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Articles

Aristotle and Johnston on Hylomorphism and the Character of Objects

Aristotelis ir Johnstonas apie hilomorfizmą ir objektų pobūdį

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Abstract: As M. Loux has recently reminded us, there are two basic strategies for explaining the character of particular objects, the 'relational approach' and the 'constituent approach'. The prime example of a constituent approach would be Aristotelian hylomorphism. This article reveals three things. First, it gives a roadmap towards what the author considers to be the exegetically correct reconstruction of Aristotle's hylomorphic theory. Second, it provides a presentation of the basic claims of a neo-Aristotelian hylomorphic theory, the one argued for by M. Johnston. Finally, it argues that regardless of whatever shortcomings it may have, Aristotle's theory has an advantage over that proposed by Johnston. Unlike Johnston's theory, it may give us a complete account of the character of a particular object.

Keywords: constituent approach, Aristotle, matter, form, essence, hylomorphism, Johnston.

Summary: Kaip neseniai mums priminė M. Louxas, yra dvi pagrindinės strategijos, paaiškinančios tam tikrų objektų pobūdį: santykio prieiga ir sandaros prieiga. Pagrindinis sandaros prieigos pavyzdys būtų Aristotelio hilomorfizmas. Šiame straipsnyje atskleidžiami trys dalykai. Pirma, jame pateikiamas planas, ką autorius laiko egzegetiškai korektiška Aristotelio hilomorfizmo teorijos rekonstrukcija. Antra, jame aptariami pagrindiniai M. Johnstono neoaristoteliškos hilomorfizmo teorijos teiginiai. Galiausiai straipsnyje atskleidžiama, kad, nepaisant galimų trūkumų, Aristotelio teorija turi pranašumą prieš Johnstono siūlomą teoriją. Skirtingai nuo Johnstono teorijos, ji gali išsamiai papasakoti apie konkretaus objekto pobūdį.

Keywords: sandaros prieiga, Aristotelis, materija, forma, esmė, hilomorfizmas, Johnston.

Introduction

M. Loux has recently reminded us that there are two basic strategies for explaining the character of particular objects (2014: 138-141). Both of them suppose that a particular object has its character derivatively. That is to say, it derives its character from other things which have their own characters non-derivatively. The first strategy, the so-called 'relational approach', takes it that a particular object is the kind of thing it is in virtue of a relation or tie to sources of character that exist apart from it. For instance, in Plato's metaphysics an object is the kind of thing it is in virtue of participating in some transcendent entities, the Forms. On the other hand, there is the 'constituent approach' according to which the underived sources of character are immanent in particular objects.

As Loux (2014: 139) notes, they are immanent in familiar objects "... in the sense that they are something like their parts, components, or ingredients". Hence, an object is the kind of thing it is in virtue of encompassing certain sources of character [1] . The prime example of such an approach would be Aristotelian hylomorphism. For Aristotle (see e.g., *Metaph*. Z 3, 1029a30-31, 11, 1037a5-10 and 17, 1041a32-b9) an item such as a substance is the kind of thing it is in virtue of being 'composed/compounded' (σύγκειται) out of 'matter' (ὕλη) and 'form' (μορφή/εἶδος).

Hylomorphism has been experiencing a revival in the work of neo-Aristotelian metaphysicians. As is well known, there are a number of ongoing debates among these philosophers. They are involved in disputes regarding questions such as these: (a) What exactly is the nature of the form, is it a relation or a structure?, (b) Is the form a universal or a trope-like particular?, and (c) Is the form, like matter, a part of a hylomorphic whole? [2] It is not my intention, however, to engage in any of these debates as such. The objective here is a modest one. I propose to do three things. First, I lay out a roadmap towards what I consider to be the exegetically correct approach to Aristotelian hylomorphism. To do this I appeal to the work done by a number of scholars. As we will see, one may plausibly assert that an Aristotelian hylomorphic entity is the outcome of the ontological union of two items, matter and form, where the latter is both an essential way of being and a final cause. Second, I briefly review the basic claims of the hylomorphic theory advocated by M. Johnston (2006). Johnnston's view is that an object encompasses a number of material parts and a form, where the latter is not itself a part of the whole. He supposes that the form is a principle of unity. In more detail, he takes it that a "... principle of unity for a given item is a relation holding of some other items, such that ... what it is for the given item to be is for the relation to hold among those items" (Johnston 2006: 653). Finally, I argue that Aristotle's theory has a distinct advantage over the one presented by Johnston. I show that, regardless of whatever shortcomings it may have, Aristotelian hylomorphism succeeds in at least one important respect. Unlike Johnston's hylomorphism, Aristotle's theory is in a position to achieve the main aim at hand: it may provide us with a complete account of the character of particular objects.

On Aristotelian Hylomorphism

Let us begin with some clarifications and inevitable excuses. The effort to interpret Aristotle's work is fraught with difficulties which invariably give rise to intense exegetical disputes. This is also the case with the interpretation of his hylomorphism. One may uncontroversially assert that, for Aristotle, an object or a kind of object is characterisable in terms of matter and form. The reconstruction of the details of this theory, however, is a highly contentious affair. As has already been indicated, my intention is not to defend an interpretation of this theory against all or most comers. Rather, what I propose to do is to present the basic elements of what I consider to be the exegetically correct reading of

Aristotle's hylomorphism. The defense of some of the points made below, and especially in the next section of this article, will have to await another occasion.

Throughout *Metaphysics* Z (e.g., Z 3, 1029a30-32, 11, 1037a5-10) and H (e.g., H 3, 1043a30), Aristotle assumes that a material object such as a substance or an artefact is composed or compounded out of matter and form. What we should also note at the outset is that there are several places, e.g., *Metaph*. Z 10, 1036a8-9 and 11, 1037a27, where Aristotle explicitly states that matter 'in itself' (καθ' αὑτήν) is 'indeterminate' (ἀόριστον) and 'unknowable' (ἄγνωστος). Roughly speaking, this is a claim to the effect that matter by itself, that is to say, matter without a form, is indeterminate or unspecified [3] . To ascertain how matter is related to form, and how these two are related to the whole, we have to determine what an Aristotelian form is. To do this we need to begin with a detour into Aristotle's theory of definition and explanation.

In *Posterior Analytics .APo*) B Aristotle deals with issues related to our scientific inquiries into types of natural process, e.g., thunder and eclipse. D. Charles (2000: chs 8-10; 2010: 286-309) has convincingly shown that in this context Aristotle argues for the interdependence of definition and explanation. According to this interpretation, Aristotle takes it that:

1. There is an important connection between the 'Why [is it the way it is]?' question, i.e., the cause or explanation-seeking question, and the 'What [is it]?' question, i.e., the essence-seeking question. They have a common answer (*APo* B 2, 90a14-23).

2. Our causal-explanatory knowledge is exemplified in demonstrations the canonical formulation of which is:

A (= major term) belongs to all B's (= middle term).

B belongs to all C's (= minor term).

A belongs to all C's.

3. In *APo* B 8, 93b7-14 we are told that in the case of thunder the relevant syllogism is the following:

Noise belongs to all fire-quenchings.

Fire-quenching belongs to the clouds.

Noise belongs to the clouds.

4. The 'middle term' (μέσον) in the demonstration, 'fire being quenched', refers to the basic 'cause' (αἴτιον) which brings about the occurrence of noise in the clouds. Thus, the answer to the 'Why does noise occur in the clouds?'/'Why does it thunder?' question is: [A certain type of noise occurs in the clouds] because fire is extinguished (*APo* B 2, 90a5-7 and 8, 93b7-14).

5. The cause marked out by the middle term is also the basic 'essence' or the 'what it is to be' (τὸ τί ἐστι/τὸ τί ἦν εἶναι) of thunder. It is what makes the phenomenon under investigation the one it is (e.g., *APo* B 2, 89b38-90a15). Hence, from the demonstration above one may read off the answer to the 'What is thunder?' question, the definition of thunder: it is [a certain type of] noise in the clouds brought on by fire being quenched (*APo* B 8, 93b7-14 and 10, 94a5-7).

6. In light of the above, it follows that our knowledge of the essence of a type of natural process is dependent on our explanatory grasp of it, and conversely. And crucially, what underlies the interdependence of our definitional and explanatory practices and knowledge is the metaphysical thesis for the identity of the basic cause with the basic essence.

In *Posterior Analytics* B Aristotle suggests that his interconnected account of definition and explanation, the Causal Explanatory Model (CEM) for grasping essences, does not apply only to types of natural process [4]. He notes, without elaborating on the issue within the particular work (see e.g., *APo* B 7, 92b4-11 and 8, 93a21-24) that it may be extended to substance-kinds.

D. Charles (2000: 276-294; 2010: 309-322) has also shown that in *Metaph*. Z 17 Aristotle explains how CEM may be extended to kinds of artefact and substance-kinds [5]. In *Metaph*. Z 17, 1041a24-25 Aristotle refers back to this model by using one of his favorite *Posterior Analytics* examples, that of thunder. Subsequently, in Z 17, 1041a25-28, b5-6, he argues that CEM may be extended to cover types of artefact, e.g., a house. And, in Z 17, 1041a32-b9 he does the same for a substance-kind, the kind human [6]. If one follows the statements made in 1041a32-b9, as well as some related comments in *Metaph*. H (1-4), then one may arrive at the following syllogistic demonstration:

Having a certain arrangement belongs to what it is to be a human/being a human.

What it is to be a human/being a human belongs to a body of a certain type, one made of arms, legs, etc.

Having a certain arrangement belongs to a body of a certain type, one made of legs, arms, etc.

The middle term of the syllogism, 'what it is to be a human', refers to the final cause which accounts for the way humans are [7]. Moreover, given that the cause and the essence are one and the same Aristotle supposes that we may discern the corresponding definition:

Human =def A certain type of body, one made of arms, legs, etc, which is arranged thus-and-so, because of being a human.

At first sight, this definition appears blatantly circular. As M. Peramatzis (2015: 198; 2018: 15) has shown, however, Aristotle does have an answer to the problem at hand. In *Metaph*. Z 17, 1041a27-28 he suggests that what it is to be ./being . is only an abstract way of characterizing .'s essence. To specify .'s essence in concrete terms, we ought to identify it with a cause. In the example under consideration, to properly specify the pertinent essence, being a human, we have to identify it with a particular final cause. Thus, Aristotle may escape the charge of circularity by appealing to his thesis for the identity of the basic essence with the basic cause.

The upshot of the discussion above is that the middle term in the syllogistic demonstration for the substance-kind human refers to the essence of the kind, the what it is to be a human. And, to be the essence of man is to be a certain kind of cause, the final cause which accounts for the way the human body is. We should also note that in *Metaph*. Z 10,

1035b14-16 Aristotle asserts that in animals the 'soul' (ψυχή) is the 'form and the what it is to be for bodies of this sort' (τὸ εἶδος καὶ τὸ τί ἦν εἶναι τῷ τοιῷδε σώματι). He takes it that the essence of an animal kind is to be identified with the pertinent soul. Moreover, he explicitly identifies the essence or the soul with the form of the kind [8] . Therefore, it is fair to suppose that the middle term in a syllogistic demonstration such as the one about the kind human picks out the essence or the form of the kind, and that this is to be identified with the relevant (final) cause.

Let us now further refine our understanding of what an Aristotelian form is [9] . The form or the essence of man is the what it is to be a human/being a human. As we have just seen, Aristotle supposes that being a human is to be identified with a soul of a certain sort. According to the standard reading of *De Anima* (II. 1-2), a living thing's soul is its capacity to engage in the activities which are characteristic of living things of its kind. In the case of man these activities include self-nourishment, movement and rest and intellection. Hence, we may plausibly suppose that the human soul is to be identified with a certain sort of life. This is the life which is characteristic of complete and successful members of the kind man. At the very same time, we are told, the essence or the form of the kind is a cause. It is the final cause which accounts for the way the human body is. If to have the relevant essence or form is to have a human soul, then we can understand why the form is also a final cause. In particular, if the form is a certain sort of soul, then we can see how the form is teleologically linked to matter. The soul of the kind human is a complex way of being, e.g., being capable of movement and being capable of perception. And, this specific way of being requires for matter to be organized in a particular way. To spell things out a bit, the human soul requires for matter to be organized into a certain kind of body, one made of certain body parts which are arranged in a specific manner. This is the type of body which is required for the life characteristic of man. In other words, the body of man is the way it is, it is composed of specific materials and body parts and it is arranged in a specific manner, for the sake of the requirements of the human soul.

Given the above, we may put together Aristotle's position regarding the relation between matter and form. M. Peramatzis (2018: 15-20; 2019) has proposed that the concepts Determinate, Determinable and Determinant may be employed to elucidate this relation. As has already been noted, for Aristotle, matter in itself is indeterminate, where this claim may be understood in one of two ways. First, matter is absolutely indeterminate. In such a case 'matter' would refer to prime matter. Secondly, matter may be indeterminate with respect to a specific form. I take it that in places such as *Metaph*. Z 10, 1036a8-9 Aristotle adopts the latter view. [10] Now, a form such as that of man is in effect a particular (essential) way of being for the appropriate kind of matter. Moreover, although such matter in itself is indeterminate, it is determinable by a determinant form. Hence, we may suppose that the form of man, which is a way of being for matter, yields a determinate entity with a specific character, a human being, by determining matter in the relevant way. [11]

Aristotelian Hylomorphism and the Part-Whole Puzzle

The other major issue in Aristotelian hylomorphism is the notorious part-whole puzzle. Are matter and form part of a hylomorphic whole, or are they related to the whole in a different way? Interpreters are very much divided on this issue.

Here is just a sample of the views defended regarding the part-whole puzzle in Aristotle's hylomorphic theory. K. Koslicki (2006; 2008: chs 5 & 6; 2018) has argued that the evidence from texts such as *Metaph*. Z 17, 1041b11-33 and *Metaph*. Δ 25, 1023b19-22 warrants a mereological reading of Aristotelian hylomorphism. To be more specific, she supposes that these texts suggest that Aristotle endorses mereological hylomorphism in the sense that he accepts that matter and form are the proper parts of a matter-form compound. L. Rotkale (2018) has recently argued *contra* Koslicki (2006; 2008) that *Metaph*. Z 17, 1041b11-33 does not support such an interpretation. The particular stretch of text, Rotkale (2018: esp. 79-81) contends, shows that for Aristotle a form is not a part of a whole. It is just the arrangement of or the relation that holds between certain material parts. [12] M. Loux (2014) defends yet a different interpretation. He suggests that in *Metaph*. Z 10, 1034b32-34 Aristotle distinguishes 'constituents' or 'metaphysical parts' from 'commonsense spatial parts'. [13] Commonsense or spatial parts are spatially less than the whole they make up. On the other hand, constituents are substantially less than their whole. Each of the constituents of a whole "... induces a form of being or character that is itself less than the complete form of being or character displayed by the whole" (Loux 2014: 139). Subsequently, Loux (2014: 141-152) argues that, for Aristotle, both form and matter are present in a whole as its constituents, and that the form is predicated of matter, where predication is here understood as a non-linguistic relation between two non-linguistic items. Other scholars, see e.g., Scaltsas 1994: esp. ch. 4, have argued for the case that an Aristotelian hylomorphic whole such as a substance is a single non-composite entity.

I do not intend to scrutinize any of the various ways in which interpreters have tried to deal with the part-whole problem. This is an important puzzle, but for our present purposes we need not definitively resolve it. Thus, what I would like to do in what follows is to (a) sketch out what I consider to be the exegetically correct approach to the particular dilemma, and (b) mark out some issues for further investigation.

In the context of a discussion of neo-Aristotelian hylomorphic theories, J. Skrzypek (2017: 380) has suggested that a hylomorphist has a number of diachronic theories of composition available to her. These are theories about what happens to the pre-existing material objects that come to compose a numerically distinct matter-form compound. The collective textual evidence suggests that Aristotle adopts two distinct diachronic theories of composition, *preservationism* and some variety of *simple annihilationism*. [14]

In *Metaph*. Z 17, 1041b11-28 Aristotle argues that some things which are compounded out of other items are not heaps. They are not mere

aggregates of material parts. Rather, they are genuinely unified entities. What is important to note is that one of the examples Aristotle uses to illustrate this point is that of the syllable *BA*. Unlike a heap, *BA* is not a mere aggregate of parts. When the syllable is dissolved, the aggregate of its 'elements' (στοιχεῖα), . and ., is preserved, whereas the whole, the syllable, ceases to be. Putatively, this much shows that besides its elements *BA* encompasses something else, namely, a form. This particular example seems to suggest that Aristotle applies preservationism to at least some items of our everyday experience. One may assert that the example of the syllable *BA* may serve as a model for the ontological status of the material objects that come to compose certain types of hylomorphic entity, e.g., artefacts. Bricks and stones, very much like the elements of *BA*, exist before the construction of a house. Furthermore, like . and ., they may be plausibly said to continue to exist after being enformed, that is, after the formation of the hylomorphic compound which is a house. Finally, like the elements of *BA*, they may/will persist even after the dissolution of the particular hylomorphic whole. If this much is accepted, and given the fact that there are places where Aristotle states that form and matter are part of a whole in the same sense of parthood, see e.g., *Metaph*. Δ 25, 1023b19-22, then one may cautiously accept a curtailed version of Koslicki's view. That is, one may cautiously admit that insofar as some hylomorphic wholes are concerned, e.g., artefacts, Aristotle supposes that: (a) the whole is the outcome of the ontological union of matter and form, and (b) matter and form are the proper parts of the whole. [15]

On the other hand, there are some other texts which suggest that Aristotle adopts a very different diachronic theory of composition. In places such as *De Anima* II 1, 412b10-25 Aristotle endorses the homonymy principle, whereby the matter of a substance is essentially enformed. That is to say, the matter of a substance cannot lose its form and remain in existence. In light of this much, I would like to submit that when it comes to substances Aristotle adopts a different diachronic theory of composition, namely, some form of simple annihilationism. According to this theory, the pre-existing material objects that come to compose a hylomorphic whole are annihilated and replaced by a single non-composite entity. Now, if this much is admitted, then it seems that Aristotle takes it that substances, unlike some other hylomorphic items, e.g., artefacts, are such that: (a) they are the outcome of the ontological union of matter and form, but (b) they are single non-composite entities.

To sum up, the picture of Aristotelian hylomorphism that has been drawn here is this. The textual evidence in *Metaph*. Z 17, 1041b11-28 indicates that Aristotle endorses preservationism. If this is so, then one may cautiously admit a curtailed version of Koslicki's thesis, that for Aristotle some hylomorphic wholes are the mereological compounds of two proper parts, matter and form. On the other hand, when it comes to substances it would seem that Aristotle adopts some variety of simple annihilationism, whereby such an entity is a single non-composite entity. Notwithstanding these issues, which merit further investigation, we may assert that Aristotle's view is that a hylomorphic whole is the product of

the ontological union of two items, matter and form. Furthermore, it is fair to assume that for an Aristotelian hylomorphic compound to exist, is for matter to have come to be ontologically tied to the relevant form, where the latter has at least two features. It is a way of being and a final cause.

On Johnstonian Hylomorphism

M. Johnston (2006) has argued for a particular version of non-mereological hylomorphism. He takes it that a hylomorphic entity encompasses some material parts and a form, where the latter is not a part of the whole but only a principle of unity. In this section of the paper I provide a brief description of Johnston's thesis.

Johnston (2006) gives an extensive account of his non-mereological hylomorphism which includes discussions of a variety of issues, e.g., of the nature of parthood and the structure of complex entities beyond processes, substances and artefacts. Yet, for our purposes we need only focus on some of his foundational claims. Johnston supposes that hylomorphism "... is the idea that each complex item admits of a real definition, or statement of its essence, in terms of its matter, understood as parts or components, and its form, understood as a principle of unity" (2006: 658). Furthermore, he takes it that the form cannot be a further part along with the more familiar material components of a whole. According to Johnston (2006: e.g., 652-653, 659, 673), it is only a principle that unifies the material parts into a particular whole. What is also important to note is that Johnston assumes that the real definitions he has in mind are to take the following canonical form: "*What it is for* ... (the item is specified) ... *to be is for* (some parts are specified here) ... *to have the property or stand in the relation* ... (the principle of unity is specified here)" (2006: 658).

Johnston supposes that a type of complex item such as an artefact . is to be defined as follows:

X =def Such and such (types of) material parts which are related to each other in a certain way.

The pertinent form, where this is assumed to be a relation that (types of) material parts stand in, is the principle of unity of the item under consideration. Thus, to turn to a couple of specific examples Johnston (2006: 653-654, 658) considers, a train and a model airplane are defined as follows:

Train =def An engine and carriages which are *coupled in a certain way*.

Model airplane =def A collection of model material parts which *hang together in a specific manner*.

It should be clarified at the outset that Aristotle would reject such hylomorphic definitions on the grounds that they construe the form of a whole as a relation. According to Aristotle, see e.g., *Metaph*. Z 4, 1030a2ff, the form should be ontologically and definitionally prior to the whole and its material parts. And putatively, a relation (or a property) cannot have this kind of priority over the whole and its various parts. [16] Irrespective

of these priority claims, and their validity, there are other troublesome elements in Johnston's thesis we need to consider.

Before we proceed with the critique of this theory though, it is only fair to note that for Johnston (2006: e.g., 663-664) a principle of unity is not *static*. That is to say, its holding of certain parts does not require that these parts remain as they are. In fact, he explicitly states that a principle of unity is *dynamic* in the sense that "... its holding of certain parts may allow or require that the parts it holds of vary over time" (Johnston 2006: 663). At the same time, however, Johnston insists on the idea that the form or the principle of unity of an item . is a relation that holds of some other material items. And crucially, for the (complex) item . to be is for the particular relation to hold of those other material items. Johnston does not provide an account of form as such, whereby this may be understood as something beyond a relation holding of certain (material) parts.

Aristotelian vs Johnstonian Hylomorphism

A definition is supposed to be the answer to the 'What is it?' question. It is meant to specify what something is. One issue that arises here is whether Johnston's hylomorphic definitions can really answer this question. For instance, is his definition of a train a satisfactory one? If we are told that a train is an engine and carriages which are coupled in a certain way, can we claim to have gained a solid grasp of what the particular (type of) entity is? The answer is negative for there is one important element missing from the definition. The definition only states that a train is something which is composed of some material parts, and that these parts are related to each other in a certain manner. It does not, however, tell us what a train does. That is to say, it does not provide the function of a train, which is, after all, the feature that fixes the identity of the item at hand. To use Aristotelian terminology, Johnston's hylomorphic definition does not provide us with the essence or the what it is to be of a train. Hence, it cannot really help us understand what the particular kind of entity is.

Consider now one of Aristotle's own definitions of a type of artefact, that of a house. As Charles (2010: 310-312) has suggested, if we take into account the statements made in Z 17, 1041a26-28, b5-6, as well as a number of related comments in *Metaph*. H 2 and 3, then we can see that Aristotle's relevant demonstrative syllogism is (roughly) the following:

Such and such arrangement belongs to being a coverer for bodies and possessions.

Being a coverer for bodies and possessions belongs to bricks and stones.

Such and such arrangement belongs to bricks and stones.

And, from the demonstration above one may read off the pertinent definition:

House =def Bricks and stones arranged thus-and-so for the sake of providing cover for possessions and bodies.

The main difference between the above and Johnston's definitions is that, in addition to the matter and its arrangment, we are here provided with the what it is to be or the essence of a house, namely, being a

cover(er) for possessions and bodies. Hence, the definition above gives us the elements needed to truly grasp what a house is.

The point made here is that Johnston's hylomorphic definitions, as they stand, are incomplete. Knowing that certain types of material parts are related in a given manner cannot help us understand what a type of object is. To truly grasp what an object is, we ought to know its end or function. I take it that this is a shortcoming in his theory that Johnston, at some level, acknowledges. Hence, for the definition of a train to be completed, Johnston himself notes, we need to add that the engine should be coupled with the carriages in such a way *so that it [the engine] can pull or drive the carriages* (Johnston 2006: 658). Likewise, a model airplane is not only a collection of model material parts which hang together in a particular way. The definition should be accordingly supplemented. A model airplane is a collection of model parts which *hang together in such a way as to resist separation in the face of the range of forces to which we usually subject such models* (Johnston 2006: 653). What is imperative to recognize is that these add-ons do not refer to relations. Rather, they refer to functions and ends. This is especially evident in the case of the model airplane example where we are explicitly told that: a model airplane is a sum of model parts which hang together in such a way *so that the whole may retain its structural integrity while performing the function characteristic of items of its kind*. The fact of the matter is that one will never understand why these material parts here, which are arranged thus-and-so, are a model airplane, unless we add to the definition the end or the what being is for a model airplane. Furthermore, I take it to be obvious, as is evidenced by the particular example, that no effort can obscure the fact that the essence or the what being is of an item is something distinct from any relation that may hold of the relevant material parts.

These are precisely the points Aristotle's account in *Metaphysics* Z (and H) does get right. As we have seen, Aristotle takes it that a house is not simply bricks and stones related or arranged in a certain way. It is bricks and stones arranged in a certain way so as to be a shelter for people and property. If this much is correct, that is to say, if a complete definition requires the addition of an essence or a final cause, then Aristotle's hylomorphic definitions have a clear advantage over their counterparts in Johnston's theory. [17]

Let us now consider particular objects, where these may be understood to be essentially members of their respective kinds. [18] As has already been noted, in Aristotle's hylomorphic theory a particular object such as a house is an entity with a particular character. And, to explain the character of a house all we need to do is refer to the things out of which it has come to be compounded, matter and form. In more detail, for a house to exist is for (the appropriate kind of) matter to be organized in a specific way for the sake of an end, namely, that of providing shelter for possessions and bodies. When matter is ontologically tied to or determined by the relevant form, where this is an essence and a final cause, the result is a determinate object with a specific character, that of a house.

In the Johnstonian hylomorphism we are told that for a particular house to exist is for such and such material parts to be related to each other in a certain manner. Yet, as Johnston himself seems to acknowledge, citing the material parts and a relation will not give us a complete account of what a house is. It is required that we add the end or the function of the material objects which have been thus-and-so arranged. This is to acknowledge, however, that the Johnstonian hylomorphism is incomplete in an important respect. For a house to exist is not sufficient for matter to be arranged in a cetrain way. For a house to exist is for matter to be arranged in such and such fashion for the sake of a certain end. And, this end is something distinct from any relation that may hold of the relevant material parts. Hence, it would be incorrect to state that a hylomorphic compound such as a particular house is matter which has been arranged in a certain way. This much will not yield a complete entity, a house, with a particular character. To put it differently, the form of a particular matter-form compound cannot be just a relation that holds of certain material parts. Therefore, unlike Aristotelian hylomorphism, Johnstonian hylomorphism, as it stands, cannot deliver a complete account of the character of a particular object.

Conclusion

In this article I tried to reveal three things. I provided an outline of what I take to be the exegetically correct approach to the Aristotelian hylomorphism. I presented a brief acount of the main claims of the hylomorphic theory defended by M. Johnston. Finally, I argued that the Aristotelian hylomorphism has an advantage over the one proposed by Johnston. Aristotle's theory, unlike the one defended by Johnston, can provide us with a complete account of the character of particular objects. Admittedly, the discussion above leaves a number of issues unresolved or in need for further investigation, especially issues that relate to the reconstruction of Aristotelian hylomorphism. As has been noted , the scope of this article was a limited one. The main goal I hope I have achieved here is to have shown that Aristotle's theory should be taken seriously, at least in the sense that some lessons may be learnt from it.

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Notes

1 As M. Loux (2014: 139) points out, it was N. Wolterstorff (1970: 111ff; 1991: 547-548) who labeled these strategies as the 'relational' and the 'constituent' approaches to explaining character.

2 For a good discussion of these and other related questions, see Skrzypek 2017. Skrzypek (2017) critically evaluates the hylomorphic positions defended by four neo-Aristotelian metaphysicians, M. Johnston (2006), K. Fine (e.g., 1999), K. Koslicki (e.g., 2008) and W. Jaworski (e.g., 2016).

3 For a detailed treatment of this issue, see Peramatzis 2018: 21ff. See also the discussion at the end of this section of the article.

4 I borrow the particular terminology, CEM = (The) Causal Explanatory Model (for grasping essences), from M. Peramatzis (2018: 13ff).

5 What follows, in this paragraph, is an outline of the particular interpretation of *Metaph.* Z 17.

6 In *Metaph*. Z 17 Aristotle does not consider the examples of the house and the substance-kind human in the same detail that he treats thunder in the *Posterior Analytics*. As Charles (2010: 309-315) acknowledges, to reconstruct the explanatory demonstrations for these two cases, we need to also utilize related material from *Metaph*. H, e.g., H 2, 1043a8-9 and H 3, 1043a29-b4, b10-14.

7 In *Metaph*. Z 17, 1041a27-32, Aristotle states that in some cases, e.g., that of thunder, the middle term refers to the 'efficient cause' (τί ἐκίνησε πρῶτον), whereas in some others, e.g., those of the house and the substance-kind human, it refers to the 'final cause' (τίνος ἕνεκα). For the interpretation of this passage, see Charles 2010: 289-296 and Peramatzis 2018: 15. On the same issue, see also Charles 2021: ch. 2.

8 One could assume that *Metaph*. Z 17, 1041b6-9 makes the same point, that the basic cause or the essence of the kind human is the form of the kind, provided that one accepts that τοῦτο δ' ἐστὶ τὸ εἶδος at 1041b8 is not a later addition to the text.

9 In the ensuing discussion I largely follow D. Charles (2000: 288-294; 2010: 312-315) and M. Peramatzis (2015: 203-205; 2018: 17-18).

10 I also take it that this is how Peramatzis (2018: e.g., 30), at least as I understand him, construes Aristotle's claims for the indeterminacy of matter.

11 M. Peramatzis (2015: 198; 2018: 13) points out that in *Metaph*. Z (and H) Aristotle focuses primarily on substance-kinds, e.g., man or horse, where these are not themselves substances. At the same time, it should be noted that Aristotle routinely shifts the discussion from substance-kinds to token substances; see e.g., Z 11, 1037a5-10 and Z 17, 1041b6-9, b28-33. In this article I assume that his views on substance-kinds may be extended to particular substances, items like Socrates and Bucephalus. As Peramatzis (2018: 13, fn. 2) points out, this move may be justified if we assume that particular substances are essentially members of their kinds.

12 It is worth pointing out that the view Rotkale (2018) ascribes to Aristotle is reminiscent of the hylomorphic theory defended by M. Johnston (2006).

13 On the same distinction, see also the discussion in Lowe 2012: 231.

14 The terms used here, 'preservationism' and 'simple annihilationism', along with the related definitions employed below, are borrowed from Skrzypek 2017: 380.

15 Koslicki (2006; 2008) assumes that every Aristotelian hylomorphic entity is the compound of two proper parts, form and matter.

16 For a discussion of this issue, see Charles 2010: 294-295, 297. See also Peramatzis 2011, a comprehensive treatment of priority in Aristotle's *Metaphysics*.

17 To reinforce the point outlined above, consider the following. Let us suppose, as Johnston would suggest, that the definition of a house is this: house = certain material parts, e.g, bricks, stones and planks, which are related or arranged in a certain manner. A definition ought to cover every possible type of house such as a brick house in central London, a hut in Sudan or even an igloo. It should be clear that to achieve such a definition we must include in it, besides matter and its arrangement, the relevant end or function.

18 In the case of Aristotle this assumption was made earlier on. Johnston (2006: 659) seems to be making a similar assumption.