



University of Tabriz-Iran
Philosophical Investigations
Vol. 11/ No. 21/ Fall & Winter 2017

Aristotle on the Cause of Being and of Coming to Be*

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Abstract

This paper considers Aristotle's distinction between the cause of being and the cause of coming to be. It is intended to show that Aristotle is able to unify both kinds of causes on the basis of the idea that a thing's substance is its end. He is not confused about the cause of being and of coming to be, as it might seem in several passages. The paper's focus is on Metaphysics Zeta 17. In contrast to David Charles' interpretation, my reading of this chapter puts weight on the fact that the end is said to explain both coming to be and being. According to this reading, Zeta 17 is a clue to understanding the unification of both causes in Aristotle.

Keywords: being, Coming to be, Aristotle, cause of being, Metaphysics, Zeta 17.

* Received date: 2017/10/15

Accepted date: 2017/11/11

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I

In some passages, Aristotle explicitly distinguishes between the cause of being and the cause of coming to be. In other passages, he speaks as if there were no such difference. One may consider the distinction as essential. The concern does not disappear if we render the Aristotelian *aitia* not as “cause”, as we conveniently do, but as “explanation” or “explanatory factor”. To ask why *a* is an *F* and to ask why *a* becomes an *F* seems to ask for different explanations. In consequence, one can arrive at the view that Aristotle confounds both causes or explanations. I intend to show that he does not. In doing so, I hope to contribute to a better understanding of why, for Aristotle, essence is a cause both of being and of coming to be.

First, I will list the passages in Aristotle that distinguish between the cause of being and the cause of coming to be. Second, I will consider three passages where Aristotle seems, at first glance, to confound these two causes. Third, I will discuss *Metaphysics Zeta* 17 in detail, in order to show why both causes are unified in Aristotle’s concept of substance.

Evidence for the distinction between the cause of being and the cause of coming to be can be found in at least two passages, *Met.* V 1, 1013a16–19 and *Met.* I 9, 991b3–4 (= XI 5, 1080a2–3). By discussing the various meanings of the term *archê* (“principle”) in Book V of the *Metaphysics*, Aristotle tells us that *aitia* has the same meanings as *archê* due to the fact that every *aitia* is an *archê* (1013a16–17). Principles, he adds, are primary either with respect to being, with respect to coming to be, or with respect to coming to know (a17–19). Presumably, these aspects of being primary are not mutually exclusive. Something may be primary in several ways. For example, in *Met. Zeta* 1, 1028a32–33, substance is primary in every aspect. Nonetheless, Aristotle takes it as relevant to distinguish principles of being from principles of coming to be in *Met.* V 1. It is reasonable to suppose that if principles are primary with respect to being or with coming to be, the same will hold for causes. Hence the passage can be read as evidence for the distinction between both causes.

Explicitly, the distinction appears in *Met.* I 9, 991b3–4 (= XI 5, 1080a2–3) where Aristotle criticizes Plato’s concept of causation. He reads the *Phaedo* as rendering Forms both as a cause of being and of coming to be (*tou einai kai tou gignesthai aitia*). This reading seems to be echoed in *Met. Zeta* 8, 1033b28, where Aristotle claims the uselessness of Platonic Forms to explain coming to be and being. So much for the appearance of the distinction in Aristotle. *Metaphysics Zeta* 17 will be considered later.

II

The idea that Aristotle confuses both causes may arise from three passages: *Met.* V 18, 1022a14–20, again *Met.* I 9, 991b3–4 (= XI 5, 1080a2–3), and *De gen. et corr.* 333b7–16. I shall discuss them in that order.

In *Met.* V 18, Aristotle considers the various uses of the phrase *kath’ ho* and *kath’ hauto*. He says that the phrase *kath’ ho* is coextensive with the term *aition*. In general, if A is in virtue of (*kath’ ho*) B, then B is a cause (*aition*) of A.¹

This seems to be simple. However, is being in virtue of B the same relation as coming to be in virtue of B? Here, it sounds as though Aristotle neglects the distinction.

A further look confirms this. He starts by presenting two ways in which “in virtue of” (*kath’ ho*) is said. First, things are said to be in virtue of form and substance, as the good thing is said to be in virtue of the good itself (*auto agathon*, 1022a16). Second, things are said to come to be in virtue of an underlying thing (*pephyke gignesthai*, a16). For example, color is in virtue of the surface where the color appears. In the first way, things are said to be in virtue of form, in the second, things are said to be in virtue of matter (1022a17–19).

His first example is unambiguous: the cause of being is at stake. The good thing is good in virtue of the good itself. *F*-ness is the cause of *o*’s being an *F*. This sounds Platonic, and it is indeed, as can be seen in the earlier Platonic dialogues. There is one form of virtue by which (*di’ ho*) all virtuous things are virtuous (*Meno*, 72c7–8, see also 72e5: *tô autô eidei*). In the same way, there is one form of piety by which all pious things are pious (*Eutyphro* 6d10–11). Now, goodness is not the cause of Socrates’ being what he is as such, i.e., a human being. He is a human being in virtue of human-ness, animal-ness, and two-footed-ness. These three are causes of being a human being, as Aristotle explicitly says in 1022a33–35. In short, form is the cause of a thing’s being a substance.

In another way, Aristotle tells us, color is said to be in virtue of an underlying surface (*pephyke gignesthai*, a16). We must not infer from the mere appearance of the Greek verb *gignesthai* that coming to be is at stake. Aristotle does not say that a color comes to be owing to matter. Rather, he says that color always appears on an underlying surface. One may infer from this fact that matter is needed for a color’s coming to be, but Aristotle is not explicit about this inference. As far as this passage is concerned, the question of whether the cause of coming to be is considered or not is in limbo.

Nonetheless, Aristotle adds a general conclusion: the term *kath’ hauto* is equivalent with *aition*. In this passage it sounds as if an *aition* is but a cause of being an *F*. But such a restriction is far from Aristotle’s general doctrine. Thus, even though the cause of a substance’s coming to be has not been brought up here, it must be included.

III

The second passage worth considering is Aristotle’s criticism of Plato’s concept of cause. Aristotle distinguishes twice between the cause of being and the cause of coming to be. But in his arguments against Plato, he seemingly does not.

In the Phaedo the case is stated in this way—that the Forms are causes both of being and of coming to be. Yet when the Forms exist, still the things that share in them do not come into being unless there is an efficient cause. And many other things come to be (e.g., a house or a ring), of which we do not say that there are Forms. Clearly, therefore, even the

other things can both be and come to be owing to such causes just mentioned [and not owing to Forms]. [translation by Ross, modified]²

Aristotle's criticism of the *Phaedo* has much been discussed in the literature since it is not clear what type of cause he is taking aim at (e.g., whether he takes Forms as efficient or as formal causes). I propose not to consider this question, but to take Aristotle at his word. He says that in the *Phaedo*, Forms are rendered as the cause both of being and of coming to be (*kai tou einai kai tou gignesthai aitia*). Is this a correct reading of the *Phaedo*?

When Socrates introduces his concern about causes, he first speaks of the cause of coming to be and perishing (95e9–96a1). However, a few lines later, he refers to the causes of coming to be, of perishing, and of being (96a8–10). This extension comes without fanfare.³ In Socrates' later account, it is hard to decide whether Form as a cause should embrace both the cause of being and the cause of coming to be. His earlier reference to the explanations of Empedocles and Anaxagoras makes it probable that he has both causes in mind when talking about Forms and participation. But with one possible exception, all he explicitly says until 103b is that something is an *F* because of the Form *F*. Coming to be seems not to be considered.

The exception is 100d7–8 and e2–3. Some manuscripts read that all the good things *become* good because of the Form of the good, some read that they *are* good.⁴ If we accept the reading that the good things become good because of the Form of the good, one may ask whether this must be taken in a physical sense. In 101b9–c1, Socrates talks about the reason why one and one become two (*genesthai*), and this phenomenon is not a generation in a physical sense. It is not a process.⁵

We have to wait until 103a5–10 for a clear reference to coming to be. As Phaidon reports of the dialogue between Socrates and his friends, someone of the participants has noted that the discussion's result seems to contradict with what has been said earlier. Socrates agrees, and the concern seems to be about the earlier discussion in 70d7–71a7. There, everything was said to come to be (*gignesthai*) from its contrary, e. g. the big from the small. This has proved impossible, Socrates sums up in 103c7–8.

For this reason, I conclude, Aristotle may take it as obvious that physical change is at stake in the *Phaedo*. His objection to the *Phaedo*'s doctrine starts with a twofold argument that is restricted to coming to be. Nonetheless, he concludes that therefore (*hôte delon*) many things are and come to be not by virtue of Forms. In the first part of the argument, he shows Forms to be insufficient to explain coming to be. Forms are always there, physical objects are not. The latter do not come to be unless there is a moving principle. In the second part, he goes a step further by showing that Forms must be irrelevant for coming to be. Since many things come to be of which there are no Forms, Forms cannot be a necessary condition for coming to be.

Here, it is indubitable that Aristotle is speaking about the coming to be of objects, as his example of a house makes clear. As Annas rightly sums up, the argument shows that “Forms are neither sufficient (a) nor necessary (b) for coming into being.”⁶ However, the argument's purpose was to show that Forms

are neither causes of coming to be nor of being. Does the latter follow from the former?

As Aristotle puts it in the passage quoted, he seems to think that the cause of a thing's coming to be is also the cause of its being. However, he gives no hint of why we should agree with him. We have to search elsewhere for an explanation.

IV

The full relevance of the next passage will not become clear until we discuss *Zeta* 17. In that passage, Aristotle seems, when refuting Empedocles' concept of nature, to ignore the difference between the cause of being and the cause of coming to be. He indifferently speaks of *aition* when replacing Empedocles' concept of mixing by the concept of essence:

Then, what is the cause determining that a human being comes to be from a human being, that wheat (instead of an olive tree) comes to be from wheat, either always or for the most part? And are we to say that a bone is what is put together in such and such manner? For nothing comes to be by being composed by chance, as he puts it, but by a certain account. What, then, is the cause of this? Fire and Water are none. But neither is it Love and Strife, the former is a cause of association only, and the latter only of dissociation. No: the cause in question is the substance of each thing, not merely "a combining and a divorce of what has been combined," as he says. And chance, not account, is the name of these occurrences, for things are combined by chance here.[translation by Joachim, modified]⁷

It is worth noting that the Greek noun *mixis* does not stand for mixture, but for mixing.⁸ Empedocles' Fragment DK 8 shows us that he takes the mixing of elements as what people call nature, and the divorce of elements what they call death. Possibly, Empedocles' concept of *mixis* is primarily intended to explain coming to be. However, as long as fire and water are mixed in a certain way, a bone is given. The elements' mixing, then, were the cause of becoming a bone, the elements' mixture the cause of being a bone.⁹

Aristotle reads Empedocles' concept of *mixis* as explaining both why a bone comes to be and what a bone is. First, he asks for an explanation of why a man always begets a man. Second, he asks whether the past mixing (*ôdi syntethê*) explains us what a bone is (note that the aorist *syntethê* refers to a process in the past).¹⁰

By contrast, the Greek *ousia* can hardly signify a process, and Aristotle never speaks of "essentialization." Nonetheless, he does not hesitate to replace Empedocles' *mixis* by essence (as I translate *ousia* here). Since essence is not a process, how can it be relevant to explain coming to be? As Aristotle puts it, essence is what guarantees the proper way of coming to be. Because of essence, a human being always begets a human being, not only sometimes and by chance. So understood, essence is a necessary condition for a natural process of coming to be. Moreover, essence in Aristotle is an object's essence, that is, the cause of the object's being this sort of thing. If essence guarantees that an olive tree grows out of a seed, and if essence is what an olive tree is in itself, the cause of being and the cause of coming to be are unified.

Again, Aristotle neither tells us that both causes are unified nor gives any hint why it holds. Since he does not prove that essence is indispensable to explain the process of natural coming to be, one might tend to take his reference to essence as a dodge to elegantly merge both causes. My purpose is not to discharge Aristotle from such an accusation. Whether essence must be a cause of coming to be goes far beyond the scope of my considerations. However, we see why Aristotle speaks indiscriminately of the *aition* of natural objects with respect to essence. If a thing's essence is the cause of the thing's coming to be, it is both the cause of being and the cause of coming to be. But these matters will not become clear until we consider *Zeta* 17.

V

Before I turn to *Zeta* 17, 1041a20–b9, I shall offer a general claim. With respect to Aristotle's theory of definition in *Ana. post.* II 8–10, one might suppose that my concern is much ado about nothing. According to this theory, an adequate definition of what something is explains why it is. For example, the definition of thunder explains why it thunders. Definition and explanation are interrelated because the middle term of the explaining syllogism is the event's essence. Thus, being and coming to be are interwoven. In consequence, essence is both a cause of being and of coming to be.

Even though Aristotle's discussion of explanatory definitions is mostly restricted to natural events, such as thunder or an eclipse, he seems to extend this method to substances, too (*Ana. post.* II 8, 93a22–24). However, the result of *Ana. post.* II 8–10 does not work for substances without modifications, as Charles already has noted.¹¹ Charles takes Aristotle to stay "as close as possible" to the method of *Ana. post.* later in *Zeta* 17.¹² However, that isn't close at all, as we will see. As Charles rightly points out, the concepts of form and matter do not appear in *Ana. post.* II 8–10.¹³ But this is only half of the difference between *Ana. post.* and *Zeta* 17. An object's form, as it appears in *Zeta* 17, is identical with the object's end and this identification goes back to *Physics* II 7. All we get in *Ana. post.* is the idea that form is one of four explanatory factors. The end of coming to be has no relevance for an adequate definition of thunder. Hence, in order to interpret *Zeta* 17 adequately we should rather consider *Physics* II, 7–9 than *Ana. post.* II 8–10.¹⁴

Here is the relevant passage of *Zeta* 17 at full length (the most important part will be (ii)):

(i) However, one could ask why a human being is such a kind of animal. It is clear that this is not to ask why one who is a human being is a human being. So what one asks is why it is that one thing belongs to another. (It must be evident that it does belong, otherwise nothing is being asked at all.) For example, why does it thunder, that means, why a noise is produced in the clouds? In this manner, what is sought is one thing predicated of another. And why are these things, e.g., bricks and stones, a house? It is clear, then, that what is sought is the cause, and this is the essence, logically speaking.

(ii) In some cases, the cause is the end (as presumably in the case of a house or a bed), while in some cases it is the moving principle. For this latter

is also a cause. But such a cause is sought with respect to coming to be and ceasing to be, while the former is sought also with respect to being.

(iii) Most of all, in cases where things are not predicated one of another, one does not recognize what is sought. This happens, e.g., when it is asked what a human being is, because the question is simply put and does not distinguish these things as being that. But we must articulate our question before we ask it, otherwise we shall have a case of asking both something and nothing. And since the existence of the thing must already be given, it is clear that the question must be why matter is so-and-so. For instance, why are these things here a house? Because it holds what being is for a house. And why is this thing a human being, or why is this body in this state? So what is sought is the cause (this is the form) by which matter is a certain thing. And that is substance. [translation by Bostock, modified]¹⁵

For the first time in *Zeta*, the end of coming to be appears. The so called final cause enters the discussion of substance. Aristotle starts this last chapter of *Zeta* by claiming that substance is a cause and a principle. Generally, he adds, searching for the reason why means to ask why this holds of that.¹⁶ What follows in 1041a11–b7 can be read as an exemplification of what it means to ask this way. In b7–8 Aristotle concludes that by asking why this holds of that, we search for the cause by which matter is a certain thing, e. g., a house or a human being.

If we ignore section (ii) for a moment, he seems to confuse the cause of being with the cause of coming to be. In (i), he starts with the claim that one has to ask why this animal is a human being (a21) and, generally, why this holds of that (a23). In both cases, being, not generation, appears to be at stake. The same holds for the case of the house in a27: the question is why stones and bricks are a house; not, why a house comes to be. In contrast, the example in a25 asks why noise comes to be (*gignetai*) in the clouds. Aristotle switches from the question of being to the question of coming to be and back again. In (iii), to ask why this body is a human being does not ask for coming to be. Finally, Aristotle merges all these questions as being a question about matter (b7–8), and matter has to do with coming to be. In sum, both causes seem to be confounded.

But section (ii) changes everything. First, it explicitly distinguishes between the question of being and the question of coming to be. Second, it distinguishes between items such as thunder and houses. Third, it explains what sort of cause explains both an object's being and coming to be: the end.

I shall add some words to my reading of *tinós heneka* in a29 as “the end” or “the purpose”. Leunissen argues for a different meaning of the Aristotelian phrases *to hou heneka* and *to heneka tinós*. Only the former designates an end, the latter the relation “that this is for the sake of something.”¹⁷ From a grammatical point of view, one may agree with her interpretation. Moreover, one could say that this relation fits well with Aristotle's general formula *dia ti hyparchei ti kata tinós* a few lines before (a23). Nonetheless, I take the distinction to make little sense in the context of *Zeta*. The *tinós heneka* is said to be a cause (a28 & 30: *aition*) and the cause at stake is substance in the sense of form. By no means is the Aristotelian form a relation. Thus, the phrase

cannot stand for the "relation as such", as Leunissen puts it. Aristotle explicitly identifies the *tinós heneka* with form and substance (1041b9 & *Physics* II 8, 199a30–32; in 200a33, he speaks of the *aitia hê tinós heneka*). As far as I can see, the best way for rendering the Greek *tinós heneka* remains to translate it as the end or purpose of coming to be in order to preserve the idea that form is at stake.¹⁸

It is worth reading Aristotle's words in section (ii) carefully. He speaks but of one single cause (*aition*). In the case of a house or a bed, this cause is the end, in the case of events such as thunder, it is the moving principle. Remarkably, he adds that the latter is "also" (*kai*) a cause. Why this? The reason seems to come immediately after. The moving principle is the cause we are seeking for when we ask for the reason of coming to be. All we need to explain thunder is to give its cause of coming to be. If there is a cause of thunder's being, it is either irrelevant or already given by reference to the moving principle. But why there is such a difference between thunder and houses?

One might want to reason that thunder and eclipses are "natural processes" (as Charles has put it), human beings and houses substances. But neither *Ana. post.* II 8–10 nor *Zeta* 17 make such a distinction. Moreover, as many commentators read *Physics* II 8, Aristotle renders natural processes such as rain as being for the sake of something. Why, then, do we seek for the moving principle in the case of thunder and for the end in the case of houses, as we are told in *Zeta* 17?¹⁹

What we can take for granted is this. The house's end, that is, its purpose explains both why these bricks and stones are a house and why they came to be a house. By contrast, the moving principle explains what thunder is by explaining why it thunders. The reason for this difference might be that thunder and an eclipse do not persist in the way houses and human beings do. But no such difference is offered by Aristotle. All he says is that we seek for different causes in the case of thunder and houses.²⁰

One might reason that in the case of substances, the moving principle and the end are unified in the form what would render a clear distinction between both causes as inappropriate.²¹ However, both causes are one because the end is but essence and parent and offspring are the same in essence, as Aristotle explains. This unification does not forbid us to distinguish between the moving principle and the end as two different causes, as Aristotle does in *Zeta* 17 since he is concerned with different objects.²²

The remarkable point in *Zeta* 17 is that either the moving principle or the end are said to be the cause. Aristotle is no longer seeking for a distinction of different causes or explanations as he does elsewhere (see e.g., *Physics* II 3, 194b16–195a4 = *Met.* V 2, 1013a24–b6; *Ana. post.* II 11, 94a20–b26), but for one specific cause (*aitia tis*, 1041a9–10; *to aition*, 1041b7). Substance is *the* cause by which matter is a certain thing (1041b7–8). It is the only cause we are seeking for in search of substance (1041a27–28). My emphasis of Aristotle's talk of one single cause (which is substance) does not rely on an assumption that he distinguishes between *aitia* and *aition*, which can be ruled out.²³ Rather, it relies on the fact that according to 1041a28–32, in some cases, the cause is

the end and in some cases, it is the moving principle. The plurality of causes, as it appears elsewhere, has become irrelevant.

For this reason, I think, we can rule out Frede/Patzig's reading of the passage. Against the majority of commentators, they hold that both the moving principle and the end only refer to coming to be and perishing, and that the essence mentioned in 1041a28 is what also refers to a thing's being. My objections are these. First, as we can see in *Physics* II 7, 198b2–11, the end is essence, and this equation is pondered even by Frede/Patzig a few lines before in their commentary. Second, Aristotle does not discuss here what types of causes can be worked out with respect to coming to be and being, as Frede/Patzig put it. He is searching for *the* cause that makes matter this sort of thing.²⁴

Substance, then, is both the cause of being and the cause of coming to be. There is no need to distinguish between both causes. Inasmuch as substance explains why some matter is a certain thing, it also explains the matter's coming to be this thing.

But should we take the latter claim for granted? Does substance really explain why these bricks and stones became a house? It does, when we take the end to be substance, as Aristotle teaches us in 1041a29. What we get in *Zeta* 17 is a remarkable shift away from the method in *Ana. post.* II 8–10.

In *Ana. post.* II 8–10, the question of why it thunders is explained by the extinction of fire. In a similar way, one might explain that bricks and stones come to be a house because a housebuilder is putting them together. However, this is not the way Aristotle proceeds in *Zeta* 17. The housebuilder as the moving principle of a house is completely irrelevant in *Zeta* 17, and the same holds for *Eta* 2–3, as we will see. Thus, the focus in *Ana. post.* is on the moving principle, but in *Zeta* 17, it is on the end.²⁵

This shift, I believe, can only be explained on the basis of *Physics* II 7–9. This is where Aristotle identifies form and essence with the end of coming to be. With respect to *Physics* II, the specification of the cause in *Zeta* 17 is no surprise. At the end of *Physics* II 9, Aristotle tells us that the end (*tinós heneka*) is most of all a cause because it is the cause of matter (*aition tês hylês*, 200a33). The purpose of a saw (namely sawing) defines the shape and the material that is needed. This fits well with the two claims of *Zeta* 17 that substance is the cause of matter and that the end is the cause of being and coming to be. What we need to understand Aristotle's discussion of cause in *Zeta* 17 is not *Ana. post.* II 8–10 but *Physics* II 7–9.

VI

However, the discussion on substance has not finished at the end of book *Zeta*. It continues in book *Eta*. I shall show also in *Eta* 2 and 3, the definition of a house refers to the end of coming to be and neglects the moving principle. Aristotle continues where he ended in *Zeta* 17. According to Charles, a house is now defined thus: "What it is to be a house [i.e., being arranged in a given way] belongs to matter of this type."²⁶ Then, the arrangement of the material were the house's essence. But as we will see, the house's purpose is its essence.

With respect to the question of what essence is, *Eta 2* and 3 stay close to *Zeta 17*.²⁷

The discussion of *Eta 2* is concerned with perceptible substances. Specific differences explain what a perceptible thing is. Ice, for example, is water being solidified in a certain manner, a threshold is defined by its position, a wind by its direction and place, and a house by bricks and stones being arranged in a certain way (1042b15–25 & 1043a7–10). All we need to explain a thing's being, it seems, is matter and difference.

However, Aristotle warns us not to take such differences as substance. They are but what is analogous to substance (*homôs to analogon en hekastô*, 1043a4–5). It is hard to explain why this holds. Ross has offered the reason that these differences do not fall into the category of substance. This is disputable on the basis of *Topics I 4*, 101b19–20, where the difference is included in the class of genus.²⁸ I shall try to offer a better reason.

First, we have seen that mixture is not substance because mixture is an arrangement by chance. Thus, in the case of ice, the arrangement itself does not explain why water always freezes to ice, that is, why water is always arranged this way when it gets cold. In the same manner, the arrangement of the four elements in a human body does not explain why a human being always begets a human being. Hence, substance must be different from proportion and arrangement. The latter is rather a result of substance.²⁹

There is a second reason why the arrangement is not the cause we are searching for. It does not meet the demands of *Zeta 17* for being the *aition* that explains both coming to be and being. The arrangement of a house does not explain why a house has been built. And the arrangement of the water molecules does not explain why water solidifies this way. By contrast, the extinction of fire sufficiently explains why it thunders. Here, the moving principle is all we need, since it answers both the question what thunder is and why it happens. What, in the case of a substance does explain both what it is and why it came to be? Only the end.³⁰

Unsurprisingly, thus, Aristotle comes back to the end as essence in *Eta 2*. Charles meets this fact by concluding that “[t]he example of the house, so understood, parallels that of thunder. As the latter is noise in the clouds caused by fire being quenched, a house will be bricks and stones (matter) arranged in a given way for the sake of protection.”³¹ I see no parallel here. In the case of thunder, the definition in *Ana. post.* mentions but the moving principle. In the case of a house, the definition in *Eta* mentions matter, the arrangement, and the purpose. As we learnt in *Zeta 17*, the end is essence, not the difference, as many commentators seem to read *Eta 2*. The one cause of a house's being and coming to be is the purpose of a house. It explains both what a house is and why bricks and stones have to be arranged in a certain way in order to build a house.

Why, then, is the difference at stake in *Eta 2*? Aristotle's explicit purpose is to clarify substance in the sense of actualization (*energeia ousia*, 1042b10–11), but the result is dubious. In 1043a12, he sums up that the actualization and the account of each thing differ due to the difference of matter. This seems to assume that the actualization and essence of a thing is the specific difference.

However, what follows from a14 on is a different line of reasoning. As often, Aristotle reminds us that there are various ways to define an object. With respect to the potentiality of a house, it is defined as bricks and stones, he says, with respect to the actualization, it is defined as a shelter for goods and stuff. Here, the actualization is not taken as the arrangement of the bricks and stones, but as the purpose of the house. The arrangement as the constitutive difference is no longer mentioned.³²

How can both aspects, the purpose and the difference, be brought together? The beginning of *Eta* 3 repeats the claim that the purpose is the actualized substance we are searching for (1043a32-33). This, then, can be taken for granted. However, Aristotle adds another way of defining a house, namely by considering the composite substance. In this respect, a house is “a shelter made of bricks and stones arranged in such and such manner” (1043a31–32). Since he immediately adds that the purpose is the actualization, one may conclude the following. The potential house is matter, the house actualized is the purpose, and the composite substance is the purpose combined with matter and the difference. In order to get a shelter out of bricks and stones, they need to be arranged in a certain way. The arrangement is needed to achieve the purpose. This result has an obvious parallel in *Physics* II 9. There, a saw’s teeth must be made of a certain shape in order to fulfill the purpose of sawing (200b1–8).

If we accept the idea that the end is the cause of the arrangement and of matter (as it is said in *Physics* II 9, 200a33), we see why the purpose is added in the definition of a house in *Eta* 3. The definition goes beyond *Zeta* 7–9 where the end is never mentioned, but it is in line with *Zeta* 17.

The arrangement of matter just explains why these bricks and stones are a house but it does not explain why this house came to be. The purpose does both. Substance as the purpose or end explains why this sort of matter becomes a certain thing and it also explains what it is to be this sort of thing. Thus, I conclude the following. Aristotle’s idea that substance is both the cause of being and of coming to be relies on the fact that the end explains both. He identifies form and essence with the end and renders the end to be the cause of matter.

I shall add a final word on *Eta*. When Charles discusses the ending of *Eta* 6, 1045b18–19, he interprets the shape (*morphê*) which is said to be actuality as “presumably, being two-footed” (Chalmers, 2000: 295). Due to the doubt of authenticity given in manuscript Π Jaeger has put the whole final section 1045b17–23 into double brackets. If these are Aristotle’s own words, we should read the Greek *morphê*, I recommend, as having the same meaning as *eidōs* (see evidence for the equation e. g. *Physics* II 1, 193a31–32 & b18–20). Whether form (which is contrasted with matter here in 1045b18) should be read as the dialectic two-footedness or as the coming to be’s end depends on what Aristotle has in mind. The Greek *eidōs* and *morphê* are rather vague container words in Aristotle as we have seen by his specification of form as the end in *Physics* II, and much the same can be said with respect to the specification of soul as form in *De anima* II 1. The vagueness of *eidōs* is why he puts that much energy into the discussion of substance as form in *Zeta*.

By no means did I intend to give an account of Aristotle's conception of form. However, what I think is clear now is why substance is both the cause of being and of coming to be in Aristotle. There is no confusion in his discussion. But as often, his explanations are terse and rough.

Notes

1. 1022a19–22: ὅλως δὲ τὸ καθ' ὃ ἰσαχῶς καὶ τὸ αἴτιον ὑπάρξει. Ross reads the relation thus: “the καθ' ὃ has meanings answering to those of ‘cause’,” *Aristotle's Metaphysics. A Revised Text with Introduction and Commentary* by W. D. Ross, 2 vols. (Oxford 1924, repr. 1958), vol. i, 333. Kirwan proposes to translate the Greek κατα as “by,” e.g., “Callias is good by (virtue of) good itself,” see his notes in *Aristotle's Metaphysics. Books Γ, Δ, and Ε, Translated with Notes* by C. Kirwan (Oxford 1971), 168.

2. 991b3–9 = 1080a2–8: ἐν δὲ τῷ Φαίδωνι οὕτω λέγεται, ὡς καὶ τοῦ εἶναι καὶ τοῦ γίνεσθαι αἴτια τὰ εἶδη ἐστίν· καίτοι τῶν εἰδῶν ὄντων ὅμως οὐ γίγνεται τὰ μετέχοντα ἂν μὴ ἢ τὸ κινήσον, καὶ πολλὰ γίγνεται ἕτερα, οἷον οἰκία καὶ δακτύλιος, ὧν οὐ φαμεν εἶδη εἶναι· ὥστε δῆλον ὅτι ἐνδέχεται καὶ τᾶλλα καὶ εἶναι καὶ γίνεσθαι διὰ τοιαύτας αἰτίας οἷας καὶ τὰ ῥηθέντα νῦν. 1080a8 additionally reads ἀλλ' οὐ διὰ τὰ εἶδη at the end, which improves the conclusion's sense.

3.95e9–96a1: ὅλως γὰρ δεῖ περὶ γενέσεως καὶ φθορᾶς τὴν αἰτίαν διαπραγματεύεσθαι. 96a8–10: ὑπερήφανος γὰρ μοι ἐδόκει εἶναι, εἰδέναι τὰς αἰτίας ἐκάστου, διὰ τί γίγνεται ἕκαστον καὶ διὰ τί ἀπόλλυται καὶ διὰ τί ἔστι.

4. The decisive phrase in 100d7–8 and e2–3 is τῷ καλῷ τὰ καλὰ [γίγνεται] καλά. According to Burnet's edition, manuscripts *T* and *b* read the γίγνεται in d7–8, *B* and *W* do not (where *b* is a correcting hand in manuscript *B*). For e2–3, *T* and *W* read the γίγνεται, but *B*, again, does not. Hence, Burnet puts the Greek γίγνεται into brackets in both lines. The edition of Strachan has reworked the stemma and omits γίγνεται in d8 in accordance with the manuscripts *TPQV*. In e3, however, Strachan reads γίγνεται in accordance with the manuscripts *WPQVA*. By contrast, Rowe's edition reads γίγνεται in d8, but not in e3. In short, there is no consensus in the editions.

5. This reservation has already been made by Annas: “Plato does, it is true, continue to use the language of coming-to-be; thus at 101c3-7 we are told that Forms explain not only things' being one or two in number, but their becoming so. But of course they do not; what they explain is the possession of a quality, not the causal history of how that quality came to be possessed.” J. Annas “Aristotle on Inefficient Causes,” *Philosophical Quarterly* 32, 129 (1982), 311–326, 318.

6. *Aristotle's Metaphysics. Books M and N*, Translated with Introduction and Notes by J. Annas (Oxford 1976), 162.

7. 333b7–16: Τί οὖν τὸ αἴτιον τοῦ ἐξ ἀνθρώπου ἄνθρωπον ἢ ἀεὶ ἢ ὡς ἐπὶ τὸ πολὺ, καὶ ἐκ τοῦ πυροῦ πυρὸν ἀλλὰ μὴ ἐλαίαν· ἢ καὶ ἐὰν ὡδὶ συντεθῆ ὅστοῦν· οὐ γὰρ ὅπως ἔτυχε συνελθόντων οὐδὲν γίνεταί, καθ' ἃ ἐκεῖνός φησιν, ἀλλὰ λόγῳ τινί. Τί οὖν τούτων αἴτιον· οὐ γὰρ διη πῦρ γε ἢ γῆ. Ἀλλὰ μὴν οὐδ' ἢ φιλία καὶ τὸ νεῖκος· συγκρίσεως γὰρ τὸ μὲν, τὸ δὲ διακρίσεως αἴτιον. Τοῦτο δ' ἐστὶν ἢ οὐσία ἢ ἐκάστου, ἀλλ' οὐ «μόνον μίξις τε διάλλαξις τε μιγέντων», ὥσπερ ἐκεῖνός φησιν. Τύχη δ' ἐπὶ τούτοις ὀνομάζεται, ἀλλ' οὐ λόγος· ἔστι γὰρ μιχθῆναι ὡς ἔτυχεν.

8. Translators sometimes render the Greek μίξις as mixture, see e.g. Kirwan's Translation of *Met.* V 4, 1015a2. However, the *LSJ* correctly offers but “mixing” and “mingling”.

9. Ross offers a remarkable note on this point. He claims: “It is clear that Aristotle interprets φύσις in Empedocles as = permanent nature.”, see *Aristotle's Metaphysics*

vol. i, 297. Ross refers to *Met.* V 4 where Aristotle renders Empedocles' words as a claim about essence. Again, with respect to *De gen. et corr.* 333b7–16, Ross holds that φύσις in Empedocles is interpreted by οὐσία, permanent nature." With respect to *De gen. et corr.* 414b17, he takes it as unclear. I suppose that consequently, Ross took Aristotle to read Empedocles' *mixis* as "mixture" since the process of mixing can hardly be considered as a thing's permanent nature.

10. In *Met.* I 10, 993a15–24, Aristotle praises Empedocles for hinting at the thing's essence. This shows us that he reads Empedocles' *mixis* at least as the cause of being. Williams has claimed that Aristotle takes Empedocles' concept of mixing merely as "juxtaposition [...] as when rubbish is hurled together in a refuse dip," *Aristotle's De generatione et corruptione*, Translated with notes by C. J. F. Williams (Oxford 1982), 171. Indeed, according to Aristotle's presentation, Empedocles' focus solely lies on the proportion of the components and not on the question of how the composition is made.

11. D. Charles *Aristotle on Meaning and Essence* (Oxford 2000), 283–294; "Definition and Explanation in the Posterior Analytics (and beyond)" in D. Charles (ed.) *Definition in Greek Philosophy* (Oxford 2010), 286–328, from now on abbreviated as [Defintion], esp. 309–313.

12. [Definition], 312–313.

13. [Definition], 309.

14. I disagree with Ferejohn's judgment that "...I maintain that in the *Physics* Aristotle in effect replaces his earlier logical concept of an essence with the physical concept of nature," M. Ferejohn *Formal Causes. Definition, Explanation, and Primacy in Socratic and Aristotelian Thought* (Oxford 2013), 162. As he puts it, essence does not "play a major role in the *Physics*," 161. On the contrary, it does, if we consider Aristotle's specification of essence as the end, see *Physics* II 7, 198b2–11.

15. 1041a20–b9: ζητήσῃε δ' ἄν τις διὰ τί ἄνθρωπός ἐστι ζῶον τοιονδί. τοῦτο μὲν τοίνυν δῆλον, ὅτι οὐ ζητεῖ διὰ τί ὅς ἐστιν ἄνθρωπος ἄνθρωπός ἐστιν· τί ἄρα κατὰ τίνος ζητεῖ διὰ τί ὑπάρχει (ὅτι δ' ὑπάρχει, δεῖ δῆλον εἶναι· εἰ γὰρ μὴ οὕτως, οὐδὲν ζητεῖ), οἷον διὰ τί βροντᾶ· διὰ τί ψόφος γίνεταί ἐν τοῖς νέφεσιν· ἄλλο γὰρ οὕτω κατ' ἄλλου ἐστὶ τὸ ζητούμενον. καὶ διὰ τί ταδί, οἷον πλίνθοι καὶ λίθοι, οἰκία ἐστίν· φανερόν τοίνυν ὅτι ζητεῖ τὸ αἴτιον· τοῦτο δ' ἐστὶ τὸ τί ἦν εἶναι, ὡς εἰπεῖν λογικῶς, ὃ ἐπ' ἐνίων μὲν ἐστὶ τίνος ἕνεκα, οἷον ἴσως ἐπ' οἰκίας ἢ κλίνης, ἐπ' ἐνίων δὲ τί ἐκίνησε πρῶτον· αἴτιον γὰρ καὶ τοῦτο. ἀλλὰ ὁ μὲν τοιοῦτον αἴτιον ἐπὶ τοῦ γίνεσθαι ζητεῖται καὶ φθεῖρεσθαι, θάτερον δὲ καὶ ἐπὶ τοῦ εἶναι. λανθάνει δὲ μάλιστα τὸ ζητούμενον ἐν τοῖς μὴ κατ' ἀλλήλων λεγομένοις, οἷον ἄνθρωπος τί ἐστὶ ζητεῖται διὰ τὸ ἀπλῶς λέγεσθαι ἀλλὰ μὴ διορίζειν ὅτι τάδε τόδε. ἀλλὰ δεῖ διαρθρώσαντας ζητεῖν· εἰ δὲ μὴ, κοινὸν τοῦ μὴθὲν ζητεῖν καὶ τοῦ ζητεῖν τι γίνεταί. ἐπεὶ δὲ δεῖ ἔχειν τε καὶ ὑπάρχειν τὸ εἶναι, δῆλον δὲ ὅτι τὴν ὕλην ζητεῖ διὰ τί ἐστίν· οἷον οἰκία ταδί διὰ τί· ὅτι ὑπάρχει ὃ ἦν οἰκία εἶναι. καὶ ἄνθρωπος τοδί, ἢ τὸ σῶμα τοῦτο τοδί ἔχον. ὥστε τὸ αἴτιον ζητεῖται τῆς ὕλης (τοῦτο δ' ἐστὶ τὸ εἶδος) ᾧ τί ἐστίν· τοῦτο δ' ἡ οὐσία.

16. Leunissen reads this formula as a general rule for explanation which has relevance for a correct understanding of the *Analytics*' method. See M. Leunissen *Explanation and Teleology in Aristotle's Science of Nature* (Cambridge 2010), 186. Her discussion is part of the sixth chapter of her monograph, which forms a slightly modified version of her earlier work "The Structure of Teleological Explanations in Aristotle: Theory and Practice," *Oxford Studies in Ancient Philosophy* 33 (2007), 145–178. My later references will be to her monograph, abbreviated as [Explanation].

17. [Explanations], 188.

18. There is a deeper concern I have to skip here. As long as we read the Aristotelian *aitia/aition* as "explanation" (as Leunissen and many other do) we have to admit that substance in the sense of form and essence is but an explanation or explanatory factor.

This, I suppose, violates the standard reading of Aristotle's concept of substance in *Zeta*.

19. Also the latest contribution to the dispute on *Physik* II 8 argues for this reading, see M. Scharle 'Elemental Teleology in Aristotle's Physics 2.8' in *Oxford Studies in Ancient Philosophy* 34 (2008), 147-183. According to Charles, *Ana. post.* 99b33-34 refers to the idea that thunder is for the sake of threatening those in Hades, see his [Definition], 293. However, there is no such idea in *Ana. post.*

20. It might appear that Ross' has already offered a modest version of my reading. He writes: "On the other hand we may ask not only for what purpose has so-and-so come into being or ceased to be, but also for what purpose it exists.", see his *Aristotle's Metaphysics* vol. ii, 223. However, he reads the passage as though we can either ask for coming to be or for both coming to be and being with respect to *one and the same* object. As I read it, we ask for the coming to be with respect to thunder and both for the coming to be and being with respect to houses.

21. See *Physics* II 7, 198a24-27. Even though Aristotle just says that often (*pollakis*) these causes coincide, I agree with Bostock that this extends to all physical objects. Evidence for the generality is given in a27: *kai holôs hosa kinoumena kinei*. For Bostock, see his notes on Waterfield's translation *Aristotle—Physics, A New Translation by Robin Waterfield* (Oxford 1996), 243.

22. I agree with Leunissen when she writes: "It is through this efficient cause that the essence of thunder and thereby the formal explanation of why there is thunder are revealed: thunder is noise in the clouds caused by fire being extinguished." [Explanations], 186-187. In the same manner, one can argue that the parent as the efficient cause reveals the essence of the offspring. This reasoning may rely on *Physics* III 2, 202a9-12, where the moving principle is said to always carry form. However, all these considerations do not recommend to us to consider the efficient cause as sufficient to explain a substance's coming to be.

23. As far as I can see, all scholars agree with Frede's dictum that Aristotle uses *aitia* and *aition* without significant difference, see M. Frede 'The Original Notion of Cause' in M. Schofield, M. Burnyeat, and J. Barnes (eds.) *Doubt and Dogmatism: Studies in Hellenistic Epistemology* (Oxford 1980), 217-249, 220-223. Leunissen proposes *Ana. post.* I as the only exception where a distinction between both terms can be found, see her [Explanation], 180.

24. Frede/Patzig write against the common reading with which I agree: "Warum soll nicht auch im Hinblick auf (schon oder noch) existierende Dinge nach deren wirkenden Ursachen gefragt werden können?" Aristotle does not deny this. However, when we ask for substance as *the* cause for coming to be and for being, this cause is the end. Why? Because only the purpose explains both why this matter is a house and why it became a house. If we take the moving principle explaining why a human being begets a human being, we can only do so because the moving principle, the formal cause, and the purpose are unified, see *Physics* II 7, 198a24-27. For Frede/Patzig see M. Frede/G. Patzig *Aristoteles 'Metaphysik Z'*, Text, Übersetzung und Kommentar, vol. 2 (Munich 1988), 313.

25. I tend to agree with Charles that in the case of substances, the moving principle is subordinated to the end. The end defines the form of a house and the form must be given in the soul of a housebuilder so she can build a house, see [Definition], 294. For cases such as thunder, Leunissen seems to be right that the moving principle reveals the form: "It is through this efficient cause that the essence of thunder and thereby the formal explanation of why there is thunder are revealed: thunder is noise in the clouds caused by fire being extinguished." [Explanations], 186-187.

26. "Definition and Explanation in the Posterior Analytics (and beyond)," 311.

27. I reject the idea that the case of syllables as it appears in the end of *Zeta* 17 is significant with respect to substances. As Burnyeat has rightly pointed out, “The syllable [...] is not a proper substantial being.” M. Burnyeat *A Map of Metaphysics Zeta* (Pittsburgh 2001), 61. In a similar way, Mann wrote: “Thus by the end of Z 17 it seems that syllables will not be *ousiai*, nor will there be an *ousia* of a syllable”, and later “[...] only individual *ousiai* have a genuinely internal principle of unity.”, W.-R. Mann “Elements, Causes, and Principles” in *Oxford Studies in Ancient Philosophy* 40 (2011), 29–61, 52 & 54.

28. Ross explains: “They indicate not the inmost nature of that to which they belong but a mode of arrangement or other characteristic which may be only temporary.” *Aristotle’s Metaphysics*, vol. ii, 229.

29. Among other reasons, this may explain why Aristotle quickly rejects the idea that the soul is a mixture’s proportion. His own reasoning is terse and hard to understand, see *De anima* I 4, 407b27–408a18. Ross lists the arguments in *Aristotle, De Anima*. Edited with Introduction and Commentary by W.D. Ross (Oxford 1961), 192–193. For a discussion of Aristotle’s refutation, see W. Charlton “Aristotle and the Harmonia Theory” in A. Gotthelf (ed.) *Aristotle on Nature and Living Things* (Pittsburgh and Bristol 1985), 131–150.

30. In *Physics* II 8, 199a7–8, we read that “the end is present in the things that come to be by nature and are by nature.” (ἔστιν ἄρα τὸ ἐνεκά του ἐν τοῖς φύσει γιγνομένοις καὶ οὖσιν.) Remarkably, Aristotle mentions being by nature explicitly, which refers back to the beginning of *Physics* II, 192b8. As I take it, a thing’s nature is both its cause of being and its cause of coming to be. Note that 193a9–10 and a20 equate nature with substance. The physician has to work out the end as the natural object’s nature, we are told in 193a27–28 & 199a29–32.

31. “Definition and Explanation in the Posterior Analytics (and beyond)”, 312.

32. Ross still has the foregoing discussion on difference in mind when he translates ἢ τι ἄλλο τοιοῦτον in a17 as “or add some other similar differentia.” To be a shelter for goods is definitely not a constitutive difference. For Ross, see *The Complete Works of Aristotle. The Revised Oxford Translation*, ed. by J. Barnes, vol. ii, 1646. Bostock ignores the introduction of the purpose in a14 when he summarizes *Eta* 2 thus: “And the chapter ends by recommending us to regard a definition as something that combines matter and differentia.” *Aristotle: Metaphysics Book Z and H*, 254. He renders the purpose as an addition only: “[Aristotle] adds in parenthesis that the purpose should be considered too.” 257.

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