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Aristotle on Ontological Pluralism



Mohammad Hossein Esfandiari

Ph.D candidate of philosophy, University of Isfahan, Isfahan, Iran. mhesfandyari@gmail.com

Morteza Hajhosseini (corresponding author)

Associate Professor of philosophy, University of Isfahan, Isfahan, Iran mtzh.hosseini2006@yahoo.com

Seyyed MohammadAli Hodjati

Associate Professor of philosophy, Tarbiat Modares University, Tehran, Iran hojatima@modares.ac.ir

Abstract

Aristotle has repeatedly stated in his works that 'being has several senses'. Is this to be regarded as his pluralistic ontology, an approach that seems to be too nascent? If so, how can this newfound approach in ontology be linked to the ideas of the father of this science, i.e. Aristotle? These are the questions that the present article seeks to answer. First, we will show that Aristotle thinks of 'being' in four senses. Then, step by step he proceeds to leave different senses aside, insofar as only one sense remains: being in the sense of the figures of the categories. We argue, then, that it is better to found Aristotle's ontological pluralism upon the fourfold sorts, instead of the tenfold categories. We will provide some reasons for this preference, i.e. in defense of the fourfold sorts and against the tenfold categories. Each of these four modes of being will be discussed. Finally, a version of ontological pluralism will be provided and attributed to Aristotle: Sorting Version. According to this version of pluralism, we will demonstrate how Aristotle speaks of the ontologically fundamental structure of the world.

Keywords: Aristotle's Ontology, Ontological Pluralism, Sorting Version, Categorical Being.

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1. Introduction

After the fluctuation through which the metaphysics in general, and ontology in particular, underwent in the first half of the 20th century, it was argued that what had fallen was one thing and what had arisen was another thing. In other words, it is claimed that what the analytic philosophers, in particular, Wittgenstein and the members of the Vienna circle omitted is not the same as what Quine is known for reviving it', and this is to say that the ontology that Quine presented, and is better to say, imposed on us is not the same as what the positivists had rejected. One of the differences between the two, the ontology before the fluctuation and the ontology after that, is the dispute over pluralism: that the previous ontologies were predominantly pluralistic and the later ontology, Quine's ontology, is monistic. The idea that Quine's ontology is monistic seems to be indisputable*. But in the case of previous ontologies, since the minds of new philosophers and commentators have a Quinean bias, it has to be proved that which philosophers, and how, were pluralists. Strictly speaking, it must be clarified that which philosopher believed the types and ways of being, the plurality of being, and which one accepted its various meanings, i.e. pluralism of the meaning of being. Let's start with the latter definition of ontological pluralism: that being, not merely beings, has many kinds and ways, or in other words, there are various modes of being and/or to be has various meanings in different contexts, namely depending on the different ways of being. It was in this context that Aristotle's ontology was re-noticed.

Accordingly, following the proliferation of the literature on ontological pluralism, the views were again drawn to Aristotle's ontological approach. His works seemed to provide a suitable context for developing this literature. It should be mentioned that this return was largely due to Brentano's valuable book, On the Several Senses of Being in Aristotle; the book which one can state that has woken Heidegger from the slumber of dogmatism. This is to say that Aristotle's slogan in Metaphysics that 'there are many senses in which a thing may be said to "be", is still alive and continues to inspire philosophers through centuries. Of course, how to properly understand this slogan is the subject of this article, but for now, we share the common view that Aristotle by proposing categories speaks about the pluralistic ontological structure of the world. Thus conceived, depending on this structure, being is said in many ways. Therefore, the doctrine of the categories, in addition to Aristotle's emphasis on the above slogan throughout his works, provided a suitable context in which the literature of ontological pluralism turned to him, and very likely developed around him. This is why some commentators, who contributed to the expansion of the literature on ontological pluralism, have also written about Aristotle's ontological approach. Here we can clearly refer to McDaniel (2009) and Turner (2010) who began the historical debate on the question of pluralism by referring to Aristotle.



Nevertheless, it should be noted that researching on Aristotle is difficult for two reasons, and due to the end, I'm pursuing in this essay, for three reasons. First, and it is obvious, many of Aristotle's works are no longer available and this causes incomplete, and possibly obscure, access to his ideas. Second and most importantly, in his various works, Aristotle has devised different plans and has concluded differently. These differences, for example in the case of the essence, the categories, the primary and the secondary substances, the soul, the matter, and being *qua* being, has divided Aristotle's interpreters into two groups: those who try to systematize his ideas and think of these differences as progress in Aristotle's thought or as something trivial, and those who regard these differences as inconsistency in Aristotle's thought and believe that there have been fundamental changes in his ideas and then, we cannot speak of a 'philosophical system' founded by Aristotle. Nevertheless, I will favor the first approach, depending on the purpose I pursue, and suppose that Aristotle had a philosophical system. There is also another difficulty that has its origin in that part of Aristotle's ideas that I am interested in, i.e. the doctrine of categories and particularly the treatise of the Categories. On the authenticity of this treatise, there are disputes among Aristotle's commentators and Werner Jaeger (1968, 46), for example, does not consider it as an Aristotelian treatise⁴. Nevertheless, contrary to Jaeger and in line with the mainstream commentators, I think of the categories as a treatise written by Aristotle. Then, based on these two presumptions, i.e. the Categories is an Aristotelian treatise and that Aristotle has a philosophical system, I will examine whether his philosophical system leads to pluralism and if so, how?

2. Aristotle and the Several Senses of Being

We saw how the discussion of ontological pluralism is also relevant as regards Aristotelian ontology. We remember that Aristotle once said: 'there are many senses in which a thing is said to be' (1003a)'. In seventh chapter of the fifth book of *Metaphysics*, he clarifies what he means by 'the many senses of to be' and considers 'being' in these four meanings: accidental being, essential being (being according to the figures of the categories), being in the sense of being true, and potential and actual being (1017a-b; and also 1026a-b)''. Elsewhere, without talking about the first meaning, he writes:

The terms 'being' and 'non-being' are employed firstly with reference to the categories, and secondly with reference to the potentiality or actuality of these or their opposites, while being and non-being in the strictest sense are truth and falsity (1051a-b).

However, I will focus only on the second sense of being (categorical being) and leave other senses aside. Of course, I have reasons to do so and I will explain them



in the course of explaining each of these fourfold senses of being in Aristotle. First, Aristotle considers accidental being not as a type of (independent) entity, but as a predicative relation between two beings that underlines the accidental nature of this relationship. Of course there are such a beings, because it's not so that all predicates are essential and necessary for their subjects, rather sometimes a predicate occurs by chance or by accident. Accordingly, there are accidental beings and if not, everything will be of necessity, that is not true (1027a). Indeed, accidental being in Aristotle's view is some kind of predicate that is attributed to its subject not in an essential and necessary form and also cannot be considered separated from the subject as an independent being. Brentano writes:

Something has accidental being by virtue of the being of that with which it is accidentally conjoined (Brentano 1975, 6).

And then, continues:

...accidental being does not have being in its own right, but it is because something else is accidentally conjoined with it (Ibid, 6-7)¹⁷.

To state the matter differently, being by accident is being by accident for a subject, not an independent being (e.g. musical for a white man). This is why Aristotle believes that this kind of being does not indicate the existence of any separate class of being and also, its cause is indeterminate (1028a). Furthermore, there can be no scientific treatment of it. (1026b). Therefore, this kind of being has no metaphysical significance for Aristotle and then, it is not a subject of the debate that is desirable for him, i.e. the causes and the principles of being itself, *qua* being (see for example 1003a and 1025b). For the same reasons, this sense of being is not notable for our purpose, that is, the ontological structure of the world in Aristotle and its plurality or unity.

Let us consider the third sense of being, being in the sense of being true, and the reason for abandoning it. Aristotle explains it as follows:

Being' and 'is' mean that a statement is true, 'not being' that it is not true but false,-and this alike in affirmation and negation; e.g. 'Socrates is musical' means that this is true, or 'Socrates is not-white' means that this is true; but 'the diagonal of the square is not commensurate with the side' means that it is false to say it is (1017a)¹⁷.

Thomas argues that based on this sense of being:

...anything can be called a being if an affirmative proposition can be formed about it, even though it is nothing positive in reality. In this way privations and negations are called beings, for we say that affirmation is opposed to negation, and that blindness is in the eye. (1968, 29)¹⁶

This sense of being is not also of importance for Aristotle, because he believes that this being is found not in things but in thought. As a result, being in this sense is a different sort of being as compared to being in its full sense. So, it must be dismissed. Also, its cause lies in some affection of the thought¹⁰ and again, this kind



of being does not indicate any separate class of being (1027b-1028a). It is why Thomas writes, 'in this sense, some things are called beings that do not have an essence, as is clear in the case of privations' (Ibid, 30). That this sense of being is metaphysically insignificant to Aristotle, along with the ambiguities about what and how it is in his works', are reasons why we will not pay attention to it in this article'.

Being in the fourth sense, being potentially and being actually, is of course metaphysically important to Aristotle. He writes about this kind of being:

Again, 'being' and 'that which is', in these cases we have mentioned, sometimes mean being potentially, and sometimes being actually. For we say both of that which sees potentially and of that which sees actually, that it is seeing, and both of that which can use knowledge and of that which is using it, that it knows, and both of that to which rest is already present and of that which can rest, that it rests. And similarly in the case of substances we say the Hermes is in the stone, and the half of the line is in the line, and we say of that which is not yet ripe that it is corn (1017a-b).

We know that potentiality and actuality are one of the most important issues of Aristotelian metaphysics and they are highly relevant in view of his other ideas, including matter and form, change, motion et cetera. Nonetheless, I would like to pass it in silence and just emphasize that this kind of being must be understood in relation to being in the sense of the categories, as the above quote implies. In the above quote, Aristotle first discusses potentiality and actuality in relation to some accidents and then, deals with them in relation to the substance. A quote from Aristotle which was mentioned at the beginning of this section, that is 'the terms "being" is employed with reference to the potentiality or actuality of the categories' (1051a), implies the same thing. So, although this fourth sense of being catches Aristotle's metaphysical attention, unlike the two senses that were previously rejected, but it can be discussed under the being in the sense of categories. This is why Brentano, when discussing this sense of being, writes: 'There are as many modes of potential being and actual being as there are categories; through the latter we shall understand the number of, and differences between, the former'. (1975, 33)

In short, Aristotle emphasizes that 'being has several meanings' and then, describes those meanings as something worthless and metaphysically irrelevant, or included in one sense, that it seems unjustified to say there are several meanings of being. At least, this belief is metaphysically inconsequential. Now if we consider him an ontological pluralist, ignoring those 'several senses of being', we need to examine how he is pluralist and what kind of a pluralist he is.

Categorical Being

2.1. Tenfold Classification



Having abandoned other senses of being, let's focus on being according to the figures of the categories. We know that the categories are one of Aristotle's fundamental doctrines which have been discussed in many of his works. It can be regarded as a doctrine through which Aristotle wanted to talk about the ontologically pluralistic structure of the world and then, involves both a logical and a metaphysical aspect. In *Metaphysics*, Aristotle along with discussing on different sense of being, focuses on this sense and writes:

The kinds of essential being are precisely those that are indicated by the figures of predication; for the senses of 'being' are just as many as these figures. Since, then, some predicates indicate what the subject is, others its quality, others quantity, others relation, others activity or passivity, others its 'where', others its' when', 'being' has a meaning answering to each of these (1017a)^{1A}.

There may be a confusion here between essential being, i.e. what we are discussing now and divided into substance and accident, and accidental being, which under the first meaning of being discussed and was dropped. Thomas, by pointing out this confusion, tries to make clear categorical being:

He says, then, that while things are said to be both essentially and accidentally, it should be noted that this division of being is not the same as that whereby being is divided into substance and accident. This is clear from the fact that he later divides essential being into the ten predicaments, nine of which belong to the class of accident. Hence being is divided into substance and accident insofar as it is considered in an absolute sense; for example, whiteness considered in itself is called an accident, and man a substance. But accidental being, in the sense in which it is taken here must be understood by comparing an accident with a substance; and this comparison is signified by the term *is* when, for example, it is said that the man is white. Hence this whole 'the man is white' is an accidental being. It is clear, then, that the division of being into essential being and accidental being is based on the fact that one thing is predicated of another either essentially or accidentally. But the division of being into substance and accident is based on the fact that a thing is in its own nature either a substance or an accident (1961, Bk 5, Lsn 9, Sct 885).

Some other commentators have similar remarks. Taylor, as an example, thinks of the list of categories as an attempt by Aristotle to answer the question in how many different senses the words 'is' or 'are' are employed when we assert that 'x is y' or 'xs are ys' (1919, 20). Later by emphasizing again that the word 'is' has more than one sense for Aristotle, he states that there are as many modes of being as there are types of predication. Therefore, substances, qualities, and actions, namely, each have their own specific mode of being (1919, 36). According to this reading, which quotes from Aristotle support it too, the categories are like forms that mold the being, or they are various determinations of being (1029a), or elsewhere, he introduces them as kinds of being (1089b). This is why categories can be considered as the proper



foundation through which Aristotle sought to ground the ontologically fundamental structure of the world, that is, in what fundamental types, reality or being can be founded. So, according to this interpretation, the categories are indeed *categories of being* (200b and 1024b and 1065b), or in other words, they are predicates of being: being is substance, being is quantity, being is quality, et cetera.

2.2. In Rejecting Tenfold Classification

Nonetheless, the basis on which I lay the groundwork for Aristotle's pluralism is not his emphasis on the tenfold categories, but instead, I would suggest a fourfold assortment. We will see what the four sorts of being are, but, for now, let me outline my reasons for excluding the tenfold classification. First, because Aristotle in his various works considers the categories in different numbers*. It shows that this classification cannot be about the *ontologically fundamental structure of the world*. Brentano, as an instance, clarifies:

On the other hand, it has been widely accepted that Aristotle quietly abandoned two of the original ten categories, namely posture [keisthai] and having [echein], which were originally introduced only because of the old Pythagorean and Platonic preference for the number ten (Brentano 1975, 50).

I reinforce the reason by this assumption that Aristotle did not regard the nature of categories as definitive and considered his own view merely a suggestion, or the number of categories, ten, eight or three, was not his concern⁵¹.

Second, the ten categories are concerned with the essential differences of beings and since our focus is merely on differences of being, by assuming the distinction of being and essence, this classification is not appropriate. But the fourfold classification, as will be illustrated, is only concerned with the mode of being of a thing and then, reveals the ontologically fundamental structure of the world. We will pursue this important reason again after discussing the fourfold sorts in Aristotle.

Third, because commentators have discussed a lot for many years about this possibility that the categories can be reduced to one another and then, they see them in different numbers^{rr}. It's another reason that the well-known arrangement of categories does not comply with the ontological structure of the world. The reader may be reminded here that philosophers perhaps regard various ontological structures of the world and thus, see the categories in different numbers. These differences, the reader continues, do not lead to that the tenfold categories, the eightfold categories, et cetera, are not in accordance with the ontological structure of the world (rejecting the third reason). Or even, the intelligent reader says, maybe a philosopher like Aristotle during his philosophical career, considers the different ontological structure of the world and then, treats the categories differently and in different numbers. Again, this does not mean that the usual arrangement of the categories does not refer to the ontological structure of the world (rejecting the first

reason). The answer is that it seems that differences like these are based on an empirical approach to beings, instead of coming from some sort of absolute division of being and dealing with the fundamental differences of beings. Of course, some commentators have attempted to derive categorical classification from a kind of absolute division. Thomas, for instance, has debated various ways that a predicate can be referred to a subject, that is the predicate states what the subject is, or the predicate is taken as being in the subject, or the predicate is taken from something extrinsic to the subject (1961, Bk 5, Lsn 9, Sct 891-2). But still, as we'll see, these divisions are more like divisions of the essence than divisions of modes being^{rr}. As a result, and it's related to the second reason too, since our discussion is about the fundamental structures of being and ontological differences of beings, not about differences of what-ness of them, the ten categories may not be the most appropriate answer for our discussion. Moreover, the assortment we will provide is more fundamental, since Thomas, for example, goes on the absolute division by this assumption that different mode of predication is indeed the same as different mode of being and then, the classes of being are distinguished on the basis of different ways of predicating (Ibid, Sct 890). The criteria that this research will introduce is more fundamental because, for instance, based on whether or not a concept is predicable, the classification of ways of being will be presented, and since 'mode of predication' is a posteriori criterion than 'being predicable', so my criterion will be more fundamental. In other words, the most favorable answer to the discussion is the answer that reveals the ontologically most fundamental structure of the universe and since, the fourfold classification, as you will see again, is more ontological and more fundamental than the tenfold classification, it is more demanded.

Fourth, and perhaps more importantly, because the tenfold classification considers a mode of being as substance and regards other ways as the nine accidents. Nonetheless, as everyone knows, Aristotle has discussed in detail the ontological differences of two kinds of substance, primary and secondary^{††}. The discussion is as if he refutes the possibility that these two kinds of substances have the same *mode of being*, although both are substance. At least, because one of them is individual and the other is universal^{†a}. But the fourfold sorting, as we'll see, obviously endorses to the ontological differences of primary and secondary substance and introduces them in two distinguished sorts of being.

Fifth, and less importantly, because there has always been the hypothesis that Aristotle's categories are a linguistic doctrine and concerned with the kinds of predicates attributed to a subject and then, do not contribute to the ontology. Or at least, according to the weakened version of this hypothesis, although the categories are a doctrine about the ontological structure of the world, they come from linguistic classification and considerations and insofar as language is contributed to ontology, the categories are involved in ontology too. Nonetheless, the categories are originally



the linguistic thesis. Therefore, the categories cannot be a *genuine* classification of the world and do not genuinely contribute to the ontology. Aristotle's categories from this point of view, however, is not endorsed by the author, but it has been put forward by some commentators¹⁵. Hence, this view, at least as a hypothesis, diminishes the validity of tenfold categories in presenting the ontological structure of the universe.

At the end of this part, it must be noted that my purpose was not to discredit the table of Aristotelian categories or describe it as irrelevant to Aristotle's ontology. But I was just pursuing the purpose that this table, in its usual form, can't be relevant to the ontological division of the world, as I follow it.

3. The Fourfold Sorts of Being

3.1. Introductory Remarks

Before addressing how Aristotle sorted the world, it is worth mention two considerations first. These two considerations stem from how the pluralism that will be attributed to Aristotle, 'The Sorting Version of Ontological Pluralism', is accompanied by two important and somewhat obvious ideas about Aristotle's philosophy. First, philosophies discussing the substance are generally prone to some kind of pluralistic reading in ontology. For, as the literal meaning of 'substance' also suggests, i.e. 'something that stands under or grounds things', the universe ontologically is divided into two areas: one for substructure, substance, essence, noumenon, and self-dependence, and another for superstructure, accident, appearance, phenomena and dependence, so on and so forth. To put it otherwise, a substance is always associated with an accident and if there is no accident, there would be no room for substantivity of substance. Now if we consider accident to be something ontologically distinguished from substance, which belongs to different sort of being, the notion of substance will involve some kind of ontological pluralism^v. Therefore, substantialism in a sense leads to pluralism. Secondly, to take Aristotle's ontological approach as 'sorting', implicitly indicates that he is concerned with ontological sorts or, strictly speaking, 'things in different sorts'. In other words, this reading is associated with the view of Aristotle's ontology that he thinks of 'entities' instead of 'being'. This indicates that Aristotle seeks to explore in what different ontological sorts entities are, or said differently, he discusses being as the subject, not as the predicate. From another perspective, he speaks of being not as universal, where it is attributed to something, rather as a particular, where it is the subject of something." Thus, these two common beliefs about Aristotle alone, i.e. his substantialism^{Y9} and his focus on entity instead of being, will provide the background for advancing my reading, viz. 'sorting' version of 'pluralism'.

3.2. Two criteria for ontological classification



Aristotle based on two logico-metaphysical criteria proceeds to offer a fundamental classification or sorting of the being: 1. not said of a subject, 2. not in a subject. He writes:

Of things themselves some are predicable of a subject, and are never present in a subject... Some things, again, are present in a subject, but are never predicable of a subject... Other things, again, are both predicable of a subject and present in a subject... There is, lastly, a class of things which are neither present in a subject nor predicable of a subject. (1a-1b)

It should be noted that by '(not) in a subject', for example when one says 'X is in Y', Aristotle means although X is not as a part of Y, like a component that is a part of a whole, it cannot still exist separately from Y (1a) and yet, it is impossible for the definition of X to be predicated of Y (2a)*. Based on these two criteria, there are four sorts of being:

First sort: things that are said of a subject, but are not in any subject. For example 'man' and 'horse', that although be predicated of a subject but are not in any subject.

Second sort: things that are not said of any subject, but are in a subject. For example 'the individual white' presents in a subject (the body) but is not said of any subject.

Third sort: things that are both said of a subject and in a subject. For example, 'color' that is in a subject and is said of a subject, whiteness.

Fourth sort: things that are neither said of a subject, nor in a subject. For example, 'the individual man' or 'the individual horse' that can't predicate anything and are not in a thing.

Let's look at two criteria from another perspective: 1. particularize/universalize criterion^r, 2. substantivize/ accidental criterion^r. Accordingly, there are four ontological sorts: universal substance, e.g. 'man' and 'animal', particular accident^r such as 'the individual white', universal accident such as 'color', and particular substance such as 'Plato' and 'Bucephalus'. Needless to say, Aristotle calls particular substance as primary substance and refers to universal substance as secondary substance. Now if we apply the same to the accident our fourfold classification would be these: secondary substance, primary accident, secondary accident and primary substance.

Now let's make some illustrative points about these fourfold sorts: first, the main criteria for Aristotle are negative forms, 'not said of' a subject and 'not in' a subject, as can be seen in the above criteria. This can be understood from Aristotle's discussion of the criteria, although in his words the criteria are affirmative. Accordingly, since the primary substance, namely 'this man', satisfies both criteria, it exists firstly and independently. To state the matter differently, since the primary



substance has both properties, it is ontologically different from other beings of any sort which at least lack one of the properties. Beings of other sorts, because of their failure of satisfying one of the criteria, always need a subject, i.e. primary substance, to be either *said of* it or *in* it. Thus, they are not ontologically independent. Aristotle writes:

Thus all the other things are either said of the primary substances as subjects or in them as subjects. So if the primary substances did not exist it would be impossible for any of the other things to exist (2b)^{rs}.

Secondly, beings in the second and the fourth sorts because of satisfying the first criterion (not said of a subject) include individuals while beings in the first and the third sorts, due to their lacking this criterion, include universals. Thirdly, beings in the first and the fourth sorts because of satisfying the second criterion (not in a subject) signify substances and beings in the second and the third sorts, because of lacking this criterion, include accidents. Fourthly, things in the first and the third sorts, although fail to satisfy the 'not said of a subject' criterion and include universals, there is still a difference between them insofar as since beings of the third sort lack the second criterion (not in a subject), only their names are predicated of the subject, not their definitions (for example, when we say 'the horse is white'). This was mentioned in the previous explanation of 'in a subject'. On the other hand, because things of the first sort satisfy the second criterion, both their names and their definitions are predicated on the subject (for example, when we say 'Socrates is a man') (see 2a and 103b). Fifthly, since things in the first and the second sorts lack one property, and because beings in the third sort lack both properties, they lack ontological independence. Accordingly, the beings of the third sort have two aspects of ontological dependency while beings of the first and second sorts have one aspect of ontological dependency. Sixthly, although none of the things in the second and third sorts satisfy the second criterion and are 'in' a subject, there is still a difference between them in this property of being 'in' a subject. Since things in the second sort (that satisfy the first criterion) include particulars, they just appear 'in' the primary substance (as this individual white is 'in' Bucephalus and is Bucephalus's whiteness). On the other hand, beings in the third sort, universal accidents, are 'in' substances like body or soul, not in particular substance like Socrates.

Aristotle thinks of these fourfold classifications as sorts without any ontological similarity and sorts that are ontologically disjunctive. In other words, they are different ways in which being is found and thus, it is under these four ways that a thing comes to be. Also, since these four modes of being are fundamentally different, based on those two fundamental criteria, none of them can be explained by or can be reduced to, one another. And that's why these four modes are fundamental. Here it is worth noting that a thing ontologically can *have* two sorts. As



previously stated, the being of things in the first, second and third sorts is fundamentally derived from the being of things in the fourth sort which are as a subject for their being. Indeed, 'ontologically disjunctive' and 'ontologically irreducible' in this context do not imply that a thing cannot enjoy two ontological sorts. Rather this is to say that *no things can be simultaneously contained in two ontological sorts*, that is, be ontologically particular substance and particular accident, as an example^{TV}. As it is clear, based on this new classification all the nine accidents of the categories fall into one ontological sort.

In order to understand Aristotle's sorting better, let's take advantage of one of the tools of Classical Logic. We know that particular and universal quantifiers in First-order logic refer to things in the domain of interpretation or the universe of discourse; to put it otherwise, particular quantifier, ($\exists x$), refers to at least one of the things in the domain of interpretation while universal quantifier, $(\Box x)$, refers to all of them. What we have previously called Quinean defense of ontological monism in the introduction is actually tied to this semantics. Because this semantics considers single symbol for existential quantifier and its equivalents in natural language, 'to be', 'exist', et cetera and thus, recognizes a unified sense for all these words, that is, what exactly the symbol means. Then, according to this semantics, it seems that there is only one mode of being. Now let's consider the domain of interpretation in this semantics sorted. This is to say that the domain of interpretation is not flat and uniform but it has different sorts and each thing, as it was maintained, falls into one sort only. According to this sorted domain, our symbols need to be different in referring to things, because by a single symbol, '3x' for example, it is not clear which sort of object we are referring to. Therefore, here based on Aristotle's view, we choose four different symbols: '\(\frac{1}{3}\)x' for referring to secondary substance, '\(\frac{1}{2}\)x' for referring to particular accident, '\(\frac{1}{3}\)x' for referring to universal accident, and '\(\frac{1}{4}\)x' for referring to primary substance. Thus, each symbol refers to the objects in that sort and also from it, 'being in the particular way' is understood. Hence, for, say, 'Socrates is a man' we write $(\exists_4 x)$ (Sx \land Hx). Likewise, we write for 'Bucephalus's whiteness is brilliant', by replacing 'a' for 'Bucephalus', 'b' for 'the individual whiteness', 'R' for the relation of 'being in a something' and 'B' for brilliant, as follows:

$\exists_{4}x \exists_{2}y (x=a \land y=b \land Rxy \land By)$

It is clear that in this translation we can (along with Quine shun and) replace the names with predicates. For example, we can write 'Ax' and 'Wy' instead of 'x=a' and 'y=b'. Nonetheless, as this example reminds the intelligent reader, Classical Logic with its usual semantics in the predicate calculus cannot be at all applied to Aristotelian pluralism. Since this logic radically depends on the distinction between objects and concepts, individuals and universals, names and predicates, or as Frege preferred arguments and functions. Thus, the logic fails to formulate Aristotelian



pluralism which considers a sort of being as particular, namely primary substance, and a sort of being as universal, namely secondary substance and hence, this pluralism requires uniform semantical treatment for them. Of course, Classical Logic tries to cope with this by the division between first-order logic and higher-order logic. But anyway, though Turner (2010 and 2012) has tried to reconcile between ontological pluralism and first-order predicate logic, the only acceptable logic for Quine, it may not include overall reconciliation between the two, since it does not contain Aristotelian pluralism. Turner's presupposition of pluralism is indeed the various ways of being for individual things, e. g. to be abstractly or concretely^{rx}. Whereas being universally is itself a way of being that obviously does not present individually and accordingly, the semantics of first-order predicate logic fails to model it. Hence, my purpose of using Classical Logic in order to illustrate ontological pluralism, my not be considered as consistency between the two. In other words, the semantics of Classical Logic and the Quinean slogan that 'to be is to be the value of a bound variable, of course, may be an appropriate criterion for ontology in Aristotle's eyes, but it's not sufficient. This criterion embraces properly the ontology of particular things, but there's nothing to say about universals. Therefore, according to Aristotle, representation of being by existential quantifier basically does not have a problem, but the problem arises when we consider existential quantifier encompasses the whole ontology. Thus, according to this view, logic may reveal the ontological structure of the world, but not the whole structure. Since its application is limited to quantifying over individual objects and hence, its ontology is equally limited.

However, and more important than the previous limitation, such a view of ontology is itself a Quinean one and has its origin in paying more attention to the semantics of predicate logic and the slogan of Quine's ontology. In other words, considering ontology as limited to the question 'what is there?' and preparing its answer based on the semantics of predicate logic and in the light of the slogan that 'to be is to be the value of a bound variable', and finally presenting a flat and uniform list of things (things in the domain of interpretation) may all mislead ontology from an Aristotelian perspective^{rq}. Aristotle surprisingly warns that:

In general, if we search for the elements of existing things without distinguishing the many senses in which things are said to exist, we cannot succeed, especially if the search for the elements of which things are made is conducted in this manner. (992b)

As we have seen, 'the many senses in which things are said to exist' concerns the (pluralistic) *structure* of the world. According to this ontological perspective, logic should not be taken too serious, for, at best, it can only formulate the answer to the



question 'what is there?' even if logic could speak about being universally and encompass it in its flat list.

In the end, I would like to return to the second reason upon which we preferred the fourfold categories to the ten categories. This return also makes the fourfold categories clearer for us. It was claimed that the tenfold categories are concerned with the essential classification and essential differences of beings, while our focus is merely on differences of being. (Insistence on) the distinction of being and essence, of course, is one of the tools provided by the philosophies in the Islamic world. With this tool, I want to deal with the thoughts of one of the ancestors of these philosophies. First, I would like to point out that Aristotle was aware of the distinction of being and essence. This can be found in many of his works, e.g. when he distinguishes between the question of being and the question of nature (essence):

...but in some questions the enquiry proceeds differently: namely whether a thing exists at all or not; e.g. as to whether or not a centaur or a god is. By 'whether it is or not' I mean is absolutely, not whether a thing is, e.g., white or not white. When we know that the thing does exist we enquire about its nature, asking, for instance, 'what then is a god, or what is a man?' (89b)

This distinction is found elsewhere in this book, the second book of the *Posterior Analytics*.* One can also see in *Metaphysics* how Aristotle recognizes essence as distinct from being and tries to clarify it. He explains the essence as follows: 'The essence of each thing is what it is said to be propter se' (1029b). Then we see that he recognizes essence, as being, in accordance with the figures of categories:

'What a thing is' in one sense means substance and the 'this', in another one or other of the predicates, quantity, quality, and the like. For as 'is' belongs to all things, not however in the same sense, but to one sort of thing primarily and to others in a secondary way, so too 'what a thing is' belongs in the simple sense to substance, but in a limited sense to the other categories. (1030a)

Then, continues:

...essence will belong, just as 'what a thing is' does, primarily and in the simple sense to substance, and in a secondary way to the other categories also.... (ibid)

So, in addition to the distinction of essence and being in Aristotle's eyes, we see that the categories for him are (also) the classification of the essence that the categories for him are (also) the classification of the essence that a this discussion, in the seventh book of *Metaphysics*, Aristotle has tried in detail to prove that a thing and (its) essence are one and the same or, better said, are simultaneous. Said differently, each essence is the essence of a thing and each things has an essence (see chapter six of the seventh book).

From these three, we can conclude that since categories are the classification of the essence, and because each essence is the essence of a being, so categories are the



classification of beings too. But it should be noted that this classification is concerned with essential differences of beings while, as it was mentioned, we can introduce a fundamental classification that only focuses on the ontological differences of beings. This classification concerns the mode of being of a thing and therefore, is preferable to the tenfold categories. Moreover, it is more fundamental (in addition to the other preferences mentioned earlier).

Such a view can be found in Matthews, without referring to the distinction of being and essence. He, after introducing the fourfold classification and the tenfold classification, in explanation of why Aristotle speaks of both, writes:

He wants the former [the fourfold classification] as part of his 'reduction project,' that is, he attempt to show how everything there is, is either a primary substance, or the basic classification (or conceptual part of the classification) of a primary substance, or something in a primary substance, or the classification of something in a primary substance. (2009, 154)

Then, he concludes:

Still, despite the central importance of the Fourfold Classification scheme to the metaphysics of Aristotle's *Categories*, Aristotle also thinks it important to outline the categorical differences between the ways in which non-substances can be features of primary substances. Being six feet tall is a very different sort of property from being blue-eyed, or being the teacher of someone, or being sitting rather than standing. The Tenfold Classification scheme brings out these categorical differences. (Ibid, 155)

4. Conclusion

In this article we tried to introduce Aristotle as an ontological pluralist. This may seem easy at first glance, because he has repeatedly stated in his works that 'being has several senses'. But in this article we have only proceeded on one of these different senses, i.e. being in the sense of the figures of the categories. There were some reasons for this. However, it may not be too difficult to speak about the pluralistic ontological structure of the world in Aristotle based on the figures of the categories. Because it was assumed that through the tenfold categories Aristotle wanted to show how the universe is ontologically pluralistic. But we reject the assumption as well. Based on two logico-metaphysical criteria in Aristotle, i.e. 'not said of a subject' and 'not in a subject', we presented a fourfold classification of the *ontologically fundamental structure of the world*. We then discussed in detail why the fourfold classification is preferable to the tenfold categories, that is, is more ontological and more fundamental than the tenfold classification. Based on all this, it must be concluded that Aristotle should be understood as a proponent of a version of the ontological pluralism that focuses on the pluralistic ontological *structure* of the







world, not of a version that depends on different *senses* of 'being'. We called this version 'The Sorting Version of Ontological Pluralism'.

Notes:

1 See the hint that Quine is the revivalist of ontology in (Putnam 2004, 78-79).

2 For a critical discussion on how Quine's conception of ontology has taken it to the wrong place see (Schaffer 2009), who thinks of Quine as a philosopher who shares anti-metaphysical sympathies with positivists, (Norton 1977, 88–99) and Fine (2009, 161) who thinks that Quine's approach to ontology appears to be based on a double error: asking a scientific question rather than a philosophical and answering to them by appealing to philosophical considerations. See also Huw Price (2006, 5-6) for the view that Quine in fact did not revive ontology and this orthodox philosophical history is mistaken.

3 Turner writes: ontological pluralism 'has been thought dead for a long time, destroyed by the Quinean doctrine that to be is to be needed as the value of a variable bound by an existential quantifier' (Turner 2012, 419). Although he does not agree with considering Quine's approach and ontological pluralism as appositional. Then continues: 'Announcements of its death were premature. Ontological pluralism is consistent with the Quinean doctrine...' (Ibid, 420).

4 In this case see, for example, van Inwagen (1998, 236-7), where he attributes five theses to Quine's meta-ontology and under the third one, with the title 'being is univocal', speaks about his monism.

5 See this definition of ontological pluralism in (McDaniel 2009, 290), (Turner 2010, 6) and (Turner 2012, 421).

6 See this definition of ontological pluralism in (Eklund 2009, 137-9).

7 McDaniel writes: 'Heidegger's interest in the question of being was stimulated by reading Franz Brentano's On the Several Senses of Being in Aristotle' (2009, 293). Especially, this focal point of Being and Time has Aristotleian echoes: 'But we call many things 'existent', and in different senses' (Heidegger 1996, 5). See also On Time and Being, where Heidegger describes the beginning of his philosophical career while reading Brentano's book, the book that propounds the following question for Heidegger: 'If being is predicated in manifold meanings, then what is its leading fundamental meaning? What does Being mean?' (Heidegger 1972, 74).

8 For more information on these two approaches to Aristotle's philosophy, see Jaeger (1968) (in particular, the introduction and chapter 2, 7 and 8) and Ghavam Safari (2008, 82-9). The latter contains reasons for the approach that considers Aristotle as he has a philosophical system. See also Graham, who believes that Aristotle has two philosophical systems: S1 for the *Organon* treaties and S2 for physical-metaphysical treaties. He, then, argues how the ontology Aristotle found in S1 and his conception of beings in it, is different from the ontology presented in S2 (Graham 1987, 54 and 81). This approach, of course, refutes my research. See an answer to Graham in (Wedin 2000), where Wedin defends the unified philosophical system for Aristotle and tries to resolve the conflicts between these two treatises about substance. The two can also be found in (Matthews 2009, 158-9).

9 See also (Ross 1995, 23-4) for other problems that this doctrine is involved in.

10 See also (992b), (1017a), (1026a), (1028a), (1030b), (1060b), (1061b), (1064b), (1089a) and (1217b) where Aristotle stipulates on this slogan.

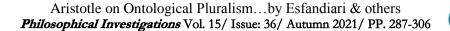
11 It should be noted that although we focus only on these four senses of being, Aristotle has also considered other senses, from other perspectives, for 'being' (see for example, 1003b). But Brentano (1975, 3-4) has elaborated how these other senses can be reduced to the fourfold senses. Nevertheless, see critical considerations on this reduction in (Shields 1999, 217-18).

12 For more on such a remarks on accidental being in Aristotle, see (1017a) and (1025a).

13 See Aristotle's other explanations on this sense of being in *Metaphysics*, fourth chapter of sixth book, tenth chapter of ninth book, and eighth chapter of eleventh book.

14 See Thomas's other explanations on this case in (1961, Bk 5, Lsn 9, Sct 896).

15 See also (Brentano 1975, 19).





- 16 For instance, on what different sense 'true' can have in Aristotle, and what different bearers, see (Brentano 1975, 15-17 and 20-22). See also (Aristotle 1051b-1052a).
- 17 See similar explanations for abandoning these two senses in (Ross 1995, 171-2).
- 18 See Aristotle's other emphasis on being according to the categories, in *Physics* (200b), in *Metaphysics* (1024b), (1026a), (1028a), (1029a), (1030b), (1045a), (1045b), (1051a), (1054a), (1065b), (1089a), (1089b), in *Nicomachean Ethics* (1096a), and in *Eudemain Ethics* (1217b).
- 19 See similar remarks in Brentano (1975), especially page 49 onwards, and (Wedin 2009).
- 20 Aristotle in *Categories* (1b) and *Topics* (103b) lists categories in ten cases, in *Posterior Analytics* (83b) and *Metaphysics* (1017a) in eight cases, elsewhere in *Metaphysics* (1068a) in seven cases, and in *Physics* (225b), (226a) in seven or eight cases, depending on different editions.
- 21 However, Copleston mentions an interesting point: 'Nevertheless, even if the tenfold division of the Categories was not looked upon as definitive by Aristotle, there is no reason to suppose that he regarded the list of Categories as a haphazard list, devoid of structural arrangement'. (1962a, 278). He writes also: 'It will be seen, therefore, that even if the number of the Categories could be reduced by subsuming certain Categories under others, the principle whereby the Categories are deduced is by no means merely a haphazard principle' (Ibid, 279-80).
- 22 See for example (Brentano 1975, 49-50) and (Ayati 1992, 52-8).
- 23 For a better understanding of Thomas's presupposition of categorical division, and knowing how this division applies to essence, see *On Being and Essence*, where Thomas explains 'an essence' is derived from 'a being' in the categorical sense and a being in this sense is that which signifies the essence of a thing (Thomas 1968, 30). He continues: 'Because we use the term 'a being' absolutely and primarily of substances, and secondarily and with qualification of accidents, it follows that essence is in substances truly and properly, but in accidents in a restricted way and in a qualified sense' (Ibid, 32).
- 24 For instance, see the fifth chapter of Categories.
- 25 More emphasis on this distinction is not verbosity, for if one does not properly understand the ontological distinction between the primary and the secondary substance, and the priority between them, she would not understand which of Plato's ideas does Aristotle disagree with and what has he achieved in return. The author believe that any ontological division that considers the primary and the secondary substance to be ontologically similar to Aristotle, misunderstands his philosophy. Strictly speaking, any interpretation that treats Aristotle's ontology as pluralistic, and yet does not suppose the primary and the secondary substance ontologically plural, when does suppose accidents, which don't matter to Aristotle, ontologically plural, is not acceptable. It is why the author consider other interpretations that regard Aristotle's pluralism concerns with the figures of the categories to be inappropriate.
- 26 For such a view to Aristotle's categories see Trendelenburg (1898, 27) and Wahl (2001, 17). See the opposition to this view in Brentano (1975, 56-8), Ross (1995, 23), Ackrill (1963, 71-2 and 78-9) and Matthews (2009, 144).
- 27 Note that before Aristotle, it was only Plato who uses the term *ousia* (Ghavam Safari 2008, 26). Accordingly, He can be considered as the author who has founded the discussion on ousia and then, ontological pluralism, and who has ontologically divided the world into two parts, one and plural, constant and changeable.... See *Phaedo* (79) where Plato regarded things to be of two kinds or classes of existence, the invisible and the visible, those that always remain the same, and those that never does, those that you could touch and see and perceive with the other senses and those that can only be grasped by the reasoning power of the mind.... However, the sixth chapter of the first book of *Metaphysics* can be regarded as a report by the pupil of Plato's pluralism.
- 28 On the view that the history of metaphysics is the history of oblivion of being and paying attention to what is, see Heidegger (1949, 277-90). In opposition to this view see Nicolai Hartmann (2019, 53), who believes that although the fundamental question of ontology is the question about 'being', this question begins with 'beings'. Because 'the initial statement of a question and its subsequent path are not one and the same'. As a result, being *qua* being 'asks about 'what is', of course, and not about 'being'; but because it considers what is only insofar as



- it is, thus, only in its most universal aspect, it indirectly comes across 'being' over and above 'what is' nonetheless'.
- 29 Nonetheless, let's for now consider the ousia in Aristotle's view the same as the substance and ignore the point Ghavam Safari (2008, 27) has made in footnote that some translators and interpreters of Aristotle's works have mentioned that the ousia is not equivalent to substance everywhere or anywhere, but 'reality' or 'real thing' are more appropriate synonyms.
- 30 See more explanations in (Ackrill 1963, 74).
- 31 Aristotle exactly uses this criterion in definition of particular: 'I call universal that which is by its nature predicated of a number of things, and particular that which is not' (17a-b).
- 32 Aristotle exactly uses this criterion in definition of substance: 'It is a characteristic common to every substance not to be in a subject' (3a). Ross (1995, 24) explains 'in a subject' refers to the relation of an attribute to its possessor. Although this explanation is not false, but since only remembers the linguistic aspect of this relation, not the ontological aspect, is not significant.
- 33 'Particular accident' may be unfamiliar to readers of Aristotle's works. But Ross wrote and quoted that 'The general tendency both in Aristotle and in subsequent philosophy has been to draw no distinction between universal and individual except in the category of substance. Prof. Stout has, however (in Proc. of the Brit. Acad. Vol. X.) recently urged a precisely similar distinction. "A character characterising a concrete thing or individual is as particular as the thing or individual which it characterises. Of two billiard balls, each has its own particular roundness separate and distinct from that of the other, just as the billiard balls themselves are distinct and separate". (Ross 1995, 60-1)
- 34 Matthews introduces this sort of beings similar to what is called 'trope' in today's metaphysical literature, and has argued for this similarity. See (Matthews 2009, 147-8).
- 35 Ross (1995, 24) has written: 'Thus the distinction of primary and secondary (i.e. of individual and universal) might have been drawn in the other categories as well as in that of substance; but Aristotle does not explicitly draw it'.
- 36 See similar considerations in Metaphysics, the firs and thirteenth chapter of the seventh book.
- 37 See (1024b) of *Metaphysics*, where Aristotle considers things which belong to different categories of being to be not analyzed the one into the other nor both into the same thing.
- 38 Although it seems that Turner's approach should prepare the ground for mathematical platonism, but in (Plebani 2017, 7-9) see how Turner's characterization of ontological pluralism, contrary to his wishes, does not lead to some versions of mathematical platonism.
- 39 It should be noted that discussing this Quinean question that 'What is there?', and insisting on the theory of quantification in this discussion, is just one of the approaches in ontology, maybe a deviant approach. Van Inwagen, for example, mentions different approaches as follows:
- [t]he study of the ontological structure of objects (Bergmann and his school's conception of ontology), the attempt to answer the ontological question 'What is there?' (bare Quinean conception of ontology), and the attempt to provide answers to the ontological question in terms of a specification of the ontological categories.
- In particular, it was Schaffer (2009) who raised this objection on Quine's ontology that he offers a *flat* list of things. He describes traditional Aristotelian ontology that is about what grounds what, and whether or not a thing is fundamental, while asking of foundation in Quinean ontology is nonsense.
- 40 Knowing the distinction of being and essence in Aristotle's view, may raise the question for the readers that to which one would he give principality and priority? I ignore this question. Just proving this distinction in Aristotle's view is sufficient for my purpose. Although considering Aristotle as the philosopher who believe to principality of essence or to principality of being, both are defensible. See, as an example, (Sanei 2001) and (Copleston 1962b, 308-9) for considering him as the believer to principality of essence, and (Dadjoo 2011, 136-59) to principality of being. Nonetheless, it is clear that if we consider Aristotle as essentialist, then, since being complies essence and essence is plural, based on different categories, it follows being would be plural too. It means, by regarding Aristotle as essentialist, his pluralism is not difficult to illustrate. However, my purpose is not tied to this issue.

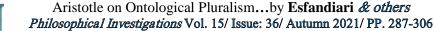


41 See also (1031a).

42 That the categories are the classification of essence is accepted in Islamic thought. Ayati, for example, after discussing the source of division of categories according to Islamic thinkers, concludes: "We can say that previous views which suppose "being" or "beings" or "craters" or "the entity of the world" as the source of division of categories are neglectful and the source of division of categories is indeed the possible quiddity [essence], one of the tree kinds of quiddity: the necessary, the possible and the impossible. The thinkers who have said otherwise, knew that the all kinds of substance and accident are of kinds of quiddity....' (Ayati 1992, 46)

References

- Ackrill J. L (1963). Aristotle's "Categories" and "De Interpretatione". Oxford: Clarendon Press.
- Aquinas, Thomas (1961). Commentary on the Metaphysics of Aristotle. vol. I. Trans. John P. Rowan. Chicago: Henry Regnery Company.
- Aquinas, Thomas (1968). On Being and Essence. Trans. Armand Maurer. Toronto: Pontifical Institute of Mediaeval Studies. Second edition.
- Aristotle (1984). *The Complete Works of Aristotle*. Two Volume. The Revised Oxford Trans. and ed. Jonathan Barnes. Princeton: Princeton University Press.
- Ayati, Mohammad Ibrahim (1992). Categories and Related Ideas. Tehran: University of Tehran Press (in Persian).
- Brentano, Frantz (1975). On the Several Senses of Being in Aristotle. Trans. Rolf George. University of California Press.
- Copleston, Frederick (1962a). A History of Philosophy. Volume 1. New York: Image Books.
- Copleston, Frederick (1962b). A History of Philosophy. Volume 2. New York: Image Books.
- Dadjoo, Ibrahim (2011). Metaphysics in the View of Aristotle and Avicenna. Tehran: Research Institute for Islamic Culture and Thought (in Persian).
- Eklund, Matti (2009). "Carnap and Ontological Pluralism." In Metametaphysics: New Essays on the Foundations of Ontology, edited by David J. Chalmers, David Manley and Ryan Wasserman, 130-56. Oxford: Oxford University Press.
- Fine, Kit (2009). "The Question of Ontology." In Metametaphysics: New Essays on the Foundations of Ontology, edited by David J. Chalmers, David Manley and Ryan Wasserman, 157-77. Oxford: Oxford University Press.
- Ghavam Safari, Mahdi (2008). Theory of Form in Aristotle Philosophy. Tehran: Hekmat Publications (in Persian).
- Graham, D. W (1987). Aristotle's Two Systems. Oxford: Clarendon Press.
- Hartmann, Nicolai (2019). Ontology: Laying the Foundations. Trans. Keith R. Peterson. Berlin: Walter de Gruyter.
- Heidegger, Martin (1949). Introduction to "What Is Metaphysics?" Trans. Walter Kaufmann. In: Heidegger, Martin. 1998. Pathmarks. Ed. William McNeill. Cambridge: Cambridge University Press. 277-90.
- Heidegger, Martin (1972). On Time and Being. Trans. Joan Stambaugh. New York: Harper & Row.
- Heidegger, Martin (1996). Being and Time. Trans. Joan Stambaugh. New York: State University of New York Press.
- Jaeger, Werner (1968). Aristotle, Fundamentals of the History of His Development. Trans. Richard Robinson. Oxford: Oxford University Press. Second Edition.
- Matthews, Gareth B (2009). "Aristotelian Categories." In A Companion to Aristotle, edited by Georgios Anagnostopoulos, 144-61. Blackwell.
- McDaniel, kris (2009). "Ways of Being." In Metametaphysics: New Essays on the Foundations of Ontology, edited by David J. Chalmers, David Manley and Ryan Wasserman, 290-319. Oxford: Oxford University Press.
- Norton, Bryan (1977). Linguistic Frameworks and Ontology: a Re-Examination of Carnap's Metaphilosophy. Mouton Publishers.





- Plato (1997). Complete works. Edited, with introduction and notes, by John M. Cooper.
 Cambridge: Hackett Publishing Company.
- Plebani, Matteo (2017). "Mathematical Platonism Meets Ontological Pluralism?" *Inquiry*. DOI: 10.1080/0020174X.2017.1347518.
- Price, Huw (2007). "Quining Naturalism." The Journal of Philosophy. 104(8): 375–402.
- Putnam, Hilary (2004). Ethics without Ontology. Cambridge: Harvard University Press.
- Ross, David (1995). Aristotle. New York: Routledge. Sixth edition.
- Sanei Dare Bidi, Manouchehr (2001). "Being and Essence in Aristotle's Philosophy."
 PazhooheshNameie Oloome Ensani. 32: 1-13 (in Persian).
- Schaffer, Jonathan (2009). "On What Grounds What." In Metametaphysics: New Essays on the Foundations of Ontology, edited by David J. Chalmers, David Manley and Ryan Wasserman, 347-83. Oxford: Oxford University Press.
- Shields, Christopher (1999). Order in Multiplicity: Homonymy in the Philosophy of Aristotle. Oxford: Oxford University Press.
- Taylor, A. E (1919). Aristotle. London: T. C. & E. C. Jack.
- Trendelenburg, Friedrich Adolf (1898). Outlines of Logic. Trans. R. Broughton. Oxford: Oxford University Press.
- Turner, Jason (2010). "Ontological Pluralism." Journal of Philosophy. 107, 1: 5-34.
- Turner, Jason (2012). "Logic and Ontological Pluralism." Journal of Philosophical Logic. 41: 419–48.
- van Inwagen, Peter (1998). "Meta-Ontology." Erkenntnis. 48: 233–50.
- van Inwagen, Peter (2014). Existence: Essays in Ontology. New York: Cambridge University Press.
- Wahl, Jean (2001). Traite de Metaphysique. Trans. Iahia Mahdavi. Tehran: Kharazmi. (in Persian)
- Wedin, Michael V (2000). Aristotle's Theory of Substance. Oxford: Oxford University Press.
- Wedin, Michael V (2009). "The Science and Axioms of Being." In A Companion to Aristotle, edited by Georgios Anagnostopoulos, 125-43. Blackwell.