


## ARISTOTLE'S PRINCIPLES AS CONDITIONS

Jose Maria Llovet Abascal<sup>1</sup>

Universidad Panamericana (UP)

 <https://orcid.org/0000-0002-1765-9085>

E-mail: [jllovet@up.edu.mx](mailto:jllovet@up.edu.mx)

### ABSTRACT:

In this paper I will argue that when Aristotle uses the word 'ἀρχή' (commonly translated as 'principle,' 'beginning,' 'origin,' or 'starting-point') he is often referring to what we call a condition, whether necessary, sufficient or necessary and sufficient. To this end I will discuss how conditions for being, change, and knowledge, as identified by Aristotle, can be equated to ontological, physical and noetic principles, respectively.

**KEYWORDS:** Aristotle; Metaphysics; Principles; Conditions; Ontology; Dependence.

---

<sup>1</sup> Doutor(a) em Filosofia. Professor da Universidad Panamericana (UP), México.

## 1. What is a principle according to Aristotle?

Aristotle uses the word “ἀρχή” throughout his works to describe, define and refer to a wide variety of entities. While God is famously described as an ἀρχή (e.g. *Metaph.* A,2, 983a9), the same is true in the case of the soul (e.g. *De An.* A,1, 402a7), substances (e.g. *Metaph.* Z,17, 1041a10), form (e.g. *Phys.* A,7), matter (*ibid*), privation (*ibid*), contraries (*Meteor.* Δ,1, 378b10), the natural body (e.g. *De An.* B,1 414a12), and happiness (e.g. *NE* A,12, 1102a2-3). Likewise, indemonstrable premises and the ends of actions are called ἀρχαί (*Post. An.* A,2, 72a7 & *EE* B,10, 1227a5-12, respectively) and in book Γ of *Metaphysics* Aristotle asserts that the principle of contradiction is “the most indisputable of all principles” (βεβαιοτάτη τῶν ἀρχῶν πασῶν, 4, 1005a10).<sup>2</sup> Now, what exactly does Aristotle mean when he calls something a principle (ἀρχή)? We know from *Metaphysics* Δ,1 that ἀρχή is said πολλαχῶς. Is there a focal meaning, a πρὸς ἓν, of ἀρχή? We know as well from *Metaphysics* Δ,1 that the notion of ἀρχή is broader than the notion of cause:<sup>3</sup> every cause is a principle, but not every principle is a cause. What is it then about principles that makes them different from causes?

It must be noticed that, as Terence Irwin correctly points out, principles are for Aristotle not only propositions, but also and primarily, all kinds of entities that are first or prior in some way to other entities (IRWIN, 1988, p. 4). Also, Malcolm Schofield has shown that pre-Socratic philosophers were looking initially for some sort of primary things or origins and not for principles understood as ‘primitives within a theoretical system’ (SCHOFIELD, 1997, p. 219). This can be confusing, because a principle is understood to be, in modern western European languages, a fundamental proposition (e.g. the principle of non-contradiction and the principle of sufficient reason). For Aristotle, by contrast, a principle is also, for example, matter. In this case, the principle is not a proposition we can formulate that might explain or establish something fundamental about matter: the principle *is* matter.<sup>4</sup> Propositional principles are of course known by Aristotle, but when he asserts that form, soul and happiness are principles, he does not mean propositional principles. This is why ‘ἀρχή’ has been translated also as ‘starting-point’, ‘origin’ and ‘beginning’.

<sup>2</sup> All translations of Aristotle’s texts in this paper are taken from the *Revised Oxford Translation* (1995). This paper follows up the research I presented in my book *La noción aristotélica de principio* (2020) by offering a summary of its main argument and my latest findings on the subject.

<sup>3</sup> According to S. Menn ([s.d.], p. 1), ἀρχή has a narrower sense than αἰτία, because all principles are causes, but not all causes are principles; an ἀρχή, then, would be a special type of cause, that is, a first cause, which is eternal and absolutely first. I do not agree with this reading. Aristotle establishes clearly at Δ,1 that all causes are ἀρχαί. And he frequently calls an ‘ἀρχή’ something which has his own causes or principles and therefore is not absolutely first. This is the case in all the examples he offers at Δ,1 of ἀρχαί.

<sup>4</sup> In his book about Aristotle’s *Physics*, W. Wieland identifies Aristotle’s principles with concepts of reflection (1962: 202–230). I do not agree with him because I think that for Aristotle principles are primarily things, entities that make possible other entities or states of affairs. Substance as a principle is not a mere concept, and cannot be boiled down *only* to a human intellectual construction we can arrive at by means of reflective thinking in order to explain something about the world (or about our experience of the world): in other words, substances are real. Forms, matter, even privation, are not only reflective concepts, they are real principles, real conditions for the existence of other things. Likewise, I do not think that principles are points of view either, as Wieland asserts. Rather, I think that we can discover different principles depending on the points of view we adopt. For instance, which would be the principles of Socrates? The answer depends on what we mean by principles: if we think of Socrates as a man, then we have to look for the most proximate conditions for the existence of any man. But we could also think of Socrates as an individual man, as a substance, as an animal, as a philosopher, as an idea, as a body occupying a particular place in a particular time. Each of those standpoints leads to a different inquiry of principles.

If we look at the inventory present in the *Categories* of things that are said without combination, ἀρχαί seem to be relatives, because a principle is always a principle of something else, and its being a principle depends on the relation it has with that entity of which it is a principle (or better said, its being a principle is the kind of relation it has with that thing of which it is a principle). Therefore, a man who is a father is in himself a man, but as a father he is πρὸς τι, he is in a relation of fatherhood with his offspring. In a similar way, all ἀρχαί are πρὸς τι. This is clearly asserted in Aristotle's refutation of Monism in *Physics* I, 2: οὐ γὰρ ἔτι ἀρχὴ ἔστιν, εἰ ἔν μόνον καὶ οὕτως ἔν ἔστιν. Ἡ γὰρ ἀρχὴ τινὸς ἢ τινῶν (*Phys.* I,2, 185a03-4).

If being a principle is being in a sort of relation with something else, what kind of relation is that? I believe that Aristotle used the word 'ἀρχή' to denote a relation of conditionality between two entities. Therefore, if X is an ἀρχή of Y, X is a condition of Y. The focal meaning of the philosophical meanings of 'ἀρχή' is precisely a conditional meaning.

At the beginning of book Δ of *Metaphysics*, Aristotle presents a somewhat rhapsodic list of six different ways in which ἀρχή is said. This list is not exhaustive. For instance, although Aristotle regards matter as a principle (*Phys.* A,7-9), he does so without resorting to any of the six senses of ἀρχή included in the list. Rather, this enumeration appears to be only a general guide on how to understand the general philosophical meaning of the term. Once the list is over, Aristotle outlines what an ἀρχή is: πασῶν μὲν οὖν κοινὸν τῶν ἀρχῶν τὸ πρῶτον εἶναι ὅθεν ἢ ἔστιν ἢ γίννεται ἢ γινώσκειται.

What exactly does it mean 'to be the first' (τὸ πρῶτον) 'from which' (ὅθεν) something is, or comes to be, or is known? The point I attempt to make throughout this paper is that with the expression 'to be the first from which' Aristotle points out that every ἀρχή is a condition. In this line, Aristotle identifies at least three different kinds of conditions: a) the conditions for *being* (i.e. ontological principles), b) the conditions for *change* (i.e. physical or natural principles), and the conditions for *knowledge* (i.e. noetic principles). This triple classification of principles or conditions is only a general orientation on how to understand what it means for *something* to be the principle of *something else*.

In what follows, I will elaborate on how the ontological, physical and noetic principles entail the conditions for being, for change, and for knowledge. I do not pretend to assert that Aristotle has a doctrine of principles according to which all principles are ontological, physical or noetic; what I am asserting is that by analyzing the triple classification of principles of Δ,1 and searching for such principles in the Corpus, we can have a general understanding of the meaning of the term ἀρχή.

Some conditions are necessary conditions, other are sufficient, other are necessary and sufficient, according to the most general contemporary classification of the subject. What kind of conditions are Aristotelian ἀρχαί, according to my reading? Most of the time, Aristotle seems to be referring to necessary conditions,<sup>5</sup> since both his analyses περὶ ἀρχῶν and his general view of science tend to be reconstructive rather than predictive. In contrast with modern science, Aristotle is not interested in understanding what the sufficient conditions for X are; rather, he is concerned with

<sup>5</sup> Sometimes Aristotle expresses a necessary condition between two elements using the relative ὅθεν (e.g. *NE* VI,2 1139a31; *Metaph.* A,1, 981b20, see CAMBIANO (2012: 35); *Phys.* II,7 198a26).

finding the conditions without which X would not be the case or would not exist.<sup>6</sup> An ἀρχή is always an ἀρχή of something.<sup>7</sup> Hence, the conditional relationship between the ἀρχή and the entity of which it is an ἀρχή is always grasped from the point of view of the entity that has such an ἀρχή.

In *On Generation and Corruption* II,11, Aristotle distinguishes clearly between necessary and sufficient conditions and poses the problem of absolute necessity in terms of the questionable sufficiency of some necessary conditions: if X is a necessary condition of Y, that does not necessarily mean that it is also a sufficient condition of Y: “Assuming that what is prior must have come-to-be if what is posterior is to be (e.g. that foundations must have come-to-be if there is to be a house clay, if there are to be foundations), is the converse also true? If foundations have come-to-be, must a house come-to-be? It seems that this is not so, unless it is necessary absolutely for the latter to come-to-be. If that be the case, however, a house must come-to-be if foundations have come-to-be. For the prior was assumed to be so related to the posterior that, if the latter is to be, the prior must have come-to-be before it” (337b14-21). In Aristotle’s scientific conception of nature, we must depart from what is given and look for its principles, its necessary conditions (see *Post. An.* II,12, 95b15-22). So, he is mainly concerned with hypothetical necessity (see *Phys.* II,9; *De Part.* I,1 642b4-13). Focusing in sufficient conditions fits a more experimental and law-oriented view of science. So, Aristotle’s interest on sufficient conditions is marginal and always related to what is eternal (see *Metaph.* Δ,5 1015b10-15): if X is a sufficient condition of Y, then Y is necessary and eternal, such is the case of generation and corruption and of the eternal movement of the heavenly spheres (see *Metaph.* Δ,5 1015b10-15).

## 2. Ontological principles

In the first chapter of book K of *Metaphysics*, Aristotle asserts that being and unity contain all things and must be considered as principles because they are first by nature, “for if they perish all other things are destroyed with them” (1059b30-31). This is a clear description of ἀρχή as a condition: being and unity are necessary conditions for the existence of everything, because if they did not exist, nothing else would exist; and if they perished, then everything would also perish. When Aristotle says that principles are first by nature, he is pointing out that every principle is always prior in some respect to that of which it is a principle. Aristotle’s notion of priority is closely related to his notion of ἀρχή.<sup>8</sup> In many passages he uses the comparative term πρότερος to refer to an ἀρχή,<sup>9</sup> because all ἀρχαί are necessarily first or prior.<sup>10</sup> As Alexander points out, preexistence is what best characterizes principles (*In Met.* Δ 347, 38).<sup>11</sup>

The expression “first in substance” (πρότερος τῆ οὐσίᾳ) is used by Aristotle to refer to an ontological priority, different from other kinds of priority (for example, temporal or noetic).<sup>12</sup> In

<sup>7</sup> οὐ γὰρ ἔτι ἀρχή ἔστιν, εἰ ἐν μόνον καὶ οὕτως ἐν ἔστιν. Ἡ γὰρ ἀρχή τινὸς ἢ τινῶν. *Phys.* I,2, 185a03-4.

<sup>8</sup> See *Phys.* I,6, 189b25. τῷ πρότερον καὶ ὕστερον διοίσουσιν ἀλλήλων αἱ ἀρχαὶ μόνον.

<sup>9</sup> See *Phys.* I,6, 189a30-33.

<sup>10</sup> In *Cat.* 11 and *Metaph.* Δ,12, Aristotle explains the different senses of priority and posteriority. Some of the senses of priority are ontological, meaning that they designate a conditional relation between two entities. See for example *Metaph.* Z,10, 1035b12-1036a25.

<sup>11</sup> τὸ μὲν οὖν προϋπάρχειν κοινὸν ταῖς ἀρχαῖς (*In Met.* Δ 347, 33-38).

<sup>12</sup> See for example *Metaph.* M,2, 1077b01-17.

*Metaphysics* Δ,11, Aristotle says that some things “are called prior if they can be without other things, while the other cannot be without them, a distinction which Plato used” (1019a2-3). Notice, however, that the kind of ontological priority attributed here to Plato is not the same as that presented in *Metaphysics* K,1, since Plato’s ontological priority demands that that which is a principle and prior by nature be capable of existence without that which is posterior. According to the Platonic notion of ontological priority, if the soul is the principle of the animal, this implies that the soul must be capable of existence without the animal. Yet, according to Aristotle, if the soul is the principle of the animal, this only means that there can be no animal if there is no soul.

In *Physics* Γ,1, when Aristotle explains why void cannot exist, he asserts that if it existed it would be “a marvelous thing and prior to all other things. For that without which nothing else can exist, while it can exist with the others, must needs be first; for place does not pass out of existence when the things in it are annihilated” (208b31-209a2). If void existed it would be God, since it would be the most fundamental condition for the existence of anything, and it would be the only entity left if all things were destroyed. So, hypothetically, if void existed (though it does not), it would be a principle according to the Platonic notion of priority.

A similar account of what it means for something to be the ἀρχή of something else is given in *Metaphysics* Λ,6, where Aristotle argues that “it is necessary that there should be an eternal unmovable substance. For substances are the first of existing things, and if they are all destructible, all things are destructible” (1071a36-37). From this follows that substance is the most fundamental ontological condition, because nothing would exist if substances did not exist (yet, from this does not follow that everything that exists is a substance; rather, it means that everything depends<sup>13</sup> on substance). The λόγος of *Metaphysics* Z-H is precisely devoted to the depiction of substance as the most fundamental ontological condition, since πάντων ἀρχή ἢ οὐσία (*Metaph.* Z,9 1034a31).

By the end of *Metaphysics* B,3, Aristotle raises the question of whether species or genera are principles. Since species and genera are both principles of something, the issue here is which of them would be prior, that is, which would be “more principle”. Phrased differently, are species the principles of genera or, rather, are genera the principles of species? Once again, this question must be understood in a conditional way, as Aristotle himself clarifies: “But again, it is not easy to say in what sense these are to be taken as principles. For the principle or cause must exist alongside of the things of which it is the principle, and must be capable of existing in separation from them” (999a17-19). From this point of view, since genera can exist without species, but species cannot exist without genera, then genera would be prior and more principle (μᾶλλον ἀρχάς) than species. This thesis is actually contested and refuted in other *loci* of the *Corpus*.<sup>14</sup> Nonetheless, the question regarding the ontological priority is always posed as a question about the way in which something is a condition for something else. In *Categories* 5, for example, Aristotle claims: “if primary substances did not exist it would be impossible for any of the other things to exist” (2b5). According to this point of view,

<sup>13</sup> The subject of ontological dependence in Aristotle’s philosophy has received considerable attention in the past years. See CORKUM (2008 AND 2016), K. FINE (1995) AND PERAMATZIS (2011). Also, Aristotle’s notion of separation has been studied as a form of ontological independence. See G. FINE (1984), GILL (1989), KATZ (2017) AND SPELLMAN (1995). As far as I know, however, the strong link between ontological dependence/independence and Aristotle’s notion of ἀρχή has been neglected. Peramatzis’ book (2011), for example, deals with Aristotle’s concept of priority, but pays scant attention to Aristotle’s notion of ἀρχή.

<sup>14</sup> *Metaph.* Λ,1, 1069a28-30; K,2 1059b37.

genera depend ontologically on species, while species depend on individuals and, in this sense, individuals would be “more principles” than species and genera.

In *Categories* 7 Aristotle asserts that the knowable (τὸ ἐπιστητόν) is prior to knowledge (ἐπιστήμη). He offers the following example: the perceptible (τὸ αἰσθητόν) is prior to perception (αἴσθησις), not only in a temporal sense,<sup>15</sup> but also in an ontological sense, “for the destruction of the perceptible carries perception to destruction, but perception does not carry the perceptible to destruction” (7b36). Therefore, according to Aristotle, in a world devoid of animals (i.e. devoid of perception), perceptibles would still exist. A question arises: would the perceptible also be a noetic condition for perception (as a type of knowledge), and not only an ontological condition? It may be so; yet, Aristotle here is thinking more in terms of ontological conditions than noetic conditions, and he would have noticed that sometimes even when the knowable (i.e. the perceptible) is destroyed, knowledge remains.<sup>16</sup>

### 3. Physical principles

The λόγος of *Physics* A,2-9 is dedicated to prove that the ἀρχαί of change are matter, form and privation. But what does exactly Aristotle intend when asking how many and which are the ἀρχαί of change? The brief history of natural philosophy introduced by Aristotle in this λόγος can be summarized as follows: an ἀρχή of change is that which makes change possible, so if such ἀρχή is not present or does not exist, then change cannot take place.

Initially, when philosophy was first discovered, the distinction between the ἀρχαί of change and the ἀρχαί of everything that exists was impossible to make. Nevertheless, in their search of the ἀρχαί of things, these philosophers discovered an ἀρχή of change (i.e. matter), although originally their intention was not to (exclusively) explain change. By saying that the ἀρχή of existents is water, fire, or some other element or entity, these philosophers were affirming that some element is the fundamental constituent of reality and, consequently, that it makes everything that exists possible, not only in its actual state, but also in every past or future state. In a way, their investigation was metaphysical in kind, but Aristotle considered it as merely physical, since the only ἀρχαί they discovered were material in kind (*Metaph.* A,3, 983b6).

Aristotle considers such theories as false or incomplete: although matter is certainly an ἀρχή of change and of every material body, matter alone explains neither change nor being. While matter is a necessary condition for change, it is not the only one. Another ἀρχή must be presupposed if change is to be accounted for: that is, form. The same can be said regarding privation: in a world composed of matter and form but lacking privation all things would be already completed, so change would be neither required nor sought by any entity.<sup>17</sup> These three principles account for change because they are the most proximate necessary conditions for it. Thereby, if a change takes place, it necessarily

<sup>15</sup> Sometimes the perceptible and perception can be simultaneous (see 7a25), but most often the perceptible is prior to perception in a temporal sense too. According to Stephen Menn, Aristotle broke “with the temporal conception of the priority of the ἀρχαί” (MENN, 2009, p. 215). That is to say that he was the first to acknowledge that it is possible that X be prior to Y ontologically, while not temporally (e.g. the final cause).

<sup>16</sup> Of course, this is true only if we consider the knowable to be the thing, and not the form in the soul.

<sup>17</sup> *Stricto sensu*, denying privation as a basic feature of natural entities is tantamount to adopting monism, since multiplicity cannot be accounted for in a world without privation.

implies a given matter, a given form, and a given privation. In this way, by the end of book A of *Physics*, we know that the natural ἀρχαί of change are matter, form and privation.

Another example of a natural principle is one of the senses of ἀρχή recognized by Aristotle in *Metaphysics* Δ,1: “That from which (as an immanent part) a thing first arises, e.g. as the keel of a ship and the foundation of a house, while in animals some suppose the heart, others the brain, others some part, to be of this nature” (1013a4-7). A keel and a heart are necessary conditions because without a keel no ship can be built and without a heart (understood as Aristotle does here, as the real principle of the animal) no animal can arise.<sup>18</sup>

Finally, the notion of nature (φύσις), as redundant as it may sound, is also a clear example of a physical principle. In *Physics* II,1, Aristotle writes that φύσις is ἀρχή τοῦ κινεῖσθαι καὶ ἡρεμεῖν ἐν ᾧ ὑπάρχει πρῶτως καθ' αὐτὸ καὶ μὴ κατὰ συμβεβηκός (192b21-22).<sup>19</sup> Not everything that changes or rests does so because of its φύσις, but when change and rest take place in such a being καθ' αὐτό and not κατὰ συμβεβηκός, then it must necessarily have a nature or be a nature. If all of a sudden beds started changing and resting by themselves, we would have to suppose a principle in them, a φύσις, that would account for such a ‘behavior.’

#### 4. Noetic principles

Aristotle solves some of the problems inherited from Platonic philosophy by means of a crucial distinction between that which is prior in knowledge (τῷ λόγῳ) and that which is prior in substance (τῇ οὐσίᾳ). His main point here is that a noetic condition does not necessarily entail an ontological condition, which is to say that a noetic principle is not necessarily an ontological principle. One of the errors made by Plato and some of his followers was assuming, as John Cleary puts it, that “the order of being follows the order of knowledge” (CLEARY, 1988, p. 90), that is, thinking that because X is a condition for the knowledge of Y, then X must be also an ontological condition of Y. For Aristotle, X can be an ontological principle of Y, but that does not mean that X must be a noetic principle of Y as well. Similarly, a noetic principle need not be an ontological principle. Genera, for example, are conditions for knowledge in the following way: ‘animal’ (as a concept) is prior to ‘man’ (as a concept), because one cannot know the definition of ‘man’ without the concept of ‘animal,’ but one can know the definition of ‘animal’ without the concept of ‘man.’ Nevertheless, this does not entail that ‘animal’ is an ontological principle of ‘man.’

In *Metaphysics* M,2, Aristotle explains the distinction between prior τῷ λόγῳ and prior τῇ οὐσίᾳ in the context of a discussion on the ontological status of mathematical objects:

Grant that they [mathematical objects] are prior in formula (τῷ λόγῳ). Still not all things which are prior in formula are prior in substance. For those things are prior in substance which when separated from other things continue to exist, but those are prior in formula out of whose formulae the formulae of other things are compounded: and these two properties are not co-extensive (ταῦτα δὲ οὐχ ἅμα ὑπάρχει) (1077b1-4).<sup>20</sup>

<sup>18</sup> See *HA* VI,3, 561a6; *GA* II, 4, 740a2-741b15; *III*,10, 760b28; *PA* III,1, 646a30; 4, 666a18-24.

<sup>19</sup> See *Metaph.* Δ,4, & *Phys.* VIII,4.

<sup>20</sup> See *Metaph.* Z,10, & Z,15, 1040a18-20.

A doctrine according to which everything prior τῷ λόγῳ is always prior τῇ οὐσίᾳ as well would be misguided, as becomes evident when considering the famous example of the alleged priority of the point over the line. According to Aristotle, both the Pythagoreans and some followers of Plato thought that the point is ontologically prior to the line, since the line cannot be thought nor defined without the point.<sup>21</sup> But the fact that X cannot be thought or known without Y does not (necessarily) entail that Y cannot exist if X does not exist. As a matter of fact, according to Aristotle points do not even exist! Nevertheless, we can think such concepts and they prove useful for grasping some features of the world. Therefore, it is true that the point is prior to the line, but only according to noetic priority.

Aristotle considers in his works a wide range of noetic principles. Any condition for the knowledge of something can be regarded as a noetic principle: propositions (e.g. *Top.* I,1, 105b10), definitions (e.g. *An. Post.* II,3, 90b25), essences (e.g. *Metaph.* Z,6, 1031b6-7), reputable opinions (e.g. *An. Post.* I,18, 81b20), experience (*An. Pr.* I,30, 46a19; *An. Post.* II,19, 100a6), νοῦς (*Metaph.* Δ,1, 1013a23; *An. Post.* II,19, 100b15), the Good and the Beautiful (*Metaph.* Δ,1, 1013a23), and even facts (*NE* I,4, 1095b6; I,17, 1098a33-34). Every kind of cognition is explained through a specific set of principles. For example, essences are principles of syllogistic reasoning (*Metaph.* M,4, 1078b24-25) and common opinions are principles of demonstrations (*Metaph.* B,2, 996b26-28). Hence, noetic principles are studied in a similar way as ontological and physical principles are, by answering the following question: what are the most important conditions (psychological, logical, linguistic, epistemological) for the possession of a given type of knowledge?

## 5. Conclusion

When Aristotle uses the word ἀρχή, he is often referring to what we now call a condition. Therefore, searching and finding principles is tantamount to searching and finding conditions. First philosophy is called science περι ἀρχῶν (cf. *MENN*, [s.d.], pp. 14–16) because it strives for the most primary and fundamental conditions of everything that exists: “he whose subject is being *qua* being must be able to state the most certain principles of all things” (*Metaph.* Γ,3, 1005b10). When Aristotle writes at the beginning of his short treatise on principles that knowledge and understanding are attained by means of the acquaintance with principles, causes and elements (*Phys.* I,1, 184a10-16), he means that knowing and understanding X consists in finding the conditions for X. What are the conditions for life, for example? As soon as we start an inquiry on the principles of life, we realize that not everything can be alive, and that only a certain type of body can be alive. Furthermore, in order to be alive, such body would demand a principle, that is, a special kind of form and activity. Explaining what life is calls for an account of its conditions, its principles.

<sup>21</sup> See *Metaph.* A,9, 992a17; M,2, 1077a31&ff.



## References

- BARNES, J., *The Complete Works of Aristotle: The Revised Oxford Translation*, New Jersey, Princeton University Press, 1995.
- CAMBIANO, G., “The Desire to Know The Desire to Know Metaphysics A 1” en: C. Steel & O. Primavesi (Eds.), *Aristotle’s Metaphysics Alpha. Symposium Aristotelicum* (pp. 1–42), Oxford University Press, 1991. <https://doi.org/10.1093/acprof:oso/9780199639984.003.0001>
- CLEARY, J. J., *Aristotle on the Many Senses of Priority*, Southern Illinois University, 1988.
- CORKUM, P., “Aristotle on Ontological Dependence” en: *Phronesis*, 53, I (2008) 65–92 . <https://doi.org/10.1163/156852808X252594>
- CORKUM, P., “Ontological Dependence and Grounding in Aristotle” en: *Oxford Handbooks Online in Philosophy*, (2016), 1–16. <https://doi.org/10.1093/oxfordhb/9780199935314.013.31>
- FINE, G., “Separation” en *Oxford Studies in Ancient Philosophy*, 2 (1984), 31–87.
- FINE, K., “Ontological Dependence”, *Proceedings of the Aristotelian Society*, 95 (1995), 269–290.
- GILL, M. L., *Aristotle on Substance*, New Jersey, Princeton University Press, 1989.
- IRWIN, Terence., *Aristotle’s first principles*, Clarendon Press, 1988.
- KATZ, E., “Ontological Separation in Aristotle’s Metaphysics” en *Phronesis*, 62, 1 (2017), 26–68. <https://doi.org/10.1163/15685284-12341318>
- LLOVET, J. M., *La noción aristotélica de principio*, EUNSA, 2020.
- MENN, S., “Aporia 13 -14” en: A. Laks & M. Crubellier (Eds), *Aristotle’s Metaphysics Beta: Symposium Aristotelicum* (pp. 211-266), Oxford University Press, 2009.
- MENN, S. (n.d.). *The Aim and Argument of Aristotle’s Metaphysics*, Iα3 (unpublished manuscript, August 24, 2018).
- PERAMATZIS, M., *Priority in Aristotle’s Metaphysics*, Oxford University Press, 2011.
- SCHOFIELD, M., “APXH”, *Hyperboreus*, 3, 2 (1997), 218–236.
- SPELLMAN, L., *Substance and Separation in Aristotle*, Cambridge University Press, 1995. <https://doi.org/10.1017/CBO9780511624872>
- WIELAND, W., *Die aristotelische Physik*, Göttingen: Vandenhoeck & Ruprecht, 1962.

---

**Autor(a) para correspondência / Corresponding author:** Jose Maria Llovet Abascal. [jllovet@up.edu.mx](mailto:jllovet@up.edu.mx)