# Aristotle's Refutation of the Eleatic Argument in *Physics* I.8

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## 1.

In *Physics* I.7, Aristotle derives three principles – subject, form, and privation – by analysing how we talk about coming to be and change.<sup>1</sup> On the basis of this analysis, he refutes the Eleatic argument against change in *Physics* I.8, claiming that "the difficulty of the early thinkers, as well as our own, is solved in this way alone" (*Ph.* 191a23–24).<sup>2</sup> In this paper, I show that Aristotle's solution of the Eleatic problem in *Physics* I.8 is based on the idea that "that which comes to be is always composite" (*Ph.* 190b11), which he has stated in the previous chapter, and I explain how his solution in terms of 'what is' and 'what is not' is related to 'inquiry into principles', which is the theme of *Physics* I.

<sup>&</sup>lt;sup>1</sup> Aristotle's methodology in *Physics* I.7 admits of a number of interpretations, which I cannot examine in detail here. On this issue, see, for example, Charles (2018: 181–182).

 $<sup>^{2}\,</sup>$  The English translations of Aristotle's text in this paper are based on Hardie, Gaye (1984) and Charlton (1970).

The Eleatics, as Aristotle describes them in *Physics* I.8,<sup>3</sup> consider two ways of coming to be and reject both. They say that "nothing comes to be or passes away, because what comes to be must do so either from what is or from what is not, and neither is possible" (*Ph.* 191a27–31). Thus, the two alternatives the Eleatics have in mind are:

- (a) Coming to be from what is, and
- (b) Coming to be from what is not.

It is obvious that these two alternatives are distinguished on the basis of the two cases of that from which coming to be is supposed to occur. The reason for the impossibility of coming to be of what is is explained by reference to the starting point of coming to be, when it is said that "what is cannot come to be, since it is already" (*Ph.* 191a30). The impossibility of coming to be from what is not, on the other hand, is also explained by reference to the starting point of coming to be, when it is said that "nothing can come to be from what is not, since there must be something underlying" (*Ph.* 191a30–31). By rejecting these two possibilities, (a) and (b), the Eleatics argue for the impossibility of coming to be. As will be seen below, Aristotle agrees with the Eleatics that coming to be is not possible in either of the alternative ways they have in mind, but disagrees with them that these two ways exhaust all the relevant possibilities.

The two horns of the Eleatic dilemma have been subject to various interpretations. Lewis, for example, thinks of coming to be "from the unmusical" as an example of coming to be "from what is not".<sup>4</sup> However, it is important to note that this reading does not make good sense of the Eleatic denial of coming to be from what is not, as is described in the text. If "since there must be something underlying" (*Ph.* 191a31) explains why "nothing can come to be from what is not" (*Ph.* 191a30–31), then "from what is not" (*Ph.* 191a30–31) in the dilemma should be taken to mean, not (e.g.) "from the unmusical", but "from completely nothing", just as Simplicius interprets it.<sup>5</sup>

On the other hand, "what is cannot come to be, since it is already" (*Ph.* 191a30) might be taken to represent either the structure of (e.g.) "[a man] cannot come to be [musical], since he is already [a man]" or that of "[a man] cannot come to be [musical], since he is already [musical]". As will be seen below, Aristotle understands "since it is already" (*Ph.* 191a30) in the Eleatic argument in the former way, and explains why their argument is wrong. This point will be considered more fully later when looking at how Aristotle answers the impossibility claim of coming to be from what is (*Ph.* 191b17–27).

2.

 $<sup>^{3}\,</sup>$  Here I am only concerned with the question of how Aristotle understands and reports the Eleatic argument in the text.

<sup>&</sup>lt;sup>4</sup> Lewis (1991: 228-236). For a similar view, see also Waterlow (1982: 15).

<sup>&</sup>lt;sup>5</sup> Simp. In Phys. 236.22.

Loux objects to interpreting (a) and (b) as representing the ways of coming to be which both the Eleatics and Aristotle agree in denying, such as "Socrates comes to be musical from being musical<sup>26</sup> and "Socrates comes to be musical from not being anything at all", on the grounds that "however problematic these expansions are, they hardly call into question the reality of change since the defender of coming to be is no more committed to their truth than the hardcore Parmenidean".<sup>7</sup> This argument is not convincing. First, the reasons which the Eleatics offer for the impossibility of coming to be, as they are explicitly reported in the text, should be taken into account. For example, if the second horn of the dilemma claims that "nothing can come to be from what is not" (Ph. 191a30-31) for the reason that "there must be something underlying" (*Ph.* 191a31), then it is most reasonable to take "from what is not" (Ph. 191a30-31) to mean "from nothing", even though neither the Eleatics nor Aristotle accepts coming to be from nothing. Second, if the two alternative ways of coming to be, neither of which the Eleatics and Aristotle accept, were exhaustive, then the dilemma would threaten the reality of coming to be. As will be seen below, Aristotle thinks that the Eleatic argument is based on the assumption that the two alternative ways of coming to be exhaust all the relevant possibilities, and his solution suggests that these two alternatives are not exhaustive.

Before scrutinizing Aristotle's reply to the Eleatics in *Physics* I.8, I shall review another interpretation of the Eleatic problem. Lewis thinks that the Eleatics consider the case in which "the unmusical has become the musical" to be nothing but "the replacement of one entity by another". As he writes, "[b]ut without an account of how the previous existence of the unmusical is relevant to the new existence of the musical, this [sc. Socrates' becoming musical] is the same as saying the musical is created *from nothing*". If this is the gist of the Eleatic challenge with which Aristotle is confronted in the text, then he would be expected to offer as a solution an account that guarantees a certain type of identity or sameness of the entity before and after the process of change. According to Lewis, Aristotle's solution to this kind of problem is based on clarifying that "there is something that endures through the change and also something that gets replaced as a result of the change".<sup>8</sup>

However, this is not a good interpretation of the Eleatic problem as described in *Physics* I.8. For the Eleatic argument against coming to be is based on the classification of those things from which coming to be is supposed to occur, and it is argued that *change does not even begin* in either of the two cases, namely from what is or from what is not. The Eleatics, who argue for the impossibility of coming to be from what is by maintaining "since it is already" (*Ph.* 191a30), would not even question the identity or sameness of an

<sup>&</sup>lt;sup>6</sup> This is not a good example of what Aristotle takes to be the Eleatic understanding of "coming to be from what is", but Loux's reason for rejecting it is not persuasive. See below.

<sup>&</sup>lt;sup>7</sup> Loux (1992: 289).

<sup>8</sup> Lewis (1991: 229-230).

entity *before and after* the process of coming to be. Identity or sameness between that from which a thing comes to be and that which the thing comes to be is presupposed, rather than questioned, when it is said that "it is already" (*Ph.* 191a30).<sup>9</sup> Indeed, as will be seen below, Aristotle's solution to the Eleatic challenge is not based on explaining how the musical after the change is not a mere replacement of the unmusical before the change.<sup>10</sup> Instead, he focuses on the structure of that from which coming to be occurs, and explains what the Eleatics failed to see.

## 3.

As a clue to the solution of the Eleatic problem, Aristotle points out that "coming to be from what is" and "coming to be from what is not" are in one way<sup>11</sup> not different from "a doctor doing something" (*Ph.* 191a34–b2). Both of them can be spoken in two ways by using '*qua*' (*Ph.* 191b2–4). A doctor builds a house, not *qua* doctor, but *qua* builder, and comes to be pale, not *qua* doctor, but *qua* being dark. On the other hand, he doctors or fails to doctor *qua* doctor (*Ph.* 191b4–6). It is important to note that the relevant similarity Aristotle sees between the two cases is not simply that these two distinct modes of speaking are used in both cases, but that one of the two modes of speaking is used "most properly" (*Ph.* 191b6–7).<sup>12</sup> What he actually says is:

Now we *most properly* say that a doctor does something or undergoes something or comes to be something from being a doctor, if it is *qua* doctor that he does or undergoes or comes to be this. So clearly also coming to be from what is not means "*qua* what is not." (*Ph.* I.8, 1916–10)

Aristotle explains that the Eleatic denial of coming to be stems from their failure to draw this distinction (*Ph.* 191b10–13), and suggests his own solution on the basis of the

<sup>&</sup>lt;sup>9</sup> This shows in what way Aristotle thinks the Eleatics argue for the impossibility of coming to be from what is: they think, in his view, that "what is is the same as what comes to be" (Simp. *In Phys.* 236.21).

<sup>&</sup>lt;sup>10</sup> It is true that 'persisting/remaining/enduring' (ὑπομένειν) is at issue in *Physics* I.7, and this might be what leads some scholars to think that Aristotle is confronted with a problem which needs to be solved by resorting to a 'persisting subject' (Loux (1992: 290–293), on the other hand, correctly thinks that Aristotle does not provide such a solution, even though his own alternative interpretation of Aristotle's argument does not seem to me plausible). However, in my view, what Aristotle is concerned to argue by pointing out that, while the man persists, the unmusical does not (*Ph.* 190a17–20) is that what comes to be is always composite (*Ph.* 190b11) and not monolithic. How the composite structure of what comes to be is used in his solution will be explained below.

<sup>&</sup>lt;sup>11</sup> The second solution on the basis of the distinction between potentiality and actuality is mentioned (*Ph.* 191b27–29) as distinct from the first. This is in harmony with the fact that the first solution, as far as I can see, does not use the potentiality/actuality distinction.

<sup>&</sup>lt;sup>12</sup> It is important to note that the case of a doctor who does something, etc. (*Ph.* 191a34–b10) is used, not as an example of coming to be or change, but as an example of how '*qua*' phrases are employed, even though it does not stop the case in which a doctor becomes pale, etc. from being an instance of change. Ross (1936: 494) seems to miss this point when he says that "the question whether x in general can be generated from x or from non-x is made simpler if we take the single case in which x is a doctor."

distinction he draws in the case of 'what is' and 'what is not' by analogy with the case of 'a doctor'.

We ourselves too say that nothing comes to be *without qualification* from what is not; but that things do come to be *in a way* from what is not, i.e. *accidentally*. For a thing comes to be from the privation, which in itself is what is not – this not surviving as a constituent of the result. (*Ph.* I.8, 191b13–16)<sup>13</sup>

The question here is how to understand the phrases "without qualification" (*Ph.* 191b14) and "accidentally" (*Ph.* 191b15). These two terms should be interpreted on the basis of the example of "a doctor" (*Ph.* 191a34–b10). Aristotle, I propose, thinks that coming to be from what is not, when stated "without qualification", should be understood "most properly", even though it could be understood in more than one way.<sup>14</sup> In his view, coming to be from what is not should be understood "most properly" as meaning

(b)\* Coming to be from what is not *qua* what is not (*Ph.* 191b9–10)

in just the same way as "a doctor acts" is "most properly" (*Ph.* 191b6–7) to be taken as "a doctor acts *qua* doctor", even though this could be taken in more than one way, as explained in the passage (*Ph.* 191b6–10) cited above. Since Aristotle says that he agrees with the Eleatics that "nothing comes to be *without qualification* from what is not" (*Ph.* 191b13–14), it is not unnatural to take him to analyse (b) "coming to be from what is not" (*Ph.* 191a30–31) in the sense of "coming to be from nothing" as (b)\* "coming to be from what is not *qua* what is not". Aristotle thinks that (b)\* is impossible for the same reason as that for which (b) is claimed to be impossible.

In light of this, what does Aristotle accept when he says that things do come to be *accidentally* from what is not (*Ph.* 191b14–15)? If "accidentally" (*Ph.* 191b15) is contrasted with "without qualification" (*Ph.* 191b14), as it seems natural to take it, and the latter is to be understood in the way explained above, it is not unreasonable to take "coming to be accidentally from what is not" to mean

<sup>&</sup>lt;sup>13</sup> Algra (2004: 116, n. 49) thinks that "οὐκ ἐνυπάρχοντος" (*Ph.* 191b16) expresses the idea of "inasmuch as the privation belongs to a matter" (Ross 1936: 495) and criticizes Ross, who takes "οὐκ ἐνυπάρχοντος" (*Ph.* 191b16) to mean "the privation not surviving in the product" (*ibid.*). I think, however, that Ross's interpretation is more reasonable than Algra's. See also Cherniss (1935: 61–62) and Lewis (1991: 238, n. 24) for a view favourable to mine.

<sup>&</sup>lt;sup>14</sup> If so, Aristotle does not use "most properly" (*Ph.* 191b6–7) and "without qualification" (*Ph.* 191b14) synonymously or interchangeably.

(c) Coming to be from what is qua what is not.15

"From what is *qua* what is not" in (c) is contrasted with "from what is not *qua* what is not" in (b)\* in just the same way as "a doctor acts *qua* builder" is contrasted with "a doctor acts *qua* doctor". In (c), 'what is not' corresponds (e.g.) to the unmusical and 'what is' corresponds (e.g.) to a man. Aristotle's acceptance of (c), thus understood, is in accordance with his explanation that "for a thing comes to be from the privation, which in itself is what is not" (*Ph.* 191b15–16). For it is in so far as the relevant privation belongs to a thing that the thing is that from which coming to be occurs. A man *qua* unmusical comes to be musical. A statue comes to be from a lump of bronze *qua* something shapeless.

My interpretation of "coming to be accidentally from what is not" is based on Aristotle's analysis of coming to be in *Physics* I.7. There Aristotle writes:

From what has been said, then, it is clear that that which comes to be is always composite, and there is one thing which comes to be, and another which comes to be this, and the latter is twofold: either the underlying thing, or the thing which is opposed. By that which is opposed, I mean the unmusical, by that which underlies, the man; and shapelessness, formlessness, disarray are opposed, and the bronze, the stone, the gold underlie. (*Ph*. I.7, 190b10–17)

His idea is that a thing at the starting point of coming to be is composite and is made up of what underlies and a privation, which is why it makes sense to consider it to be what is *qua* what is not. It is on the basis of his own analysis of the *composite* nature of things that come to be that Aristotle holds that things come to be *accidentally* from what is not. He thinks that the Eleatics, while only thinking of one way of coming to be from what is not (i.e. in the sense of coming to be from completely nothing, as explained above), fail to grasp such a composite structure from which a thing comes to be.<sup>16</sup>

Thus Aristotle counters the impossibility claim of coming to be from what is not on the grounds that "there must be something underlying" (*Ph.* 191a31), by pointing out that a thing comes to be from what is not in the sense that it comes to be from what is *qua* what is not, rather than from completely nothing.

<sup>&</sup>lt;sup>15</sup> The relation between "coming to be accidentally from what is not" and (c) is to be understood here in an analogous fashion to the case in which "a doctor builds a house accidentally" is paraphrased as "a doctor *qua* builder builds a house", without using 'accidentally'.

<sup>&</sup>lt;sup>16</sup> Simplicius (*In Phys.* 238.4–5) seems right when he explains that "we say that a thing comes to be accidentally from what is not; for it comes to be from the matter, in so far as the privation, which in itself is what is not, inheres to it" (see also Them. *In Phys.* 30.26–27; Phlp. *In Phys.* 178.7–11). The point is, I believe, that a thing comes to be from a composite made up of the matter and the privation. It is important *not* to take Simplicius in this passage as explaining the idea that a thing comes to be from the matter *rather than* from the privation, nor the other way around (*pace* Lewis 1991: 238–239).

## 4.

# As for (a), Aristotle argues that:

In the same way, we maintain that there is no coming to be from what is or of what is, except accidentally. In that way [i.e. accidentally], however, this too comes to be in just the same way as if an animal came to be from an animal and a certain animal from a certain animal; for instance, a dog came to be from a horse.<sup>17</sup> For a dog would come to be, not only from a certain animal [i.e. a horse], but also from an animal; not, however, *qua* animal, for that belongs already. But if anything is to come to be an animal not accidentally], it will not be from an animal, and if anything [is to come to be] what is [not accidentally],<sup>18</sup> it will not be from what is; nor from what is not either. For we have already said what it means to say "from what is not": it means "from what is not *qua* what is not". Further, we do not subvert the principle that everything either is or is not. (*Ph.* I.8, 191b17–27)

"In the same way", Aristotle claims, "there is no coming to be from what is or of what is, except accidentally" (*Ph.* 191b17–18). So, while accepting coming to be accidentally from what is (or of what is), he denies the possibility of (a)\*:

(a)\* Coming to be from what is *qua* what is.

As a next step Aristotle explains how something comes to be accidentally from what is with the help of the analogy of a case in which "a dog comes to be from a horse" (i.e. "a horse comes to be a dog"<sup>19</sup>). Being an animal is common to both a horse and a dog, and such a process of coming to be is also that in which a dog comes to be from an animal (*Ph.* 191b21–22). However, it is not in so far as the dog is an animal that it comes to be from an animal (*Ph.* 191b22).<sup>20</sup> For, Aristotle explains, being an animal *already belongs* to the horse

<sup>&</sup>lt;sup>17</sup> Here I read the text (191b20–21) without adopting Ross's emendation. If my analysis of his argument is correct (see below), then "the ordinary case of generation of dog by dog or of horse by horse" (Ross 1936: 495) would not serve Aristotle's purpose.

<sup>&</sup>lt;sup>18</sup> I take "εἴ τι ὄν" (*Ph.* 191b24) to be parallel to "εἰ δέ τι (...) μὴ κατὰ συμβεβηκός" (*Ph.* 191b23–24), and read the former by supplementing it with "not accidentally".

<sup>&</sup>lt;sup>19</sup> It should be noted that here Aristotle is not talking about a case in which a horse gives birth to a dog.

<sup>&</sup>lt;sup>20</sup> The qualification, "not *qua* animal" (*Ph.* 191b22), could be taken to qualify either "a dog" (*Ph.* 191b22) or "from an animal" (*Ph.* 191b22). In the former case, "not *qua* animal" (*Ph.* 191b22) would mean "not [a dog] *qua* animal, [but a dog *qua* dog]". In the latter case, it would mean, I suggest, "not [from an animal] *qua* animal, [but from an animal *qua* what is not a dog]". It should be noted that being an animal that "belongs already" (*Ph.* 191b22–23) to that which is at the starting point of the coming to be could be understood as contrasted either with being an animal that also belongs to that which is at the starting point of the coming to be, or with being a dog that does not yet belong to that which is at the starting point of the coming to be. This having been said, here it seems more natural to take "not *qua* animal" (*Ph.* 191b22) to qualify "a dog" (*Ph.* 191b22) rather than "from an animal" (*Ph.* 191b22). so that the case in which a dog *qua* dog, and not *qua* animal, comes to be from what is not

at the starting point of the coming to be (*Ph.* 191b22–23). But "if anything is to come to be an animal not accidentally", i.e. if anything is to come to be an animal *qua* animal, "it will not be from an animal" (*Ph.* 191b23–24), but from what is not an animal (e.g. instead, from a seed). In an analogous fashion to this, Aristotle thinks, if anything is to come to be what is *qua* what is, it will not be from what is, nor from what is not *qua* what is not either (*Ph.* 191b24–26).

Aristotle's account of coming to be from what is, so understood, accords with his account of coming to be from what is not, as suggested by his phrasing of "in the same way" (*Ph.* 191b17): that is, a thing comes to be from what is, but not from what is *qua* what is, but from what is *qua* what is not. It is not unnatural that Aristotle's accounts of coming to be from what is not and of coming to be from what is are substantially the same. For it is the Eleatics who pose the two horns of the dilemma, while Aristotle's idea is that a thing from which coming to be occurs is a composite made up of what is and what is not, and he does not have to provide two types of answers. Obviously, Aristotle's account of coming to be from what is is again based on his own analysis of the composite nature of what comes to be. By showing that a thing comes to be from what is in the sense that it comes to be from what is *qua* what is not, rather than from what is *qua* what is, Aristotle's that the grounds that "it is already" (*Ph.* 191a30), on which the impossibility claim of coming to be.<sup>21</sup>

In the illustration of "a dog coming to be from a horse", being an animal corresponds to what underlies, being a dog to the form, and being a horse (or not being a dog) to the privation. Part of the obscurity of his argument comes from the fact that, while the relation between a dog/a horse and an animal is merely an *analogue*, and not an *example*, of the relation between a form or lack thereof and what underlies,<sup>22</sup> Aristotle uses the former in order to explain the latter in the case of coming to be. If Aristotle used the example of "a statue coming to be from a lump of bronze", instead of "a dog coming to be from a horse", his explanation would be as follows: when a statue comes to be from a lump of bronze, it comes to be not only from a certain form of bronze (i.e. a bar or something that lacks the form of a statue), but also from bronze. But it is not in so far as the statue is bronze that it comes to be from bronze. For being bronze "belongs already" to that

an animal (*Ph.* 191b23–24). Ross (1936: 496) also takes οὐχ ἦ ζῷον to go with ὁ κύων, but his interpretation is complicated by his not reading Aristotle's illustration of "a dog coming to be from a horse".

<sup>&</sup>lt;sup>21</sup> Simplicius (*In Phys.* 236.28–30) explains that "so it is not in so far as the matter is what is that what is comes to be from the matter, but accidentally, for the reason that *not* being what is that comes to be ( $\mu$ ) elvau τοῦτο τὸ ὄν ὅ γίνεται) is accidental to the matter, as the privation of what is that comes to be ( $\tau$ ῆ<sub>S</sub> στερήσεως (...) τοῦ ὄντος ὃ γίνεται) is present in the matter". It should be noted that the explanation given here for coming to be accidentally from the matter (sc. from what is) and the one given for coming to be accidentally from what is not at *In Phys.* 238.4–5 are basically the same. Ross's interpretation of Aristotle's solution (Ross 1936: 494–495) appears to be under the strong influence of what Simplicius says here and at *In Phys.* 238.4–5 mentioned above.

<sup>&</sup>lt;sup>22</sup> Furthermore, when he says that "but if anything is to come to be an animal not accidentally, it will not be from an animal" (*Ph.* 191b23–24), Aristotle is talking about another type of coming to be, "an animal comes to be (from something that is not an animal)".

from which the coming to be occurs. But if anything is to come to be a lump of bronze *qua* bronze, it will not be from bronze, but from something that is not bronze (e.g. from copper, tin, etc.).

What Aristotle does not explicitly say, but presupposes, in the text is that, if anything is to come to be a dog *qua* dog, it will not be from a dog (but from what is not a dog). This explains "a dog coming to be from a horse". Analogously, he thinks that, if anything is to come to be a statue *qua* statue, it will not be from a statue, but from what is not a statue.

Thus, in the case of a statue coming to be from a lump of bronze, being bronze *already belongs* (cf. *Ph.* 191b22–23, 191a30) to that which is at the starting point of the coming to be, and it is not in so far as a statue is bronze that it comes to be from bronze; on the other hand, it is not in so far as a lump of bronze is bronze that a statue comes to be from bronze. It is in so far as a lump of bronze is something that lacks the form of a statue that a statue comes to be from bronze.<sup>23</sup> In Aristotle's view, a statue *qua* statue (and not *qua* bronze) comes to be from bronze *qua* what is not a statue (and not *qua* bronze). If so, then while Aristotle accepts coming to be from what is *qua* what is not (e.g. from bronze *qua* something shapeless), it is probable that he may not accept coming to be from what is not *qua* bronze).<sup>24</sup>

If my analysis above is correct, the Eleatic error concerning coming to be from what is, which Aristotle thinks stems from their failure to see the composite structure of what comes to be, corresponds to taking (e.g.) "a man comes to be musical" to mean "a man comes to be musical in so far as he is a man", and not to taking (e.g.) "a man comes to be musical" to mean "a man comes to be musical from being musical". As mentioned above, Loux objects to taking "Socrates comes to be musical from being musical" to exemplify the Eleatic understanding of coming to be from what is, for the reason that, since Aris-

<sup>&</sup>lt;sup>23</sup> It is not unreasonable to take Aristotle to accept that a man comes to be musical from the unmusical *qua* the unmusical, since he thinks that it is in so far as a man is unmusical (and not in so far as he is a man) that an unmusical man is that from which a man's coming to be musical occurs. I see no good reason to take Aristotle to be rejecting the statement that "[t]he unmusical *qua* the unmusical comes to be the musical" as false (*pace* Lewis 1991: 231). Of course, Aristotle does not accept coming to be from what is not *qua* what is not, when 'what is not' is understood as completely nothing.

<sup>&</sup>lt;sup>24</sup> Here at *Ph.* 191b17–27 Aristotle appears to be more concerned with that from which a thing comes to be (e.g. an unmusical man, a shapeless lump of bronze, etc.) than that which a thing comes to be (e.g. a musical man, a statue, etc.). While it is true that he mentions that which a thing comes to be, Aristotle does so in order to explain that that from which a thing comes to be lacks the form of that which is at the end point of coming to be. This is partly because the Eleatic dilemma is based on the classification of those things from which coming to be is supposed to occur, and their impossibility claims of coming to be are made with reference to the starting points of coming to be. But this is also partly because, I think, understanding the structure of a composite made up of a positive form and what underlies in terms of 'what is' is not as clear as understanding the structure of a composite made up of the lack of a positive form and what underlies in terms of 'what is not' and 'what is'. For in the former case "what is qua what is" at the end point of coming to be is ambiguous in that it can be taken to correspond (e.g.) to 'a statue qua bronze' and 'bronze qua bronze' (which do not capture Aristotle's understanding of what comes to be at the end point) as well as 'bronze qua statue' and 'a statue qua statue', whereas in the latter case "from what is qua what is not" unambiguously corresponds (e.g.) to "from bronze qua something shapeless". Indeed, Aristotle does not seem to aim at explaining the composite structure of what comes to be at the end point, when he says that "if anything is to come to be an animal not accidentally [i.e. an animal qua animal], it will not be from an animal" (Ph. 191b23-24).

totle is not committed to the truth of "Socrates comes to be musical from being musical," the impossibility of Socrates's coming to be musical from being musical does not threaten the possibility of coming to be from what is as Aristotle understands it.<sup>25</sup> This requires some comment, because Loux and I both hold that "Socrates comes to be musical from being musical" does not capture the Eleatic understanding of coming to be from what is that is at issue in the text, albeit for different reasons. In my view, Loux's argument is not plausible. Whereas it is true that "Socrates comes to be musical from being musical" is not a good example with which to analyse the Eleatic understanding of coming to be from what is as reported in Aristotle's text (Ph. 191a30), the reason why it is not a good example of the relevant case is irrelevant to the fact that Aristotle himself is not committed to the truth of that statement. Thinking that a man who comes to be musical does so in so far as he is a man, which in Aristotle's view is an error, is not the same type of error as thinking that a man who comes to be musical does so from being musical. The latter type of error is not at issue in the text. Aristotle, however, thinks that the Eleatics commit the former type of error in the first horn of their dilemma, while he is not committed to the truth of the statement that a man comes to be musical in so far as he is a man. As seen above, in Aristotle's view, it is legitimate to argue that it is not the case that a man comes to be musical in so far as he is a man on the grounds that being a man "belongs already" (cf. Ph. 191b22-23, 191a30) to that from which the relevant coming to be is supposed to occur. From this, the Eleatics draw the conclusion that, therefore, a man cannot come to be musical, while Aristotle draws the conclusion that, therefore, it is not in so far as he is a man that a man comes to be musical.

# 5.

From the above examination, it is now clear that the following three ways of coming to be are at issue in Aristotle's refutation of the Eleatic argument:

- (a) \* Coming to be from what is qua what is (Ph. 191b17-18),
- (b) \* Coming to be from what is not qua what is not (Ph. 191b6–10), and
- (c) Coming to be from what is *qua* what is not (*Ph.* 191b14–15, 191b18).

Here (a)\* and (b)\* are the "most proper" (*Ph.* 1916–7) readings of (a) and (b) in the Eleatic dilemma. These are the "most proper" readings, and the other alternative is not as obvious as these. While taking (a) and (b) in the Eleatic argument to be (a)\* and (b)\* respectively, Aristotle agrees with the Eleatics that neither (a)\* nor (b)\* is possible. It is important to note that he understands (a) and (b) in such a way that the reasons which the Eleatics give for the impossibility of each of these, namely "since it is already" (*Ph.* 191a30)

<sup>&</sup>lt;sup>25</sup> Loux (1992: 289).

and "since there must be something underlying" (*Ph.* 191331), make sense. However, (a)\* and (b)\* are not exhaustive. He argues that things come to be *accidentally* from what is not (*Ph.* 191b14–15) and *accidentally* from what is (*Ph.* 191b18), i.e. from what is *qua* what is not. In Aristotle's view, the structure of a thing from which coming to be occurs should be understood, not on the basis of (a)\* or (b)\*, but on the basis of (c). This idea of the 'accidental' in *Physics* I.8 is based on Aristotle's view that "that which comes to be is always composite" (*Ph.* 190b11), a view which has been gained through his own analysis of things which come to be in the previous chapter of *Physics* I, as explained above.

It is worthwhile, at this point, to clarify the various types of 'what is not' that are used in Aristotle's discussion of the Eleatic problem. The term, 'what is not', may refer to three things:

(N1) nothing;

(N2) the absence of musicality, etc.; and

(N3) an unmusical thing (or what is not musical), etc.

When Aristotle agrees with the Eleatics that "nothing can come to be from what is not" (*Ph.* 191a30–31), by saying that "we ourselves too say that nothing comes to be without qualification from what is not" (*Ph.* 191b13–14), he is best interpreted as talking about coming to be from what is not in the sense of coming to be from completely nothing (i.e. (N1)).

When, on the other hand, he adds "but that things do come to be *in a way* from what is not, i.e. accidentally. For a thing comes to be from the privation…" (*Ph.* 191b14–15), Aristotle accepts coming to be accidentally from what is not in the sense of coming to be accidentally from the privation. The privation might be ambiguous between (N2) and (N3).<sup>26</sup> However, when he says that the privation does not survive as a constituent of the result (*Ph.* 191b15–16), it is more reasonable to take Aristotle to mean by this that (e.g.) the lack of musicality (i.e. (N2)) does not inhere or persist in a musical man, which is the result of the coming to be in this example. Further, when he argues that the privation "in itself is what is not" (*Ph.* 191b15–16), Aristotle seems to explain that (e.g.) the absence of musicality is *in itself* nothing, while he thinks that it is a component of an unmusical thing and that, because of its relation to an unmusical thing, it is to be distinguished from completely nothing.

(N<sub>3</sub>) and (N<sub>2</sub>) are related and distinguished from each other in such a way that, while (N<sub>3</sub>) is a composite, (N<sub>2</sub>) is a component of which a composite is made up. In Aristotle's view, "what comes to be is always composite" (*Ph.* 190b11), and he thinks that such a composite at the starting point of coming to be is made up of what underlies and the

<sup>&</sup>lt;sup>26</sup> For instance, Lewis (1991: 238–239) discusses a case in which "the unmusical" in the sense of an unmusical thing is an example of the lack.

absence of a positive form,<sup>27</sup> such as "shapelessness, formlessness, disarray" (*Ph.* 190b14–15). (N2) is the absence of a form, and (N3) is that which possesses the absence of a form. The understanding of 'what is not' in the senses of (e.g.) the absence of musicality and an unmusical thing, as distinct from completely nothing, is made possible through the above-explained analysis of the composite nature of what comes to be.

That from which a thing comes to be is 'what is not' in the sense of  $(N_3)$  in so far as 'what is not' in the sense of  $(N_2)$  is its component. As explained above, Aristotle thinks that a thing comes to be accidentally from what is not and accidentally from what is, and I take him to mean by this that a thing comes to be from what is *qua* what is not. His idea can be best understood, I think, by using "from a man *qua* an unmusical thing" and "from bronze *qua* that which lacks the shape of a statue", etc. as examples of "from what is *qua* what is not". On the other hand, it does not make good sense to talk about (e.g.) a man *qua* the absence of musicality, since a man can never be or come to be musicality or the absence thereof,<sup>28</sup> even though a man can lack or acquire musicality, and can be unmusical or musical.<sup>29</sup>

#### 6.

I suggest, on this basis, that the key to understanding Aristotle's solution of the Eleatic problem lies in how the concept of accidentality is used.<sup>30</sup> Aristotle considers the distinction between 'non-accidental' and 'accidental' in various ways, and it is important to distinguish between three types of distinctions used in *Physics* I.7 and 8. These distinctions can be classified in the following way:

(D1) The distinction between 'coming to be of substance' and 'the other changes (qualitative, quantitative, and local)';

 $<sup>^{\</sup>rm 27}\,$  On the other hand, a composite at the end point of coming to be is made up of what underlies and a positive form.

<sup>&</sup>lt;sup>28</sup> Such cases as that in which one is said *metaphorically* to be (e.g.) musicality incarnate do not constitute counterexamples to my view.

 $<sup>^{29}</sup>$  The distinction between (N2) and (N3) should be understood in accordance with Aristotle's insistence on distinguishing between the opposites and what underlies (*Ph.* 190b29–191a3). While (e.g.) the lack of musicality cannot come to be musicality and an unmusical thing cannot come to be musical while remaining unmusical, an unmusical thing can come to be musical in the sense that what underlies unmusicality can acquire musicality in place of unmusicality.

<sup>&</sup>lt;sup>30</sup> Graham (1987: 137–139) claims that the problem is caused by κατὰ συμβεβηκός descriptions, such as "[t]he doctor builds a house". Waterlow (1982: 17–18) thinks that Aristotle uses "the appropriate description ('κυρίως')" to solve the Eleatic problem. While they disagree over what type of description is problematic and what type of description Aristotle uses to solve the problem, Graham's interpretation of κατὰ συμβεβηκός and Waterlow's interpretation of κυρίως seem both to be in the same wrong direction. In my view, Aristotle thinks that the Eleatic problem comes from thinking of coming to be from what is not and coming to be from what is only in the "most proper" (*Ph.* 191b6–7) fashion, and he explains that the structure of that from which coming to be occurs should be understood as κατὰ συμβεβηκός (*Ph.* 191b15, 18).

(D2) The distinction between 'subject' and 'privation'; and

(D<sub>3</sub>) The distinction between 'what is not *qua* what is not/what is *qua* what is' and 'what is *qua* what is not'.

In each of these three cases, the latter is accidental while the former is non-accidental. (D1) is a well-known Aristotelian distinction, and it is not unreasonable to think that his discussion in *Physics* I.7 (*Ph.* 190a31–34) is about this. (D2) seems to be mentioned in *Physics* I.7 (*Ph.* 190b25–27). (D3) should be distinguished from both of these.

Some scholars<sup>31</sup> think that Aristotle has (D2) in mind when he says that things come to be accidentally from what is not (*Ph.* 191b14–15),<sup>32</sup> and they base this interpretation on Aristotle's explanation of the contrast between subject and privation in *Physics* I.7 (*Ph.* 190b25–27).<sup>33</sup>

However, there are some problems with this interpretation. First, it is not obvious why arguing that coming to be from the privation is *accidental* (while holding that coming to be from the subject, by contrast, is non-accidental) addresses the impossibility claim of coming to be from what is not in the Eleatic dilemma. Second, interpreting "accidentally" (Ph. 191b15) as corresponding to 'from the privation' (as opposed to 'from the subject') does not fit the context of *Physics* I.8. While it is obvious that "accidentally" (*Ph.* 191b15) is contrasted with "without qualification" (Ph. 191b14), and that "without qualification" is to be understood on the basis of the "doctor" example (*Ph.* 191a34–191b10), the example does not accord well with the (D2)-based interpretation. For instance, it seems that the contrast between 'a doctor qua doctor' and 'a doctor qua builder' does not correspond to the contrast between 'from the subject' and 'from the privation'. Third, if coming to be 'from the privation' is taken to be accidental on the basis of (D2), then coming to be 'from the subject' has to be interpreted as non-accidental. However, Aristotle claims in his solution that coming to be from 'what is' (which on this view corresponds to the subject) is also accidental (*Ph.* 191b17–18). Thus, the (D2)-based interpretation renders Aristotle's argument inconsistent. Loux also appears to point out this difficulty, while interpreting Aristotle's solution on the basis of (D2). From that, he concludes that Aristotle's treatment of coming to be from what is is not as careful as that of coming to

<sup>&</sup>lt;sup>31</sup> Charlton (1970: 80); Loux (1992: 303-309).

<sup>&</sup>lt;sup>32</sup> What seems to lie behind the view that, while coming to be from the subject is non-accidental, coming to be from the privation is accidental, is the idea that it is only when X endures that a thing comes to be non-accidentally from X (cf. Lewis 1991: 237; Loux 1992: 302–305. See also Them. *In Phys.* 30.22–26; Phlp. *In Phys.* 178.6–7; Alexander in Simp. *In Phys.* 238.11–14). Supporters of the (D2)-based interpretation of "accidentally" (*Ph.* 191b15) might take Aristotle's remark that "this [the privation] not surviving as a constituent of the result" (*Ph.* 191b16), along with his explanation at *Ph.* 190b25–27, to mean that the relevant 'accidental/non-accidental' contrast lies between the privation and the subject (which, unlike the former, "survives as a constituent of the result"). In my view, however, his remark can be taken to explain that the privation "in itself is what is not" (*Ph.* 191b15–16), and is not particularly in favour of their view.

<sup>&</sup>lt;sup>33</sup> It is not immediately clear what Charlton means when he says (Charlton 1970: 80) that "[i]t is awkward, therefore, to illustrate non-incidental coming to be by something dark coming to be pale (b5)". One possibility is that he does not clearly distinguish between (D1) and (D2).

be from what is not.<sup>34</sup> However, it is more reasonable to think that "accidentally" (*Ph.* 191b15) as used in Aristotle's solution should not be understood, as Loux does, on the basis of (D2).<sup>35</sup>

# 7.

Having clarified how Aristotle solves the Eleatic dilemma, I conclude by briefly suggesting an explanation of why Aristotle's discussion of it in *Physics* I.8, unlike his discussion in the previous chapter,<sup>36</sup> is difficult to understand and is not clear. Indeed, it is said that "[a]t this critical point of Aristotle's exposition the text, as we have it, is elliptical almost to the point of unintelligibility, unless supplemented from other sources".<sup>37</sup> Of course, it is not unreasonable to understand, as scholars actually do, 'what is' and 'what is not' in Aristotle's treatment of the Eleatic problem as corresponding to 'a man' (or 'Socrates'), 'the musical', etc. and as corresponding to 'the unmusical', 'the lack of musicality', 'nothing', etc. respectively, since Aristotle actually uses some of these expressions in his discussion in the previous chapter.<sup>38</sup> But it is also important to note that, unlike in the previous chapter, Aristotle now appears to be discussing the problem of coming to be in terms of 'what is', 'what is not', and the combination thereof, without using 'the musical', 'the unmusical', etc. as examples, even though he uses 'a doctor', 'a builder', 'a dog', 'a horse', 'an animal', etc. as analogues of 'what is' and 'what is not'.

What is the point of arguing on the level of 'what is' and 'what is not', rather than on the level of 'the musical' and 'the unmusical' etc., when responding to the Eleatic argument? One possibility is that Aristotle might think that, even if versions of the dilemma supplemented with 'the unmusical', 'the musical' etc. can be easily solved or shown to be innocuous, the original version in terms of 'what is' and 'what is not' would survive untouched. However, if Aristotle should be expected to give a more precise diagnosis of the Eleatic error on the basis of his own analysis of coming to be, and my above reading of his argument is correct, then another explanation<sup>39</sup> suggests itself: his strategy is to bring out that the Eleatics are at most only aware of "what is not *qua* what is not" (*Ph*.

<sup>36</sup> Aristotle's analysis of coming to be in *Physics* I.7 is well known for its readability, and is sometimes used as an introduction to his works. See, for example, Ackrill (1981: 24); Burnyeat (2001: 113).

<sup>37</sup> Wicksteed, Cornford (1929: 83).

<sup>38</sup> It would not make good sense to consider whether or not (e.g.) coming to be from what is not is possible, while thinking that 'what is not' corresponds to none of 'an unmusical thing', 'the lack of musicality', or 'nothing'.

<sup>&</sup>lt;sup>34</sup> Loux (1992: 308-317).

<sup>&</sup>lt;sup>35</sup> It is important to note that, regardless of in what way 'from the privation' is explained to be accidental (as contrasted with 'from the subject' which on this view is non-accidental), the (D2)-based interpretation of Aristotle's solution does not work well.

<sup>&</sup>lt;sup>39</sup> These two suggestions as to why Aristotle's argument on the Eleatic dilemma in *Physics* I.8 is not clear are not mutually exclusive.

191b9–10) and "what is qua what is" (Ph. 191b17–18) by showing that their impossibility claims make sense only when understood "without qualification" (Ph. 191b14), and, in doing so, to clarify that they fail to grasp the composite structure of what comes to be made up of what is (i.e. what underlies) and what is not (i.e. the privation) (*Ph.* 190b10-17). Aristotle seems to think that this is most clearly done by arguing in terms of 'what is' and 'what is not' rather than in terms of 'a man', 'the unmusical', and so on. Indeed, the source of the Eleatic error cannot, it appears, be exposed merely by stating straightforwardly, against their impossibility claims of coming to be, the view that (e.g.) the musical man comes to be from the unmusical man, even though all three principles are fully loaded in it. I suggest that the manner of Aristotle's discussion in Physics I.8 is related to his own method of inquiry as stated in I.1. As for the inquiry into principles, Aristotle says in *Physics* I.1 that "the natural course is to proceed from what is clearer and more knowable to us, to what is more knowable and clear by nature" (Ph. 184a16-18), and it is not unreasonable to think that his analysis of coming to be in I.7, which extracts the three principles through the analysis of how we ordinarily talk about coming to be, is based on such a method of inquiry. The principles thus derived are not necessarily clear to us. Solving the Eleatic problem, however, requires an understanding of what comes to be at the level of principles which reveals its underlying structure. Instead of paraphrasing 'what is not' and 'what is' in the Eleatic dilemma into the lack of musicality and a man, etc., Aristotle yet further translates the privation into their expression, 'what is not', by saying that it "in itself is what is not" (Ph. 191b15–16), suggesting that what underlies be understood as 'what is', in such a way that his solution is seen to engage with the original version of the Eleatic problem in its own terms. It is in this way that the Eleatics and Aristotle come into a real dialogue with one another.40

<sup>&</sup>lt;sup>40</sup> I would like to thank Jason Carter, David Charles, Lindsay Judson, Yahei Kanayama, Eiji Kunikata, Richard McKirahan, and the editors of this volume for their valuable comments and encouragement. This is a much revised version of my 2008 paper (Oki 2008).

## BIBLIOGRAPHY

ACKRILL, J., 1981, Aristotle the Philosopher, Oxford.

- ALGRA, K., 2004, "On Generation and Corruption I. 3: Substantial Change and the Problem of Not-Being", in: J. Mansfeld, F. De Haas (eds.), Aristotle: On Generation and Corruption, Book I (Symposium Aristotelicum), Oxford, pp. 91–122.
- BURNYEAT, M., 2001, A Map of Metaphysics Zeta, Pittsburgh.
- CHARLES, D., 2018, "Physics I.7", in: D. Quarantotto (ed.), Aristotle's Physics Book I: A Systematic Exploration, Cambridge, pp. 178–205

CHARLTON, W., 1970, Aristotle Physics Books I and II, Oxford.

CHERNISS, H., 1935, Aristotle's Criticism of Presocratic Philosophy, New York.

GRAHAM, D. W., 1987, Aristotle's Two Systems, Oxford.

HARDIE, R. P., GAYE, R. K. (transl.), 1984, *Physics*, in: J. Barnes (ed.), *The Complete Works of Aristotle*, vol. 1, Princeton.

LEWIS, F., 1991, Substance and Predication in Aristotle, Cambridge.

- LOUX, M. J., 1992, "Aristotle and Parmenides: An Interpretation of Physics A8", Proceedings of the Boston Area Colloquium in Ancient Philosophy 8, pp. 281–319.
- OKI, T., 2008, "Aristotle's Analysis of Coming to Be in *Physics* A" (in Japanese), *Annual Review of the Kansai Philosophical Association* 16, pp. 77–87.

Ross, W. D., 1936, Aristotle's Physics, Oxford.

WATERLOW, S., 1982, Nature, Change, and Agency in Aristotle's Physics, Oxford.

WICKSTEED, P. H., CORNFORD, F. M. (transl.), 1929, Aristotle: Physics, vol. 1: Books 1-4, Cambridge, Mass.

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## Aristotle's Refutation of the Eleatic Argument in Physics I.8

In this paper, I show that Aristotle's refutation of the Eleatic argument in *Physics* I.8 is based on the idea that a thing at the starting point of coming to be is composite and is made up of what underlies and a privation. In doing so, I clarify how the concept of accidentality as used in his solution should be understood in relation to the composite nature of what comes to be. I also suggest an explanation of why Aristotle's discussion of the Eleatic dilemma in *Physics* I.8, unlike his discussion in the previous chapter, is not clear.

KEY WORDS

Aristotle, the Eleatics, the Physics, coming to be, change