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Unity and Primary Substance for Aristotle

Abstract: Primary substance for Aristotle is either the individual or form. These same two possibilities are the leading candidates for the source of unity in a substance. Thus, if we could determine what is responsible for the unity of a substance, we may well have located primary substance also. I consider the following possible sources of the unity of form and matter in a substance:

1) The unifier is a connector external to form and matter. (This connector may be itself a form, matter, or a relation that is neither formal nor material.)

2) There is no need for a unifier because form and matter are simply conceptual ways of understanding a single, already-unified, concrete being.

3) The unifier is an inherent aspect of form or matter.

I proceed by a process of elimination and conclude that substantial form is both what unifies a substance and the better candidate for primary substance.

In this paper, I will indirectly approach a thorny question, namely, whether an individual concrete thing or the substantial form is most properly primary substance for Aristotle. I will suggest that, if we could identify what exactly it is that unifies form and matter in a substance, then we may have found a resource for identifying primary substance as well.1

The battle over a proper understanding of primary substance pits Aristotle’s remarks in the Categories against apparently contradictory statements in the Metaphysics.2 In the Categories, Aristotle claims that “[s]ubstance, in the truest and primary and most definite sense of the word, is that which is neither predicatable of a subject nor present in a subject; for instance, the individual man
or horse.” Here, because primary substances “are the entities which underlie everything else,” we predicate species and genus—as well as the other categories—of the individual, e.g., Socrates is a man. In the Metaphysics, primary substance is still hailed as the self-subsistent something of which everything else is predicated, but this something now appears to be the form of an individual thing rather than the thing itself. Form is “the essence—160—of each thing and its primary substance.” Although it will always be encountered together with matter in an individual thing, this form or essence of the thing is distinct from the matter of a thing, and primary substance is more properly the form of the thing than the composite of form and matter.

Rather than attempting to resolve this controversy directly, I propose an alternate route. I will examine one of the main characteristics of substance: namely, unity. More precisely, I will consider the possible sources of the unity of form and matter in a substance. For clarity’s sake, the candidates for that—which-unifies form and matter in a substance may be stated as follows:

1) The unifier is a connector external to form and matter. (This connector may be itself a form, matter, or a relation that is neither formal nor material.)

2) There is no need for a unifier because form and matter are simply conceptual ways of understanding a single, already-unified, concrete thing.

3) The unifier is an inherent aspect of form or matter.

My investigation of these options will progress primarily by a process of elimination. We will see that the last two possible sources of unity are the same contenders for primary substance, namely, the individual thing itself and the form. Unity is among the distinguishing marks of substance. If either the concrete thing or the form is responsible for the unity of a substance, then we have good reason to suspect that we have located primary substance as well. I will argue that the substantial form is the better candidate.

1. A Matter of Connection
The problem of unity in a substance is a variation of the problem of the one and the many. If a substance is composed of various parts, what is it that unifies these parts into a single whole? A central version of this question, both for Aristotle’s system in general and for the debate regarding primary substance, is the difficulty of explaining how form and matter are unified in a single substance. How do we account for the unity of these two ontologically distinct elements? The first and third options above both involve the possibility that matter unifies a substance, and, in this respect, they may be investigated together. With regard to the first option, if we start with the possibility that an external connector is responsible for the unity of form and matter, then this connector could be formal, material, or something neither formal nor material. In the third option, the matter already present may unify the substance due to some internal feature. Regardless of whether it is internal or external, if matter is responsible for the unity of a substance, it must account for 1) the unity of the parts of a substance, and 2) the unity of the form and matter of a substance. I will assume that a candidate that cannot account for the unity of parts in a substance cannot account for the more problematic unity of form and matter.

Aristotle’s position on the first criterion is not difficult to find. In his discussion of sensible substances, Aristotle rejects the possibility that something material can be responsible for the unity of the parts of a substance. Here, his discussion—161—revolves around the unity of a whole. When we ask what it is that makes the parts of a substance a unified whole rather than simply a collection, we are searching for a cause: “[i]n the case of all things which have several parts and in which the totality is not, as it were, a mere heap, but the whole is something besides the parts, there is a cause.” Aristotle’s description already suggests that the substance and unity we are investigating cannot be reduced to the material parts. If the matter in a mass of yarn and a sweater are the same, then the matter alone cannot account for the unity of the latter. Instead, we are seeking a cause that explains why the whole, e.g., the sweater, is “something besides the parts.” Given that we do encounter substances and not just more and less complex heaps, what is it that unites the material parts of a substance into a whole?

Aristotle explains the difference between a whole and a heap by employing a distinction between a principle and an element. Wholes and heaps are similar
insofar as both are composed of elements, which are the material parts of a thing into which this thing can be divided. The difference, however, is in the unity of the parts. Although a whole and a heap are both numerically units or “ones,” “the whole is one, not like a heap but like a syllable,” because a whole has a different kind of integrity, i.e., it is destroyed if its elements are divided:

[B]ut the syllable is not the elements, nor is $ba$ the same thing as $b$ and $a$, nor is flesh fire and earth: for when they break apart, these things, that is, the flesh and the syllable, no longer exist, but the elements exist, as do the fire and the earth. Therefore, the syllable is something, not only the elements, the vowel and consonant, but also something other, and the flesh is not only fire and earth, or the hot and cold, but also something other.

A whole cannot be fully explained as the sum of its parts because the existence of these elements does not guarantee the existence of the whole. The whole, then, must be its parts and “something other,” which unifies these elements in a single substance.

Aristotle quickly rejects the possibility that this “something other” is an element of the substance that connects the other parts, i.e., a material unifier. If the something were an element, Aristotle argues, we would still have the same explanatory difficulty. If we attempt to explain the unity of the syllable above by positing another material component $x$, the whole would simply be divided into three parts rather than two ($b$, $a$, and $x$). We would be left with the same problem of explaining how these three elements are unified in a whole. This process can continue indefinitely. In short, we are trying to account for the unity of material parts in a whole, and adding another material part only increases the number of elements whose unity must be explained rather than explaining this unity.

Instead of appealing to another element as the unifying “something,” Aristotle shifts his focus away from matter and turns to a different kind of thing altogether, namely, a principle. We are seeking a cause to explain why a substance is a whole and a certain kind of thing, such that it can serve as the subject of predication. Aristotle— claims that substances are formed according to their natures, and he identifies such a nature as a principle, which
appears to be formal. The heart of the argument is that, as a principle, the form is of a different ontological kind than the elements. The addition of further elements only deferred the problem of locating a unifier, but the form operates as a different kind of thing than matter.

The form can unify the material parts precisely because it is not itself a “part” of the substance. To the contrary, Aristotle identifies the formal cause as the substance of a thing, i.e., the cause of the thing being what it is. In other words, the form is not simply an empty or purely functional relation but content-laden. The parts are unified into a whole by the form because the form is the cause of the thing’s being what it is. In the case of my cat, for example, his formal cause is both the reason that his parts are united and the reason that he is a cat. Therefore, the formal cause is responsible for a substance on two levels: it accounts for the unity of the parts and the content of what the thing is. On neither of these levels could the form be said to be a part.

At this point, the list of possible unifiers is shorter. Aristotle has eliminated the possibility that the matter internal to a substance is responsible for the unity of its parts. If the material elements of a substance must be unified by a formal principle, then matter hardly seems capable of unifying form and matter. Moreover, Aristotle’s argument also appears to eliminate the possibility that the unity of a substance is achieved through an external, material connecting relation. Presumably, such a connector would default to the status of an element and, therefore, join the parts in need of unification rather than explaining this unity. Neither of the original options that posit matter as a unifier is viable.

2. Further Connections

The remaining options are as follows: 1) the unity of form and matter is due to a connector that is either formal (though a form outside the substance in question) or something neither formal nor material, 2) there is no unifier because form and matter are only separate when abstracted from the basic unity of individual substances, or 3) the unity of form and matter is due to an
inherent feature of form. This section will be devoted to the first possibility in both of its versions.

Despite the emphasis on form above, Aristotle's comments are not directed to an external form but to the internal formal cause of the substance, i.e., one of the two components that an outside relation would be responsible for linking. The possibility of an external formal connector appears to fail for at least two reasons. First, the position is open to a variation of the third man argument. If the connecting form resides outside the substance, then the internal form and the matter each must be connected to this external form somehow, and we must explain this second set of connections. If we posit additional connecting forms, the same difficulties arise, and an infinite regress threatens. Further, even if we could assume that the relation of the substantial form and the unifying form could be adequately explained, we would still be left with the question of what unifies the formal unifier and the— 163 —material parts of the substance, i.e., what unifies form and matter, which appears to be where we began.20

Second, Aristotle briefly considers and then rejects the option of such a connector. The major candidate for an external formal connector, not surprisingly, would be a Platonic Form. For Aristotle, an explanation of the unity of a thing by way of participation in a Form imports additional problems:

What, then, is it that makes man one; why is he one and not many, e.g. animal + biped, especially if there are, as some say, an animal-itself and a biped-itself? Why are not those Forms themselves the man, so that men would exist by participation not in man, nor in one Form, but in two, animal and biped, and in general man would be not one but more than one thing, animal and biped?21

Note that the problem is one of the content as well as the logistics of participation. As we saw above, the formal cause of a substance is responsible for the substance’s unity and for its being what it is. Again, forms are not contentless unifiers.

The problem is not simply that each substance could reasonably be assigned participation in a wide range of Forms (although this concern alone already presents a quandary if these Forms are meant to explain unity). Instead, we are
faced with the additional difficulty of explaining why it is that a substance is a unity as “man” rather than as “animal” and “biped.” Form unifies a substance as *a something*, such that the unity and the being of a substance are enmeshed. If one appeals to Forms, there is no division among substantial, essential, and accidental Forms. Thus, substantial forms begin to resemble collections of particular participations, e.g., a bronze sphere participates in the Forms bronze, sphere, heavy, colored, etc. If all Forms are equal, so to speak, then we have no way of explaining a hierarchy of forms when we try to locate the unity and being of a substance. In Aristotle’s example, a man could participate in “animal” and “biped” rather than “man” because the last seems to be a conglomerate of the former two Forms.

In the context of Forms, we have no grounds on which to assert that a thing more properly is “man.” Again, the substantial form is the source of the thing’s unity and being as a substance. To participate in two Forms is to *be* two different things, and we have failed to explain the unity of a thing. Further, if we attempt to mend the situation by insisting that the Form “man” unifies “animal” and “biped,” then we will fall into the same difficulty we faced in the element argument: the unity of parts cannot be explained by appeal to another thing of the same ontological kind. Moreover, given that we have eliminated matter as a possible source of unity, there is nothing outside form to which we have recourse, and we are again left with a regress of Forms.

In the same vein, Aristotle objects to a catalogue of terms invoked to explain the unity of form and matter by way of relation. Whether the appeal is to “participation,” “communion,” “composition,” or “connection,” the “same account applies to all cases”: these terms will describe everything as a relation, be it a state (e.g., health), — 164 — a substance (e.g., a bronze triangle), or a quality (e.g., the whiteness of a thing).22 The heart of the difficulty, Aristotle explains, is that these appeals to relation are based on a misunderstanding:

［P］eople look for a unifying formula, and a difference, between potency and complete reality. But, as has been said, the proximate matter and the form are one and the same thing, the one potentially, and the other actually. Therefore it is like asking what in general is the cause of unity and of a thing’s being one; for each thing is a unity, and the potential and the actual are somehow one.
Therefore there is no other cause here unless there is something which caused the movement from potency into actuality.  

The crux of the argument is the claim that form, or actuality, and matter, or potential, are somehow the same. We need not search for a unifying formula because the two components are themselves “one and the same thing” in some fashion.

What exactly it is that Aristotle is objecting to in his predecessors’ theories of relation is contested. According to Theodore Scaltsas, the problem is that former philosophers have posited a series of unnecessary relations where a single model of potentiality and actuality will serve. In direct opposition, Frank S. Lewis claims that Aristotle objects because former philosophers have chosen a single, contentless relation to explain substances. If we claim that a substance is unified by “some purely contentless notion, sunthesis (say), which is the same for all cases then every unity will have the same substance and the same cause of its being.” Siding with Lewis, I agree that Aristotle objects to relation as a unifier because it is devoid of content. If we ask “what in general” causes the unity of a thing, we will miss the important insight that this cause of unity is also the cause of a thing’s being what it is. For Aristotle, substantial form is not a general explanation, as relation seems to be, but the cause particular to each kind of substance. For present purposes, it will suffice to note that, regardless of varying interpretations of what his objection entails, Aristotle clearly rejects the possibility that the cause of the unity of a substance is external to the form and matter.

One might object that I have misconstrued relation, however. Relation need not necessarily be external to the substance simply because it is neither the form nor matter. Instead, the arrangement or relation of the parts of a thing may well be responsible for its unity. In support of this position, one might turn to Aristotle’s critique of Democritus. For Democritus, all things have the same underlying matter, “but they differ either in rhythm, i.e., shape, or in turning, i.e., position, or in inter-contact, i.e. order.” Things appear to be the same matter configured into different structures. Rather than challenging this basic understanding, however, Aristotle seems to object that Democritus has been too frugal in naming the ways in which things are different. In order to remedy this
oversight, Aristotle offers a list of additional differences, comprised of various physical connections (something may be bound, glued, or nailed together), difference of composition (blending two—165—substances to make a third), time, position, and quality. Here, a proponent of relation as a tertium quid might argue, we see Aristotle embracing the relation of parts as the feature which characterizes things as different substances.

This line of argument offers certain advantages. If the relation of parts is responsible for the unity of a substance, then we do not have the problem of appealing to form or matter outside the substance itself. Further, one could argue that the relation of parts gives rise to the form of a thing, such that it is not identical to the form but the relation need not be contentless. Consider two farmers who are each given an identical supply of bricks and stone. The first proceeds to build a wall along the side of her pasture while the other constructs a small walkway in his garden. The proximate matter in each case is identical, but the relation of the bricks and stones in the wall and in the walkway are different. This relation of the parts, one might argue, is not something outside the thing but that which makes the wall or the walkway what it is. In effect, the arrangement of parts, taken together, is the cause of unity and gives rise to the substantial form of the thing.

Nevertheless, attractive as this explanation may appear, the reasoning is, according to Aristotle, exactly backwards. Aristotle claims:

If we examine we find that the syllable does not consist of the letters + juxtaposition, nor is the house bricks + juxtaposition. And this is right; for the juxtaposition or mixing does not consist of those things of which it is the juxtaposition or mixing. And the same is true in all other cases; e.g. if the threshold is characterized by its position, the position is not constituted by the threshold, but rather the latter is constituted by the former. Nor is man animal + biped, but there is something which is neither an element in the whole nor a compound, but is the substance; but this people eliminate, and state only the matter. If, then, this is the cause of the thing’s being, and if the cause of its being is its substance, they will not be stating the substance itself.

In the view above, the wall or walkway is equivalent to the bricks and stone +
juxta-position. According to Aristotle, such a position mistakenly makes the structure of a substance dependent on the material parts. This account approaches the problem from the wrong direction. It is not the case that we have a cat, flower, syllable, or wall because the respective parts are arranged in a certain way but, rather, that being a cat or any other substance requires the parts to be structured in a particular way. The juxtaposition “does not consist in those things of which it is the juxtaposition” because this arrangement or structure is not properly the result of the material elements. In the case of our two farmers, because the proximate matter is the same for each structure, the material cause must also be the same,\(^{31}\) meaning that the elements of the thing cannot account for the cause of a thing’s unity as what it is. Instead, we should turn to the substance of the thing in order to understand the relation of parts.— 166 —

Aristotle’s argument seems most persuasive in the case of natural organisms. On a common-sensical level, we can argue plausibly that the fact that a thing is a petunia seedling will determine its current structure as well as future parts and their future arrangement. On the level of artifacts, however, the argument leaves more room for dissent. In the case of our petunia, we can make some appeal to an internal structure inherent to the substance, but this hardly seems possible for our farmers’ masonry projects. In part, Aristotle appears to recognize this tension. He is willing to entertain the possibility that artifacts may not qualify fully as substances.\(^{32}\) Note, however, that in this concession to the problem of artificial substantial forms, Aristotle leaves open the possibility that artifacts may not be substances in the way that natural things are. He does not attempt to rework the notion of substance. From this response, we may infer Aristotle’s stance on the current issue: the substance of a thing determines the arrangement of its parts, not vice versa. If artifacts do not fit this model, then we should be prepared to give up their status as substances before we reverse the initial claim.

This parting of the ways may be a bit hasty, however. The problem of artifacts does not seem insurmountable on Aristotle’s terms. Returning to the farmers, if we ask how it is that they determined the arrangement of the bricks and stones, we will likely find that they had a wall or walkway in mind before they began.\(^{33}\) They did not simply begin experimenting with their materials until a wall or
walkway arose. Instead, each farmer arranged the bricks and stones in certain ways \textit{because} she or he was building a wall or a walkway. Here, too, then, the substantial form determines the relation of parts.

In addition to Aristotle’s objection, the view that relation of parts is a connecting \textit{tertium quid} is problematic because we seem to have lost the distinction between a heap and a whole. If the relation of parts is responsible for the unity of a thing as a substance, then there does not appear to be any obvious objection to the view that the initial heap of bricks and stones and the finished wall or walkway simply reflect different arrangements of parts, and that, on this basis, each should be regarded as equally a substance. Put differently, what makes parts with a certain relation a substance and the same parts with a different relation a heap? The view that relation provides a \textit{tertium quid} does not seem to provide an answer. If this is indeed the case, then we have eliminated the possibility that form and matter are unified by a connector distinct from these components, be it material, formal, or neither.

3. Implications for Primary Substance

The original options have finally been whittled down to two. To wit, either there is no need to find a unifier for form and matter because they are only separate in abstraction, or the form of a substance is responsible for the unity of form and matter. If the first is correct, then composite substance is the most basic unity, and, presumably, the individual would qualify as primary substance. If the second is correct, however, then we will have reason to regard the substantial form as most properly primary substance. Although this issue is a discussion unto itself, and one— 167 —which I have no illusion of resolving fully here, I will suggest in closing that the issue of unity indicates that form is both responsible for the unity of a substance and most properly primary substance.

Generally speaking, the debate over primary substance will come to an impasse in the interpretation of what Aristotle means by proposing that actuality and potentiality solve the problem of unity. As noted above, Aristotle claims that “the proximate matter and the form are one and the same thing, the one
potentially, and the other actually,” or again, that “each thing is a unity, and the
potential and the actual are somehow one.” According to Scaltsas, the
potential and the actual are one because the potentiality of the matter becomes
actualized as form in the individual substance. Scaltsas argues as a staunch
proponent of the composite substance as primary substance:

Neither the material substratum nor the abstract form are distinct components
in the substance. They are both abstract origins of the substance: it is by
abstraction that they are individuated, not by physical division.... Matter and
form are different abstract entities, but they are one in the sense that the
fulfillment of the one and the instantiation of the other are one and the same
entity. The concrete substance is a unity, not because its components are
related to one another, but because it has no components in actuality.

Scaltsas’s answer, then, is that we need not look for a unifier because the
concrete substance is already a unit and serves as the basis from which we may
abstract form and matter. On the other side of the debate, Lewis defends the
real distinction between form and matter, and, not surprisingly, he identifies
form as the principle of a thing’s unity and being. According to Lewis, “Aristotle
is not claiming that the matter is the same and one as, much less identical with,
the form... [but] that there is one and the same thing, in fact, one and the same
kind \( k \), such that the matter is potentially \( (a) k \), and the form is actually \( (a) k \)”.
Here, the form and matter are unified in a thing because the form, or actual
kind, operates as a telos for the matter, or potential kind.

While the view that matter and form are simply abstractions results in an
admirably clear understanding of potentiality and actuality, I submit that this
position will not, in the end, provide an answer to the problem of unity. I take it
that Aristotle is looking for the cause of the unity of individual substances.
While an appeal to the basic unity of things is both elegant and intuitively
compelling, it does not seem to answer the question at hand. Aristotle is trying
to explain this unity, in which case, an appeal to the very unity under
investigation does not appear helpful. As I understand him, Aristotle takes the
existence of unified substances as his starting-point, and the task is now to cite
a cause, which is the form. Something is a definite thing rather than a heap
because the form unifies the matter as a substance, or a certain kind of
something. Again, the form is the cause of the unity of definite things.— 168 —

This approach to form seems to indicate why Aristotle emphasizes form as substance and, arguably, primary substance in the *Metaphysics*. Aristotle refers at various times to different kinds of substance, but, in comparing matter, the composite, and the form, he dismisses the first two, concluding that form is most properly substance even while acknowledging that “it is the most perplexing.” Here, form seems to best fulfill the requirements that substance must be “first in every sense—(1) in definition, (2) in order of knowledge, (3) in time.” Form appears to be first in definition because, as we saw in Aristotle’s argument regarding relation, form determines the structure of the components of a thing. The parts are arranged and unified in a particular way because they are the parts of a certain kind of thing. Form is first in the order of knowledge not only because when we identify a thing we know the form rather than the matter but also because, as we have seen, the existence of a substantial whole is a given, which serves as the starting-point for further inquiry. Finally, in terms of temporal priority, Aristotle holds that forms are eternal while composite things are produced and destroyed. Form will be prior to individual things in the sense that the form “cat” is temporally prior to the particular creature that is my pet. The purpose of the *Metaphysics* is to investigate being as being, and, in this framework, form appears to operate as that which is most basic to a substance, which in turn seems to qualify form as primary substance.

In conclusion, I suggest that if we can identify what it is that unifies a substance, we will have made considerable progress in determining what precisely Aristotle means by primary substance. In my examination of the possible sources of the unity of a substance, the field of possibilities narrows to the same two candidates that we find in the debate over primary substance, i.e., the individual and the form. Either there is no need to find a unifier for form and matter because they are distinct only in abstraction, or the substantial form of a thing is responsible for its unity. In this discussion, I have argued that substantial form emerges as the cause of the unity of a substance and of its being what it is. In other words, form is content-laden, and the explanation of why a whole is a unity must involve the being of this whole. Although I do not claim to have resolved whether form or the concrete individual is primary.
substance, I submit that if the unity of a substance is related to the question of what is most basic to a thing, then we have good reason to think that form is indeed primary substance.

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Notes

“But everywhere science deals chiefly with that which is primary (κυριωτερονπρωτον), and on which the other things depend, and in virtue of which they get their names. If, then, this is substance, it will be of substances that the philosopher must grasp the principles and the causes (τασαρχασκαιτασαικον)” (Metaphysics, 1003b17–19). The Basic Works of Aristotle, ed. Richard McKeon and trans. W. D. Ross (New York: Random— 169 — House, 1941). Unless noted as my own translation, all English citations of Aristotle are from this edition. Translators are noted with the first citation of a work. Jonathan Lear traces this debate over primary substance, arguing in favor of species-form rather than individuals as primary substance. Aristotle: The Desire to Understand (New York: Cambridge University Press, 1988) 273–292. Categories, 2a11–13. Cf. 3b10–17. (Trans. E. M. Edghill.) Ibid., 2b16. Metaphysics, 1032b1. Cf. 1033b15. Ibid., 1036b1–7. Aristotle argues that, although we can more easily abstract a form that we have encountered in different materials (e.g., “sphere” from “bronze sphere” or “wooden sphere”), we should not assume that forms always found in certain kinds of matter must include this matter as part of the essence. Also, note that Aristotle espouses the existence of both separate substance (form without matter) and insensible substance, meaning that some forms are not enmattered and some enmattered forms will not be encountered. (“[I]f we do not know what non-sensible substances there are, yet it is doubtless necessary that there should be some” Metaphysics, 1041a3–4.) The problem of unity can be understood as synchronic or diachronic: the unity of a substance at any one time or over a period of time. Although I agree that Aristotle must account for both, I will focus on the unity of substance at a given time. Presumably, we would need to find an adequate explanation for synchronic unity before we could hope to explain diachronic unity. Cf. David Charles, “Matter and Form: Unity, Persistence, and Identity,” in Unity, Identity, and Explanation in Aristotle’s Metaphysics, eds. T. Scaltsas, D. Charles, and M. L. Gill (Oxford: Clarendon Press, 1994), 75–105. I realize that “form” may be ambiguous, especially given that the debate over primary substance involves scholars who argue for species form. While I see good reason to understand substantial form as species form, the question of the unity of a substance seems to revolve around form, regardless of how one wishes to conceive it. For a species form proponent, see Lear, esp. 274–276. If I understand the problem
correctly, “matter” could be sensible or insensible, e.g., bronze is the sensible matter of a bronze sphere while segments are the insensible matter of a circle. Therefore, the difficulty is not confined to physical objects. Also, the connection of form and matter is not the sole problem of unity in Aristotle’s treatment of substance. Theodore Scaltsas considers an additional four variations of the question of unity in “Sub-stratum, Subject, and Substance,” in Aristotle’s Ontology, eds. John P. Anton and Anthony Preus (Albany: SUNY Press, 1992), 193. Scaltsas refers to this position as “the aggregate-argument” (193–196), and I am indebted to his presentation. Also, “sensible substances” need not be composed of physical matter, e.g., syllables and circles qualify. (See note 9.)

Metaphysics, 1045a8–10. The Greek term translated as “heap” is σωρός. The term seems generally to refer to a heap of a single sort of thing, rather than a random collection, which makes Aristotle’s claim more pointed. A heap of leaves or a woodpile is not without continuity and even a kind of organization, but these features do not qualify the collection of parts as a substance. 

Further, the unifier must be simple. If the something were a compound of elements, this entity would be a whole whose unity would be like that of the syllable or flesh, and the original question would still remain: what is this something besides the elements of a whole that accounts for its unity? It would seem that this ‘other’ is something, and not an element, and that it is the cause which makes this thing flesh and that a syllable. And similarly in all other cases. And this is the substance of each thing (for this is the primary cause of its being); and since, while some things are not substances as many as are substances are formed in accordance with a nature of their own and by a process of nature, their substance would seem to be this kind of ‘nature,’ which is not an element but a principle (Metaphysics, 1041b25–31). 

that I am conflating the material parts of a thing with its matter, such that I am illegitimately applying a conclusion about parts on the level of proximate matter (e.g., bricks and stone, or flesh and bone) with the more technical concept of matter as indefinite or, in the extreme case, prime matter. Scaltsas seems to favor this kind of division in his claim that “the unity of elements which can exist separately when dispersed” is fundamentally different than “the unity of elements which cannot exist separately, that is form and matter” (197). However, I do not see this line of argument as problematic for the current claim. Regardless of whether one accepts the argument that the unities of elements and of form and matter are fundamentally different (and I think there is good reason to be dubious), my claim is simply that if something material cannot account for the unity of elements then it does not seem reasonable to think that something material can unite form and matter. As Scaltsas points out, the argument against an element as a connecting relation can implicitly be employed against the possibility of an external formal unifier in the tradition of Platonic forms (194–195). In both cases, the problem is that the parts to be unified and the unifier cannot be of the same ontological kind. (See note 16.)— 171 — "Metaphysics, 1045a14–19. 18Ibid., 1045b7–16. 19Ibid., 1045b16–25.

20"Whereas other philosophers adduce various relations to analyze these cases, in [Aristotle’s] view they can all be analyzed under the same model, that is, in terms of the potential–actual model" (Scaltsas, 197). 21Lewis, “Aristotle on the Unity of Substance,” 233. 22Put differently, part of the problem with the predecessors’ views of relation is that they are singularly unhelpful in explaining the unity of a substance. Much like Platonic Forms, these relations all seem to be on the same ontological footing, such that the relation that is substantial form is no different than the relations that are the state or quality of a thing. 23"Juxtaposition" is συνθεσίς ("a putting together, compounding, composition; συνθεσίςγραμμάτων a combination of letters"), the same contentless relation that Lewis criticizes. 24Metaphysics, 1044a15–22 and 1044b1–2. 25"Whether the substances of destructible things can exist apart, is not yet at all clear; except that obviously this is impossible in some cases—in the case of things which cannot exist apart from the individual instances, e.g. house or utensil. Perhaps, indeed, neither these things themselves, nor any of the other things which are not formed by nature, are substances at all; for one might say that the nature in natural objects is the only substance to be found in destructible things" (Ibid., 1043b19–23). 26Ibid., 1032a32–1033a4. Cf. Ibid., 1049a5–12. 27Aristotle does list parts of natural things as something recognized as substances (Metaphysics, 1017b10–23). However, he is clear that parts—and more basic material as well—could only be regarded as substances because of their relation to wholes: “Evidently even of the things that are thought to be substances, most are only potencies—both the parts of animals (for none of them exists separately; and
when they are separated, then too they exist, all of them merely as matter) and earth and fire and air; for none of them is a unity, but as it were a mere heap, till they are worked up and some unity is made out of them” (*Metaphysics*, 1040b5–10). *a* *Metaphysics*, 1045b17–18 and 20–21. *b* Scaltsas, 199. *c* Ibid., 200. *d*“For Aristotle, I take it, the parts in question are real parts, and what makes for unity too really is something about the thing itself—some real metaphysical constituent of the thing.... [T]he parts of a thing are its real parts and not merely our creations” (“Aristotle on the Unity of Substance,” 222).— 172 — *e* Ibid., 239. *f*“Since we must have the existence of the thing as something given, clearly the question is why the matter is some definite thing; e.g. why are these materials a house? Because that which was the essence of a house is present. And why is this individual thing, or this body having this form, a man? Therefore what we seek is the cause, i.e. the form, by reason of which the matter is some definite thing; and this is the substance of the thing” (*Metaphysics*, 1041b3–9). *g* Ibid., 1017b10–23, 1035a1–4. *h* Ibid., 1029a34. *i* Ibid., 1028a32–34. *j*“[M]atter is unknowable in itself” (Ibid., 1036a9). *k*The form seems to be the starting-point of knowledge, as something known vaguely, and the end point of knowledge as well, here understood as a cause. *l*Form will be a more likely candidate for primary substance if it is temporally prior to composite substances, which does not appear to be controversial given that form will be temporally prior to and separable from any individual thing. In terms of the current discussion, I need not tackle the problem of whether we are faced with the prospect of unmattered forms at the “beginning” of Aristotle’s eternal world. *m*Cf. Lear, 269–270.