proposed way, although the term "existing separately" (χωριστὸν) actually is declined after and referred to "none (μηθέν)".

essences. The essence is particularised through the realisation in matter: everything existing as particular appears to be a particularised essence in matter. The difference holding between the essence as such and the individual entity appears to lie in the use of the demonstrative. The individual entity is expressed with the formula of a particularised essence.

A passage of *Metaphysics Zeta* 15 can confirm some elements of *De Caelo*. In *Metaphysics Zeta* 15, 1039b20–27 we can find, in my opinion, elements which are similar to those of *De Caelo* I 9:

"Since the combined whole and the formula are different substances ($o\dot{\upsilon}\sigma\dot{(\alpha} \dot{\epsilon}\tau\dot{\epsilon}\rho\alpha \tau\dot{\sigma}\tau\epsilon \sigma\dot{\upsilon}\upsilon\lambda\sigma\upsilon\kappa\alpha\dot{\alpha}\dot{\delta}\lambda\dot{\sigma}\gamma\sigma\varsigma$) (I mean that the one is substance in this sense, the notion taken together with the matter ($\sigma\dot{\upsilon}\upsilon\tau\eta\ddot{\upsilon}\dot{\upsilon}\lambda\eta\sigma\upsilon\upsilon\epsilon\lambda\eta\mu\mu\dot{\epsilon}\upsilon\sigma\varsigma$ $\dot{\delta}\lambda\dot{\delta}\gamma\sigma\varsigma$), the other is substance in this sense, the notion without qualification ($\dot{\delta}\lambda\dot{\delta}\gamma\sigma\varsigma\dot{\alpha}\pi\lambda\omega\varsigma$)), of those, which are, therefore, said substances in this way, there is destruction (for there is generation too), but there is, of the formula, no such process as ceasing to be (for there is no generation either, for being for a house ($\tau\dot{\delta}\sigma\dot{\iota}\kappa\dot{\iota}\alpha\epsilon\dot{\imath}\upsilon\alpha\iota$) does not come to be, but being for this particular house ($\tau\dot{\delta}\tau\eta\delta\epsilon\tau\eta\sigma\dot{\iota}\alpha$) comes to be), but they are and are not without generation and destruction: for it has been shown that nobody creates or produces them."

In this context, too, the difference between essence and individual entity consists in the use of the demonstrative: the particular entity is expressed with the formula of a particular essence. Aristotle is putting order in the different kinds of entities. Everything which is concretised is a particular. It seems that Aristotle treats the particular entity (in this case, the particular house) as a particularised essence, if we look at the similarity holding between the expression connected to the particular house ($\tau \dot{o} \ \tau \tilde{\eta} \delta \epsilon \ \tau \tilde{\eta} \ o' \kappa' \alpha$). The entity which comes to be in the reality is the being for a particular house, not the being for a house in general. The being for a house in general is not instantiated by itself; it is instantiated in the particular concretisation of a house⁷¹. As in the passage from *De Caelo*, we can see that Aristotle is differentiating between the particularised essence and the essence in general. Individual entities are realised, concretised essences.

4. CATEGORIES 5 AND METAPHYSICS ZETA 13: RULES, PROHIBITIONS, AND TRANSGRESSIONS

In this paragraph, I would like to consider aspects of Aristotle's distinction

- between first substance as $\tau \delta \delta \epsilon \tau i$ and second substance as $\pi \sigma i \delta v$ and

– between the status of $\tau \delta \varepsilon \tau \iota$ and $\tau \circ \iota \delta v \delta \varepsilon$.

⁷¹ See *Metaphysics Zeta* 8, 1033a24–b19 for the not being-generated of the form.

We can observe in *Categories* 5, 3b10–21 the differentiations between

- $-\tau \acute{0}\delta\epsilon \tau \iota$ (this something), individual and numerically one, and
- $-\pi 0 i \acute{0} v$ (quality), not numerically one, predicated of a plurality.

These two kinds of entities belong to different realms of reality. The text says:

"Every substance seems to signify a this something (Πᾶσα δὲ οὐσία δοκεĩ τόδε τι σημαίνειν). Certainly, as regards the first substances, it is indisputable and true that it signifies a this something (τόδε τι): for the entity revealed is individual (ἄτομον) and numerically one (ἑν ἀριθμῷ). But, as regards the second substances, it appears, on the one hand, because of the form of the name, whenever one speaks of man or of animal, that a second substance likewise signifies a this something (ἐπὶ δὲ τῶν δευτέρων οὐσιῶν φαίνεται μὲν ὑμοίως τῷ σχήματι τῆς προσηγορ ίας τόδε τι σημαίνειν); this is not really true, but, rather, it signifies a certain quality (ποιόν τι), – for the subject is not, as the primary substance is, one (οὐ γὰρ ἕν ἐστι τὸ ὑποκείμενον), but the man and the animal are said of many entities (κατὰ πολλῶν ὁ ἄνθρωπος λέγεται καὶ τὸ ζῷον); – however, it does not signify simply a certain quality, as the white does; the white signifies nothing but a quality, but the species and the genus determine the quality concerning substance (τὸ δὲ εἶδος καὶ τὸ γένος περὶ οὐσίαν τὸ ποιὸν ἀφορίζει), – for they signify substance of a certain qualification (ποιὰν γάρ τινα οὐσίαν σημαίνει)."

In this context, Aristotle is differentiating between

- first substance, which is this something, individual, numerically one, and
- second substance, which is a quality, and which is not a numerically one entity.

Aristotle is identifying being a numerically one entity and being individual with being an instance, with being a concretisation of a property like man. A first substance, as such, is never something bare⁷²; moreover, the first substance is not neutral in relation to all its properties. A first substance is always something: the status of a substance consists in being the instance of something⁷³.

The status of $\tau \delta \varepsilon \tau \iota$ and the status of $\pi \sigma \iota \delta \nu$ are mutually exclusive: either an entity belonging to the category of substance is a this something, so that it is a

⁷² The passages *Metaphysics Delta* 18, 1022a24–29 and *Metaphysics Zeta* 4, 1029b13–16 show that entities are something in virtue of themselves. There is a difference between essence and accident. Moreover, the entity is constitutively something.

⁷³ In this context Aristotle is identifying being a numerically one entity and being individual with being an instance, a concretisation of a property like being man. Actually, second substances, too, could be dealt with as being, themselves, numerically one, but at another level of reality than that which belongs to the first substances. Aristotle, though, appears to be ready to concede the status of numerically one entities only to those entities which are instances.

first substance, or it is a quality, thus being a second substance. There is no third option. Second substance are no instances; they express what first substances are. Tóδε τι represents the instance, whereas ποιόν represents the content of the instance, the property of which the individual is an instance. The relationship between being an individual and being numerically one, on one hand, and being τόδε τι, on the other hand, is to be noticed. To be an individual and to be numerically one imply to be a τόδε τι; only the entity which is an individual and which is a numerically one entity may be regarded as a τόδε τι.

As to the definition of the properties which belong to a second substance qua second substance, such as the being a $\pi \sigma_1 \sigma_0 v$, Aristotle's intention is to prevent the consideration of the second substance as being itself a numerically one entity being posed on the same existential level as the instantiations. There are first substances, which are individual, and there are second substances, which are predicated of a plurality of items and, therefore, are not individual entities themselves, but only express a property like being man or being animal. First substances constitute concrete instances of this property. The determination of that which can be a numerically one entity and that which cannot be a numerically one entity is fundamental in order to have a healthy ontology⁷⁴.

Coming now to the incompatibility holding between $\tau \delta \varepsilon \tau \tau$ and $\tau \sigma t \delta \varepsilon \tau$, in *Metaphysics Zeta* 13,1038b34–1039a3 we have an example of ontological rules and of the consequence of the transgressions of these ontological rules:

"For those who reflect from these standpoints it is, then, clear both that none of the entities that belong universally is substance (φανερὸν ὅτι οὐδὲν τῶν καθόλου ὑπαρχόντων οὐσία ἐστί), and that none of the entities predicated in common signifies a this something⁷⁵ (ὅτι οὐδὲν σημαίνει τῶν κοινῆ κατηγορουμένων τόδε τι, ἀλλὰ τοιόνδε), but a such. If this is denied, many

⁷⁴ The passage from *Categories* 2 can give us elements as to the presence, in the instantiated reality, of entities which belong to the category of substance and which are numerically one, and of entities which do not belong to the category of substance and which are, nevertheless, numerically one. To be numerically one does not exclusively belong to the first substances.

⁷⁵ I present an alternative translation for the passage "... and it is clear that none of the entities predicated in common signifies a this something...". The alternative translation says: "... and this is clear also from the fact that none of the entities predicated in common signifies a this something, but a such ..." The fundamental point of this proposal is that the second sentence is not a conclusion on the same level as the level of the first sentence, as the translation of the main text says, but is a reason for the content of 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. I am not convinced by these proposals, since I think that both sentences "it is clear that none of the entities that belong universally is a substance" and "and it is clear that none of the rations of Aristotle. I do not think that the second sentence serves as an argument for the confirmation of the validity of the first sentence. Nonetheless, since my proposal corresponds to a minority position as regards the translation of Aristotle's text, I have decided to present an alternative translation, too.

inconsistencies and the third man arise (ἄλλα τε πολλὰ συμβαίνει καί δ τρίτος ἄνθρωπος)."⁷⁶

Noteworthy is that Aristotle wants to find a status both for second substances, on the one hand, and for entities belonging universally and entities predicated in common, on the other hand. Aristotle's assigning these entities, respectively, the status of $\pi \sigma \iota \delta v$ and the status of $\tau \sigma \iota \delta v \delta \epsilon$ clearly witnesses, in my opinion, his intention of defining the status of these entities. He is not ready to leave these entities out of consideration, or to eliminate them from the ontology. We can furthermore observe the following two principles of incompatibility holding, respectively, between kinds of entities and between entities and ontological status:

- None of the entities that belong universally is substance.
- None of the entities predicated in common is a this something.

The status of belonging universally and the status of substance, and the status of being predicated in common and the status of this something should not be confounded with each other: a rigid distinction of the two fields is needed. If this distinction is not respected, the consequence is the Third Man and, therewith, the collapse of the whole ontology. As alluded to, a false step in the interpretation of the elements of ontology can lead to irreparable damages for the whole ontology: actually, any ontology which is affected by the Third Man regress is no longer able to control the multiplication of entities.

A regress like the Third Man attests the incapacity, within an ontology, to explain which ontological status an entity predicated of a plurality has⁷⁷; moreover, the regress testifies the incapacity to rightly interpret the difference between entities which are predicated of a plurality and entities which are subject of the

⁷⁶ Aristotle does not aim, in my opinion, to eliminate the universal from the dimension of existing entities. He aims to assign the universal to a dimension of reality which is not the dimension of individual entities. He does not want, generally, to avoid a multiplication of entities; he wants to avoid a multiplication of individual entities, of instances; universals are not instances. This does not imply, though, that universals do not exist. Aristotle avoids a multiplication of individual entities through the assignment of the universals to the right ontological place. In other words, it is, in my opinion, not the case that Aristotle regards universals as not existing. He regards universals from the field of existence; he eliminates universals from the field of individual entities, while assigning them to another field of existence.

⁷⁷ Resorting to the idea in order to explain the reason why a plurality has a property, is already, as such, an irreparable mistake, since ideas are, in Aristotle's view, ontologically false entities. On the basis of the exposition of the One Over Many argument and of the Third Man argument contained in the lost work *De Ideis*, it can be seen that the idea is regarded as being an entity possessing the same property which is assigned to the entities of which the idea is predicated. Therefore, the idea is, as such, a false entity: for the entity predicated does not possess and cannot possess the property of the entities which it is predicated of; for example, the universal "man", predicated of the totality of men, does not possess the property "being man".

predication⁷⁸. Hence, in order that a correct interpretation of ontology can be delivered, a correct explanation of the ontology should present a right interpretation of entities which are instances of a property and entity which cannot be instances of a property. Moreover, this interpretation of ontology should give a correct interpretation of the conditions for the uniform predication of a property which is referred to a plurality of entities possessing this property. Aristotle aims to point out that the entity which is predicated in common is a such, and, as a consequence, does not constitute a further individual entity, a further instance of a property which can be counted together with the other entities. Aristotle thereby aims to delimit the range of entities which are instances of properties: the predicated entity is not itself a further instance of the property.

Examples of ontological rules, whose infringement would lead to different damages for the ontology, are the following ones (these rules can be found in *Metaphysics Beta* 6, *Zeta* 13, *Zeta* 16, and *Iota* 2)⁷⁹:

- Nothing common⁸⁰ and nothing predicated in common signify a this something; they signify a such (cf. *Metaphysics Beta* 6, 1003a8–10). The transgression of this rule has as a consequence that any substance is many "these somethings" (that is, it has many substances in itself) (cf. *Metaphysics Beta* 6, 1003a9–12).
- That which is said universally is not substance (cf. *Metaphysics Zeta* 13, 1038b8–9). The transgression of this rule leads to the Third Man regress (cf. *Metaphysics Zeta* 13, 1038b35–1039a3).
- The universal is not the substance of any entity (cf. *Metaphysics Zeta* 13, 1038b9–11). The transgression of this rule, and the consequent consideration of the universals as the substance of an entity lead to the disappearance of the plurality of all entities of which the universal taken into consideration is the substance (all the entities of which the universal is the substance would coincide with the universal itself and, consequently, would be numerically identical to each other) (cf. *Metaphysics Zeta* 13, 1038b12–15).

⁷⁸ The entities which are subjects of the predication are instances of a property; for example, the plurality of men are instances of the property "being man". The universal "man" is not an instance of the property. The regress of the Third Man shows that any ontology whatsoever which cannot distinguish entities having the status of instances from entities not having the status of instances, is completely false.

⁷⁹ Of course, these ontological rules are not the only ones which can be found in the texts of Aristotle.
 ⁸⁰ I regard as mutually equivalent the following expressions, which correspond to formulas used by Aristotle, for example, in *Metaphysics Beta* 6 and in *Metaphysics Zeta* 13:

- "the universal (τὸ καθόλου)",
- "the common entities (τὰ κοινά)".
- "that which is said universally (τὸ καθόλου λεγόμενον)",
- "that which belongs universally (τὸ καθόλου ὑπάρχον)",
- "that which is predicated in common (τὸ κοινῆ κατηγορούμενον)".

All these expressions refer to the realm of universal or common entities: these entities are not instances and should not be confused with instances.

- The substance of each entity is peculiar to this entity and it does not belong to any other entity. The universal is common (cf. *Metaphysics Zeta* 13, 1038b9–12).
- The universal is, by virtue of its own definition, that which belongs to a plurality of entities (cf. *Metaphysics Zeta* 13, 1038b11–12).
- Entities whose substance and essence are one, are themselves one (cf. *Metaphysics Zeta* 13, 1038b14–15).
- The substance is not said of a subject, the universal is always said of a subject (cf. *Metaphysics Zeta* 13, 1038b15–16).
- The universal is not present in the essence (cf. *Metaphysics Zeta* 13, 1038b16–23).
- The substance is not compounded of qualities (cf. *Metaphysics Zeta* 13, 1038b24–25).
- Nothing which belongs universally is substance (cf. *Metaphysics Zeta* 13, 1038b35). The transgression of this rule leads to the Third Man regress (cf. *Metaphysics Zeta* 13, 1038b35–1039a3).
- Nothing which is predicated in common signifies a this something; it signifies a such (cf. *Metaphysics Zeta* 13, 1038b35). The transgression of this rule leads to the Third Man regress (cf. *Metaphysics Zeta* 13, 1038a35–1039a3).
- The substance does not consist of substances which are present, in the substance itself, in the form of completion (cf. *Metaphysics Zeta* 13, 1039a3–8, 1039a16–17).
- No substance consists of universals, since the universal signifies a such and does not signify a this something (cf. *Metaphysics Zeta* 13, 1039a14–16).
- Entities of which the substance is one, are one (cf. *Metaphysics Zeta* 16, 1040b17).
- Unity and being are not the substance of the entities (cf. *Metaphysics Zeta* 16, 1040b21–22).
- Nothing which is common to many entities is substance (cf. *Metaphysics Zeta* 16, 1040b23).
- Substance belongs to itself; substance belongs to that which has it, of which it is substance (cf. *Metaphysics Zeta* 16, 1040b23–24).
- No universal exits separately from particulars (cf. *Metaphysics Zeta* 16, 1040b26–27).
- Nothing which is said universally is substance (cf. *Metaphysics Zeta* 16, 1041a3-4).
- No substance is compounded of substances (cf. *Metaphysics Zeta* 16, 1041a4-5).
- The universal is only a predicate. The universal is not a substance (cf. *Metaphysics Iota* 2, 1053b16–24).

5. ESSENCE, PROPERTIES, AND ESSENTIALISM

I would now like to introduce some reflections on the role of the soul. Through the soul and its operations, we can observe that the bearing structure (the bearing function) of reality represented by the essence and form operates, in the biological world, as the function of completion ($\dot{\epsilon}v\tau\epsilon\lambda\dot{\epsilon}\chi\epsilon\alpha$). At least some chapters of *De Anima* can, therefore, very well illustrate the bearing structure of completion. Essence and form are, for the individual biological entities, the factor of realisation of all the faculties. The dimension of form and essence is to be considered as the factor which leads the concrete entity to the development of all its potentialities. The passage *De Anima* II 1, 412b10–22 says:

"It is, then, been said in universal terms what the soul is: for the soul is substance in the sense of the notion (οὐσία γὰρ ἡ κατὰ τὸν λόγον). This is the essence (τὸ τί ἦν εἶναι) for a such body, like as if one of the tools, for example an axe, were a natural body: for the essence of axe would be its substance (ἡ οὐσία αὐτοῦ), and this would be the soul; if this were separated from it, it would not be an axe any longer, except homonymously (ἀλλ' ἢ ὁμωνὑμως); now, however, it is an axe. For the soul is not the essence (τὸ τί ἦν εἶναι) and the notion (ὁ λόγος) of such a body, but of a natural body such as that which has, in itself, the principle of movement and of rest. One must then observe what was said in the case of the parts too⁸¹. For, if the eye were an animal, the sight would be its soul (ψυχὴ ἂν ἦν αὐτοῦ ἡ ὄψις): for this⁸² is the substance of the eye in the sense of the notion (αὕτὴ γὰρ οὐσία ἀφθαλμοῦ ἡ κατὰ τὸν λόγον). The eye is the matter of sight (ἱ δ' ὀφθαλμὸς ὕλη ὄψεως); when sight is removed, the eye is no longer an eye, except homonymously (πλὴν ὁμωνὑμως) – exactly as the eye in stone and the painted eye."

Substance as soul is a life principle: a living entity is a unity of properties corresponding to all the life functions of the entity. A living substance is an organism; the soul as substance directs and organises all the functions of a living entity. The activities of the living substance are expression of a function centre. If an entity has a determined soul, it has a determined essence which gives life to the entity itself, and which directs its own development; soul is the entity. Soul as essence is an active force, a self-realising programme⁸³. Any biological entity, in order to live, in order to exist as that kind of entity, in order to be that entity, must have the soul. Without the essence, without the form, without the soul, which is, in the biological dimension, the essence and the form of the entity itself would not be realised. The properties composing the essence are the properties belonging to the vital functions of the entity. Soul as

⁸¹ I.e. "in the case of the parts of the living body".

⁸² I.e. "sight".

⁸³ The soul of man, which is organised in a nutritive part, in a sensitive part, and in an intellectual part, will bring the individual, concrete man to the development of the mentioned faculties, that is, to the development of the nutritive faculty, of the sensitive faculty, and of the intellectual faculty.

essence entails all the properties belonging to the vital functions brought to reality by the activity of the soul⁸⁴. Soul is the principle of the life development of the entity; all functions of a living entity depend on a unitary function centre. There is, in the individual biological entities, a unitary principle of all faculties and of the whole development of the entity: this principle is the soul.

An entity which is without a soul is only homonymously that kind of entity; the man without a soul is only homonymously a man. Any living entity having a soul is that entity because of the soul; if the entity loses the soul, the entity is no longer that entity, that is, it is that entity only in a homonymic way. Only if there is soul there is that kind of living entity. Otherwise the entity is not that kind of entity. Within the chapters II 1, II 2, II 3 and II 4 of the *De Anima*, following features can be attributed to the soul:

- Soul is the completion of the living entity.
- Soul is the factor without which there is and cannot be any living entity.
- Soul is the principle of the life functions.
- Soul is the cause as substance of animate bodies.
- Soul is the final cause of the animate bodies.
- Soul is the origin of motion of the animate bodies⁸⁵.

6. CONCLUSIONS

Coming now to a synthesis of the subjects dealt with in my analysis, we have seen that Aristotle is analysing the bearing structures of reality. Examples of these bearing structures are

- particular entities as instances of universals

⁸⁴ Aristotle's defining the soul as the first completion of a natural body which has the capacity for life (cf. *De Anima* II 1, 412s27–28) is to be connected with the fact that soul is always present. In other words, the soul directs all the activities of the living entity; it directs those activities, too, like sleeping, which are not fulfilled by the living entity in the condition of awareness.

One of the reasons why I am considering the passage of De Anima is that, in my opinion, this passage, in particular, and the strategy of the whole De Anima, in general, can deliver arguments for a defence of the concept of substance. Substance is the principle of life of the organisms; it develops and directs any life function and any faculty of the organisms. Substance is a unitary entity constituting the essence of the organisms. Organisms are, therefore, neither bare entities nor a bundle of properties. For a critique of the whole concept of the substance, I deeply recommend Peter Simons' study Farewell to Substance: A differentiated Leave-Taking. Ratio (new series), XI, 3, December 1998, pp. 235–252: in his examination of the concept of substance, Simons disputes in general the validity of different interpretations of substance; in particular, he criticises Aristotle's interpretation of substances as individual organisms, since the bounds of individual organisms are uncertain like in cases of sponges, slime mould, or termite colonies. Furthermore, organisms lack, in Simons' view, clear boundaries because of their energy exchange with the environment. Simons contends that the concept of substance belongs exclusively to the history of philosophy. In Simons' view, the concept cannot be used any longer as an actual concept in philosophy. I believe that the concept of organism and of substance as organism can be defended - at least for some kinds of organisms - from Simons' critics. I think that Aristotle's conception of substance could be presented again as a living concept in philosophy. The function of Aristotle's concept of soul could be, for example, compared to the concept of genome. The defence of the concept of substance will be dealt with in a future study.

- universals as properties, and

- the laws connected to individual and universals.

The ontological status of particular entities consists in their being instances of universals. No individual entity is a bare entity. Universals are not entities that exist independently of particular entities; their status is not that of further particular entities existing apart from the particular entities which they are referred to. Connected to the status of instances are rules which state that entities possessing the status of substance and of this something are to be rigidly distinguished from entities having the status of being universally said and from entities having the status of being predicated in common. Aristotle distinguishes between the realms of reality represented by instances, which are numerically one entities, and properties as programmes for instantiations, which are not numerically one entities. The internal unity of the biological entities is represented by the soul, which is the principle of life development of all the functions of the individual.

BIBLIOGRAPHY

- Ackrill, John Lloyd. Aristotle's Categories and De Interpretatione. Translated with Notes by J. L. Ackrill. Oxford University Press, Oxford, 1963.
- Annas, Julia. Aristotle's Metaphysics. Books M and N. Translated with Introduction and Notes by Julia Annas. Oxford University Press, Oxford, 1976.
- Aristoteles. Aristotelis Analytica Priora et Posteriora. Recensuit Brevique Adnotatione Critica Instruxit W. D. Ross. Praefatione et Appendice Auxit L. Minio-Paluello. Oxford University Press, Oxford, 1964.
- Aristoteles. Aristotelis Categoriae et Liber De Interpretatione. Recognovit Brevique Adnotatione Critica Instruxit L. Minio-Paluello. Oxford University Press, Oxford, 1949.
- Aristoteles. Aristotelis De Anima. Recognovit Brevique Adnotatione Critica Instruxit W. D. Ross. Oxford University Press, Oxford 1956.
- Aristoteles. Aristotelis De Caelo Libri Quattuor. Recognovit Brevique Adnotatione Critica Instruxit D. J. Allan. Oxford University Press, Oxford, first published 1936; reprinted with corrections 1955.
- Aristoteles. Aristotelis Metaphysica. Recognovit Brevique Adnotatione Critica Instruxit W. Jaeger. Oxford University Press, Oxford, 1957.
- Aristotle. Aristotle in 23 Volumes, Vols.17, 18, translated by Hugh Tredennick. Harvard University Press, Cambridge, MA; William Heinemann Ltd., London, UK, 1933, 1989.
- Aristotle. De Anima. With Translation, Introduction and Notes by R. D. Hicks. University Press, Cambridge, 1907; Nachdruck der Ausgabe Cambridge 1907, Georg Olms Verlag, Hildesheim – Zürich – New York, 1990.
- Barnes, Jonathan. Aristotle's Posterior Analytics. Translated with Notes by Jonathan Barnes. Oxford University Press, Oxford, 1975; second edition, Oxford University Press, Oxford, 1994.
- Barnes, Jonathan (ed). The Complete Works of Aristotle. The Revised Oxford Translation. Edited by Jonathan Barnes. Volume One. Princeton University Press, Princeton, N.J., 1984.
- Barnes, Jonathan (ed). The Complete Works of Aristotle. The Revised Oxford Translation. Edited by Jonathan Barnes. Volume Two. Princeton University Press, Princeton, N.J., 1984.

- Bonitz, Hermannus. *Index Aristotelicus*. Wissenschaftliche Buchgesellschaft, Darmstadt, 1960. Photomechanischer Nachdruck der Ausgabe von 1870.
- Bostock, David. Aristotle Metaphysics Book Z and H. Translated with a Commentary by David Bostock. Oxford University Press, Oxford, 1994.
- Burnyeat, Myles et. al. Notes on Book Zeta of Aristotle's Metaphysics, being the record of a seminar held in London, 1975–1979. Study Aids Series, Monograph 1, University of Oxford, Sub-Faculty of Philosophy, Oxford, 1979.
- Frede, Michael Patzig, Günther. Aristoteles ,Metaphysik Z'. Text, Übersetzung und Kommentar. Erster Band Einleitung Text und Übersetzung. Zweiter Band Kommentar. Verlag C. H. Beck, München, 1988.
- Hamlyn, David Walter. Aristotle's De Anima. Books II and III (with passages from Book I). Oxford University Press, Oxford, 1968.
- Ingarden, Roman. Der Streit um die Existenz der Welt. I Existentialontologie. Max Niemayer Verlag, Tübingen, 1964; II/I Formalontologie 1. Teil Form und Wesen. Max Niemayer Verlag, Tübingen, 1965; II/2 Formalontologie 2. Teil Welt und Bewusstsein. Max Niemayer Verlag, Tübingen, 1965; III Über die kausale Struktur der realen Welt. Max Niemayer Verlag, Tübingen, 1974.
- Kung, Joan. Aristotle on Thises, Suches and the Third Man Argument. Phronesis, XXVI, 3 (1981), pp. 207–247.
- Liddell, Henry George Scott, Robert. A Greek-English lexicon: with a revised supplement 1996 / compiled by H. G. Liddell and R. Scott. Rev. and augm. throughout by H. Stuart Jones, 9 ed., new suppl. Added. Oxford University Press, Oxford, 1996.
- Liske, Michael-Thomas. Aristoteles und der aristotelische Essentialismus: Individuum, Art, Gattung. Verlag Karl Alber, Freiburg (Breisgau)/München, 1985.
- Lowe, Edward Jonathan The Four-Category Ontology: A Metaphysical Foundation for Natural Science. Oxford University Press, Oxford, 2006.
- Oehler, Klaus. Ein Mensch zeugt einen Menschen. Über den Mißbrauch der Sprachanalyse in der Aristotelesforschung. Vittorio Klostermann, Frankfurt am Main, 1963.
- Oehler, Klaus. Aristoteles Kategorien. Übersetzt und Erläutert von Klaus Oehler. Zweite, durchgesehene Auflage. Akademie-Verlag, Berlin, 1986.
- Ross, William David. Aristotle De Anima. Edited, with Introduction and Commentary, by Sir David Ross. Oxford University Press, Oxford, 1961.
- Ross, William David. Aristotle's Metaphysics. A Revised Text with Introduction and Commentary by W. D. Ross, 2 vols. Oxford University Press, Oxford, 1924.
- Segalerba, Gianluigi. Ohne Satz vom Widerspruch keine Entität. Der Satz vom Widerspruch als Strukturformel der Realität. The Journal of Ancient Philosophy, Vol 5, No 2 (2011), pp. 1–57.
- Segalerba, Gianluigi. Semantik und Ontologie: Drei Studien zu Aristoteles. Peter Lang Verlag, Bern, 2013.
- Segalerba, Gianluigi. Das Manifest für eine neue Ontologie: Metaphysik My 10. Revue Roumaine de Philosophie, Volume 52, Issue 2, July – December 2015, pp. 209–237.
- Simons, Peter M. Farewell to Substance: A differentiated Leave-Taking, Ratio (new series), XI, 3, December 1998, pp. 235–252.
- Smith, J. A. Tóde ti in Aristotle. Classical Review, 35 (1921), p. 19.
- Wiggins, David. Sameness and Substance. Basil Blackwell, Oxford, 1980.
- Wiggins, David. Sameness and Substance Renewed. Cambridge University Press, Cambridge, UK, 2001.