



Form, Matter, Substance

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Print publication date: 2018

Print ISBN-13: 9780198823803

Published to Oxford Scholarship Online: September 2018

DOI: 10.1093/oso/9780198823803.001.0001

Independence Criteria of Substancehood

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DOI:10.1093/oso/9780198823803.003.0007

Abstract and Keywords

This chapter examines some initially attractive attempts by E. J. Lowe and Michael Gorman at formulating an independence criterion of substancehood in terms of a particular essentialist construal of ontological dependence. It is argued that the stipulative exclusion of non-particulars and proper parts (or constituents) from these accounts raises difficult issues for their proponents. These results indicate that, in order for a criterion of substancehood to yield the desired results when applied to hylomorphic compounds, a unity criterion for composite substances is more suitable to the task at hand than an independence criterion, despite a general preference among Aristotelians for the latter.

Keywords: substance, composite substances, simple substances, ontological independence, ontological disagreements, constituents, parts, intrinsicness, essence, unity

6.1 Introductory Remarks

In Chapter 5, we evaluated a plethora of relations that are offered in the literature under the heading of “ontological dependence.” When measured against the four criteria of explanatory success laid out in Section 5.1, essentialist construals of ontological dependence overall turned out to outperform their existential counterparts. Nevertheless, several potentially problematic issues remained to be addressed by proponents of essentialist accounts as well. Prominent among these is the question of whether and how essentialist construals of ontological dependence, in compliance with the second explanatory goal (Criterion of Substancehood), are compatible with the idea that

at least certain kinds of concrete particular objects (e.g., living organisms) deserve to be included in the category of substances.

We noted that this challenge is especially significant for Aristotelians who are committed to the following three tenets: (i) a hylomorphic analysis of concrete particular objects; (ii) an independence criterion of substancehood; and (iii) the assignment of substance status to at least some hylomorphic compounds. For when we attempt to combine these three commitments, an apparent conflict emerges. Suppose, for example, as is common among Aristotelians, that living organisms are designated as substances. Following the first tenet, these entities are analyzed along hylomorphic lines as compounds of matter (*hylē*) and form (*morphē*). In that case, however, one wonders whether they will not turn out to be ontologically dependent on entities numerically distinct from themselves, viz., their form and possibly their matter as well. If, in accordance with the second tenet, the notion of substancehood is construed in terms of some preferred notion of ontological independence, such a criterion would then seemingly exclude all hylomorphic compounds from the category of substances and thereby lead to a conflict with the third tenet, viz., the assignment of substance status to at least some hylomorphic compounds. In this chapter, I will examine the apparent tension between these three commitments and will propose what I take to be the most promising strategy for Aristotelians who wish to resolve the apparent conflict in question in a way that is maximally consistent with their other commitments.

(p.164) 6.2 Substancehood

According to the third tenet popular among Aristotelians, at least some hylomorphic compounds are to be included among the substances. If an ontology makes room for the designation of certain types of entities as substances, then it must at least implicitly invoke some criterion or notion of substancehood in accordance with which entities are awarded this title. But how is substance status to be conferred on an entity and which entities, if any, qualify for it? Moreover, what hangs on the question of whether some type of entity is, or is not, to be included among the substances? These are among the most hotly debated questions in metaphysics at least since the time of Aristotle.¹

Taxonomic vs. Non-Taxonomic Substancehood. Among the most important uses to which the concept of substance is put in philosophical contexts are what I will call a “taxonomic” and a “non-taxonomic” use. First, in its taxonomic role, philosophers employ this notion to single out certain *kinds* of entities (e.g., certain kinds of macroscopic concrete particular objects), without thereby simultaneously committing themselves to the idea that these entities must be assigned a position of “ontological privilege” within their respective ontologies. When the concept of substance is utilized in this first taxonomic way, the substances appear merely as one among many entries in a catalogue of beings. The resulting inventory might, for example, constitute an answer to the

existential question, “What is there?,” which Quine saw as central to the discipline of ontology (see Quine (1948)). In other contexts, however, philosophers employ the concept of substance in a second non-taxonomic role, in order to indicate that certain kinds of entities (taxonomically speaking) deserve to be assigned a special place relative to the ontology in question. Much confusion has resulted over the years from a failure to distinguish between these two very different, but equally important, roles played by the concept of substance in philosophical contexts.

To illustrate, consider Aristotle’s well-known list of ten categories in which “substance” appears as his first entry:

Of things said without any combination, each signifies either substance or quantity or qualification or a relative or where or when or being-in-a-position or having or doing or being-affected.

(*Categories*, Ch. 4, 1b25-27)

Here, Aristotle draws our attention to a ten-fold division among different *kinds* of being (taxonomically speaking). In order to set up a hierarchical ordering among these **(p.165)** entities, Aristotle appeals to his two relations, *being in a subject* and *being said of a subject*, as follows:

A *substance*—that which is called a substance most strictly, primarily, and most of all—is that which is neither said of a subject nor in a subject, e.g. the individual [human being] or the individual horse. The species in which the things primarily called substances are, are called *secondary substances*, as also are the genera of these species. For example, the individual [human being] belongs in a species [human being], and animal is a genus of the species; so these—both [human being] and animal—are called secondary substances.

(*Categories*, Ch. 5, 2a11-19; Ackrill’s emphasis)²

Given the ultimate subject criterion of substancehood Aristotle endorses in the *Categories*, certain kinds of entities (taxonomically speaking), e.g., individual living organisms, turn out to be “most strictly, primarily, and most of all” deserving of the title, “substance,” in Aristotle’s *Categories* ontology, while others rank below them: the so-called “*secondary substances*” (viz., the species and genera to which the entities classified there as primary substances belong); as well as the *non-substances* (viz., the individuals, species, and genera belonging to the other nine taxonomic categories listed earlier).

The concept of substance, then, can be, and has been, used by philosophers, among other things, in the service of at least two distinct tasks: firstly, to classify entities taxonomically; and, secondly, to impose a non-taxonomic ordering of

some kind onto the entities included in a given ontology. The second project moreover requires us to engage with the further question of *why* certain items are to be assigned a privileged position within a particular ontology. For this reason, philosophical disputes concerning substancehood often center on the very *criteria* themselves by means of which substance status is awarded to certain taxonomic categories within a given ontology.

Absolute, Comparative, and Relational Substancehood. The concept of substance in its philosophical applications can take on further explanatory roles depending on whether it is used in an *absolute*, a *relational*, or a *comparative* way:

Absolute Substancehood: x is a substance *simpliciter*.

Relational Substancehood: x is *the substance of* (or *a substance of*) y.

Comparative Substancehood: x is *more deserving of substance status than* y.

In its first absolute role, the concept of substance is used to designate entities as substances *simpliciter*. In its second relational role, the concept of substance picks out a relation between pairs of entities, x and y, when x is *the substance of*, or *a substance of*, y. When used in the third comparative way, the concept of substance ranks entities by the degree to which they are *deserving of substance status*.

All three of these explanatory roles are evident in Aristotle, but they are unfortunately not always clearly distinguished by Aristotle himself or his interpreters. For example, **(p.166)** in *Categories*, Ch. 5, 2a11–19 (cited earlier), Aristotle classifies individual living organisms, as well as their species and genera, as substances *simpliciter*, using an absolute notion of substancehood. In the very same passage, however, we find Aristotle identifying certain items as *primary* substances (e.g., individual living organisms) and others as *secondary* substances (e.g., the species and genera to which these individual living organisms belong). In this usage, Aristotle ranks entities in a *comparative* way, by the *degree* to which they satisfy the ultimate subject criterion at work in the *Categories*.³

The relational use of the concept of substance is operative in the passage cited earlier from Plato's *Euthyphro* (see Part II: Introduction); it is also employed, for example, by Aristotle in the opening lines of *Met.* Z.6:

We must inquire whether each thing and its essence are the same or different. This is of some use for the inquiry concerning substance; for each thing is thought to be not different from *its* substance [*tēs heautou ousia*], and the essence is said to be *the substance of* each thing [*hē hekastou ousia*].

(*Met. Z.6, 1031a15–18; my emphasis*)

In this passage, Aristotle speaks of the essence of each thing, relationally, as *the substance of that thing*.

If we think of the concept of substance, when employed in its non-taxonomic uses, as a marker of a certain kind of *fundamentality*, then *comparative* substancehood gives rise to a *relative*, rather than an *absolute*, fundamentality ranking of entities. Fundamentality, when construed in this relative way, is a notion that comes in *degrees*: it allows one to assess an entity, or type of entity, as *more or less fundamental (or derivative) than* some other entity, or type of entity. When we encounter alleged examples in which one type of phenomenon is purported to be more or less fundamental (or derivative) than another, we should not immediately assume that we are dealing with a case in which the more fundamental phenomenon in question can also be correctly described as absolutely fundamental. In the case of Plato's *Euthyphro* dilemma, many philosophers, including Plato, would not be particularly tempted to say that something's being pious is an absolutely fundamental matter, even if they agree that something's being pious is more fundamental than its being loved by the gods.⁴ Thus, we should take care to separate questions which concern relative fundamentality from those which concern absolute fundamentality.

Leaving Taxonomic Uses Behind. Armed with these distinctions, we can now return to the questions I posed earlier: are at least some matter-form compounds deserving of substance status? And, if so, according to what criterion or notion of substancehood? Assuming, as I do, that we are operating in a philosophical context in which the *existence* of concrete particular objects is not in dispute, I take it that the designation of concrete **(p.167)** particular objects as substances, in the purely taxonomic sense of the term, is primarily a matter of terminological convenience. To illustrate, a trope theorist (e.g., Campbell (1990) or Simons (1994)), who construes concrete particular objects as complex trope bundles, might nevertheless refer to these entities as "substances" and yet at the same time designate them as ontologically derivative. For, from the perspective of the trope-theoretic bundle theorist, concrete particular objects are further analyzable in terms of other entities (viz., tropes) which are designated, relative to the ontology in question, as either absolutely fundamental or as relatively fundamental, i.e., as more fundamental than concrete particular objects. In this way, then, the purely taxonomic designation of an entity as a substance can come apart from its occupation of an ontologically privileged position relative to a particular ontology.

For the sake of clarity and simplicity, I will in what follows refrain, as much as possible, from using the term "substance," taxonomically, i.e., as a mere classificatory shorthand for "concrete particular object" (unless I am paraphrasing another philosopher's taxonomic use of the term). Instead, I will

focus subsequently on non-taxonomic uses of the term, “substance,” and the proposed criteria of substancehood which are intended to go along with them. Our initial question concerning the possible assignment of substance status to at least some hylomorphic compounds can therefore be understood as asking whether at least some of these entities deserve to be assigned a privileged ontological position and, if so, according to what conception of “ontological privilege,” i.e. (absolute or relative) fundamentality.⁵

6.3 Independence Criteria of Substancehood

There is a long tradition dating all the way back to Aristotle’s *Categories* of employing some notion of ontological independence in the formulation of a criterion of substancehood.⁶ At least as a first pass, we would expect an independence criterion of substancehood to include at a minimum the following necessary condition:

(NICS) *Necessary Independence Condition for Substancehood:*

x is a substance only if x is ontologically independent.

(p.168) For the time being, we may understand an entity’s status as ontologically independent to consist in that entity’s failure to depend ontologically on any other entity numerically distinct from itself (in accordance with some, as of yet, unspecified preferred notion(s) of ontological dependence):

(IND) *Ontological Independence:*

x is ontologically independent \equiv_{def} There is no y numerically distinct from x such that x is ontologically dependent on y.⁷

(NICS) states only a *necessary* condition for an entity’s inclusion in the category of substances: at the very least, according to (NICS) and (IND), such an entity may not ontologically depend on any other entity numerically distinct from itself (according to some preferred construal of ontological dependence). To arrive at a criterion which yields both *necessary* and *sufficient* conditions for an entity’s inclusion in the category of substances, proponents of an independence criterion of substancehood may consider supplementing the necessary condition given so far in various ways. Below, in our discussion of proposals endorsed by E. J. Lowe and Michael Gorman, respectively, we will encounter several options for how independence theorists may wish to proceed in this connection. Moreover, a further decision must be made by proponents of an independence criterion as to whether they opt for a formulation in terms of *particular* entities or *types* of entities. I chose the former option here, because it is more in line with the formulations adopted by Lowe and Gorman and hence allows for greater continuity with our evaluation of their proposals below.⁸

According to (IND) and (NICS), substance status is awarded to an entity only if it does not ontologically depend on any other entity numerically distinct from itself (according to some preferred notion(s) of ontological dependence). As our discussion of Lowe and Gorman will illustrate, such independence criteria of substancehood are **(p.169)** typically interpreted by contemporary Aristotelians as giving rise to an *absolute*, rather than a *relational* or *comparative*, classification of entities.⁹ When read in this light, the notion of ontological dependence in terms of which the right-hand side of (IND) is interpreted has to be suitable to yield a “yes” or “no” answer to the question of whether an entity is or is not ontologically independent: either there is a *y* numerically distinct from *x* on which *x* ontologically depends; or there is no such *y*. Thus, when construed in this way, we can restate (NICS) as follows:

(NICSS) *Necessary Independence Condition for Substancehood*

Simpliciter:

x is a substance *simpliciter* only if *x* is ontologically independent.

As noted in Chapter 5, a plethora of relations have been defined in the literature under the heading of “ontological dependence.” Some of the most popular definitions are formulated in modal terms; others in non-modal, e.g., explanatory or essentialist, terms; some (viz., the existential construals of ontological dependence) emphasize requirements which must be met in order for an entity to exist; others (viz., the non-existential essentialist construals of ontological dependence) focus on requirements which must be met in order for an entity to be the very entity that it is at each time at which it exists; some are rigid, in the sense that they involve a relation between particular entities; others are generic, in the sense that they involve only a relation between an entity and some entities or other, which bear certain characteristics. I restate several of these definitions of ontological dependence here in order to facilitate our evaluation (or, in some cases, the reevaluation) of their usefulness for the purposes of formulating an independence criterion of substancehood:

(ND1) *Rigid Existential Necessary Dependence:*

x is rigidly existentially necessarily dependent on *y* \equiv_{def} Necessarily *x* exists only if *y* exists.

(ND2) *Generic Existential Necessary Dependence:*

x is generically existentially necessarily dependent on *Fs* \equiv_{def} Necessarily, *x* exists only if some *Fs* exist.

(ED3) *Essential Identity Dependence:*

x is essentially identity dependent on *y* \equiv_{def} There is some function φ such that it is part of the essence of *x* that *x* = φ (*y*).

(ED4) *Constitutive Essential Dependence:*

x is constitutively essentially dependent on $y \equiv_{\text{def}} y$ is a constituent of x 's essence (narrowly construed).

(p.170) (ED5) *Constitutive Definitional Dependence:*

x is constitutively definitionally dependent on $y \equiv_{\text{def}} y$ is a constituent of a real definition of x .

When we substitute any of these notions of ontological dependence into (IND) and (NICSS), it turns out that, given certain assumptions, *no matter-form compound counts as a substance simpliciter*. This result is surely startling, especially in light of the three tenets cited earlier which are widely accepted among Aristotelians: for, according to (iii), at least some matter-form compounds are to be included in the category of substances; and, assuming that the notion of substancehood at play here is that of substancehood *simpliciter*, the negative result just stated contradicts (iii). As we will observe below, the denial of (iii) follows from a more general result which can be established when (NICSS) and (IND) are interpreted in terms of any of the construals of ontological dependence just listed. According to the more general result in question, of which the denial of (iii) is a special case given certain assumptions, *any entity which is composite and has essential constituents fails to be ontologically independent, and is therefore disqualified from counting as a substance simpliciter*, assuming that ontological independence is read in terms of the definitions stated here.

Suppose that A is a composite entity and B is an essential constituent of A . In that case, necessarily A exists only if B exists; therefore, by (ND1), A is *rigidly existentially necessarily dependent* on B . Suppose further that B is an F ; then, generalizing the result just stated, necessarily A exists only if some F exists. Hence, by (ND2), A is also *generically existentially necessarily dependent* on F s. Next, given our hypothesis, we may assume further that there is some function, φ , such that it is part of the essence of A that it is the result of applying φ to B ;¹⁰ in that case, by (ED3), A is *essentially identity dependent* on B . Finally, given our hypothesis and given the conception of essence used in formulating (ED4), B is a constituent of A 's essence (narrowly construed), i.e., B is a constituent of the proposition or collection of propositions that is A 's essence. Therefore, by (ED4), A is *essentially constitutively dependent* on B . By the same reasoning, A is also *constitutively definitionally dependent* on B , in accordance with (ED5), the definitional variant of (ED4).

Thus, if (IND) is read with any of these definitions of ontological dependence in mind, it turns out, given our additional assumptions that, for any A , such that A **(p.171)** is a composite entity which has essential constituents, A fails to be ontologically independent; hence, by (NICSS), A is not a substance *simpliciter*. As a special case, assuming (as I do) that matter-form compounds are composite

entities which have at least their forms as essential constituents, then no matter-form compound satisfies the necessary condition for substancehood *simpliciter* stated in (NICSS). Hence, no matter-form compound is a substance *simpliciter*, given the definitions and assumptions currently operative.

6.4 Alternative Strategies

It is possible to avoid the negative result just derived by denying some combination of the assumptions to which I appealed in generating it. In particular, Aristotelians who wish to uphold their commitment to the inclusion of at least some hylomorphic compounds among the substances *simpliciter* may wish to take issue with one or more of the following claims: (a) that matter-form compounds and their forms are numerically distinct;¹¹ (b) that forms are essential constituents of matter-form compounds;¹² or (c) that an entity's ontological dependence on its own essential constituents disqualifies it from counting as a substance *simpliciter*.¹³ In what follows, we will engage with various proposed independence criteria which rely on rejecting one or more of these claims. In my view, none of these attempts to uphold (iii) are satisfactory in the end. In light of these considerations, as I will argue in the remainder of this chapter, we should concede that matter-form compounds, due to their composite nature, fail to be ontologically independent in any of the senses defined earlier and therefore do not qualify for the status of substances *simpliciter*, when this notion is approached through the lens of ontological independence.

Nevertheless, I will propose that matter-form compounds should count as ontologically privileged in other ways, despite their composite nature, since they exhibit a relatively high degree of *unity* compared to that exhibited by other composite entities (e.g., heaps). The resulting notion of substancehood, however, gives rise to a *comparative*, rather than an *absolute*, fundamentality ranking among composite entities.

(p.172) 6.4.1 Lowe's Account

E. J. Lowe has proposed the following criterion of substancehood *simpliciter*:¹⁴

(ICS1) *Independence Criterion for Substancehood Simpliciter*

(Lowe):

x is a substance *simpliciter* \equiv_{def} (i) x is a particular; and
(ii) there is no particular y such that (a) y is not identical with x and (b) x is essentially identity dependent on y.¹⁵

Clause (ii.b) of (ICS1) makes use of Lowe's notion of essential identity dependence, (ED3), which was discussed in more detail in Section 5.3.1. (ED3) classifies an entity, x, as essentially identity dependent (or, for short, "(ED3)-dependent") on an entity, y, when x's synchronic identity at each time at which x exists is fixed by a certain (functional) relationship x essentially bears to y at that time. In contrast, an entity, x, counts as essentially identity *independent* of other entities, according to (ED3) (or, for short, "(ED3)-independent") when x's

synchronic identity at each time at which *x* exists is *not* fixed by a (functional) relationship *x* bears essentially to any other entities numerically distinct from itself. Thus, no synchronic criterion of identity or principle of individuation which appeals to numerically distinct entities will be available at all for (ED3)-independent entities; rather, that they are the very entities they are at each time at which they exist is simply taken as a basic, non-derivative fact about these entities. Thus, if a concrete particular object, such as Socrates, is to qualify as an (ED3)-independent entity, and hence, by (ICS1), as a substance *simpliciter*, then it must be the case that Socrates does not owe his individuation or synchronic identity, i.e., his being the very entity that he is at each time at which he exists, to a relation he bears essentially to any other entity numerically distinct from himself.

One might think, as noted in Section 5.3.1, that Lowe's conception of the ontological independence of the substances *simpliciter* is incompatible with the essentiality of origins. For if it were part of Socrates' essence, for example, to have originated from a particular zygote, then it might appear to be possible to formulate a criterion of individuation or synchronic identity after all for an allegedly (ED3)-independent entity such as Socrates, viz., one which appeals to Socrates' origins. But whether the essentiality of origins in fact yields a criterion of individuation or synchronic identity which tracks concrete particular objects across possible worlds in which they exist is **(p.173)** itself doubtful (see Section 3.4.3); moreover, Lowe is in any case happy to give up on the essentiality of origins, since he regards this thesis as implausible.

As the general negative result derived in Section 6.3 brings out, however, a more troubling conflict apparently emerges between Lowe's conception of the ontological independence of the substances *simpliciter* and a certain natural interpretation of the hylomorphic analysis of concrete particular objects as compounds of matter and form. For if it were part of the essence of an allegedly (ED3)-independent concrete particular object, such as Socrates, to be a compound of some matter and some form, then it might appear again that Socrates' synchronic identity, at each time at which he exists, could be fixed at least by appeal to his form, even if his matter is permitted to vary from one time to another. In this case, Lowe adopts a different escape route: he argues, in Lowe (1999)), that matter-form "compounds" should be *identified* with their particularized forms and therefore are not, strictly speaking, *compounds* of matter and form at all. We will return to this strategy in Section 6.4.5.1.

6.4.2 Gorman's Modifications of Lowe's Account

Michael Gorman has argued that Lowe's independence criterion for substances should be modified in the following way:¹⁶

(ICS2) *Independence Criterion for Substances Simpliciter*

(Gorman):

x is a substance *simpliciter* \equiv_{def} (i) *x* is a particular; (ii) there is no particular *y* such that (a) *y* is not identical with *x*, (b) *x* is essentially identity dependent on *y*, and (c) *y* is not one of *x*'s proper parts; and (iii) *x* is unified in the right way.

(ICS2) is just like (ICS1) with the exception that Gorman adds two clauses to Lowe's criterion, viz., (ii.c) and (iii). The first of these, (ii.c), allows an entity to qualify as a substance *simpliciter* even if it is essentially identity dependent on entities numerically distinct from itself, as long as these entities are among its own proper parts. The second added clause, (iii), requires substances *simpliciter* to be unified "in the right way."

These additional clauses are intended to exclude the following types of cases which Gorman considers to be counterexamples to Lowe's independence criterion, as stated in (ICS1). Firstly, to motivate the unity-clause in (iii), Gorman asks us to consider the Berlin Philharmonic Orchestra. Assuming that orchestras are particulars, it might seem that (ICS1), as it stands, classifies such entities as substances *simpliciter*, which Gorman takes to be an unwelcome result. Since its inception in 1882, the Berlin Philharmonic Orchestra, for example, has managed to survive all sorts of changes, e.g., with respect to its conductor or the musicians who are its members at each time at which the orchestra exists. In this way, orchestras are more similar to such entities as organisms, which are allegedly to be classified as substances *simpliciter* and which can **(p.174)** also persist through changes with respect to their parts, than they are to such entities as sets and mereological sums, which are allegedly not to be included among the substances *simpliciter* and which are not capable of surviving changes with respect to their members or parts. Since the synchronic identity of the Berlin Philharmonic Orchestra at each time at which it exists is apparently not fixed by its essential relations to any other particulars numerically distinct from itself, such as its conductor or the musicians who are members of it, (ICS1) therefore seems to have the consequence that the Berlin Philharmonic Orchestra is classified as a substance *simpliciter*. To avoid this result, Gorman introduces the unity requirement in (iii), since he believes that what accounts for the difference between such entities as organism, which are properly classified as substances *simpliciter*, and such entities as orchestras, sets, and mereological sums, which ought not to be classified as substances *simpliciter*, is that entities which belong to the former categories are unified in a way in which entities which belong to the latter categories are not. Since he does not spell out further

in what way the substances *simpliciter* are unified compared to their complement class, however, the exact content of the unity-requirement in (iii) at this point still remains to be determined.

Secondly, Gorman's exclusion of proper parts in (ii.c) rests on the idea that even entities which he regards as plausible candidates for inclusion among the substances *simpliciter* can have essential proper parts.¹⁷ To illustrate, Gorman takes it to be part of the essence of H₂O molecules (which, in his view, are likely contenders for the status of substances *simpliciter*) to be composed of the very hydrogen and oxygen atoms of which they are in fact composed. In that case, it appears that H₂O molecules would be classified by (ED3) as essentially identity dependent on particulars numerically distinct from themselves, since there would be some function, φ , e.g., the "molecule composition" function, such that it is part of the essence of an H₂O molecule that it is the result of applying φ to the oxygen and hydrogen atoms that are its essential proper parts.¹⁸ The molecule's synchronic identity at each time at which it exists, in that case, would be fixed by appeal to these atoms which are its essential proper parts, much like a set's identity is fixed by appeal to its members. Unless the essential identity dependence (**p.175**) of an entity on its own proper parts is explicitly excluded as irrelevant to its status as a substance *simpliciter*, as is done by clause (ii.c) of (ICS2), an H₂O molecule would therefore be stripped of its alleged title as a substance *simpliciter* by (ICS1). Such entities as mereological sums, which are apparently also essentially identity dependent only on their own proper parts, in Gorman's view, are to be ruled out as potential substances *simpliciter* by way of the unity requirement in (iii).

6.4.3 The Stipulative Exclusion of Non-Particulars

Both Lowe's original criterion in (ICS1) and Gorman's modified criterion in (ICS2) contain clauses which explicitly exclude non-particulars from the range of entities which might qualify as substances *simpliciter*. But the stipulative exclusion of non-particulars from an independence criterion of substancehood *simpliciter* is problematic, because it renders apparently substantive ontological disputes over questions of fundamentality non-substantive.¹⁹

Consider, for example, two philosophers who agree that both universals and particulars exist, but disagree over which taxonomic category of entities deserves to be granted the status of substances *simpliciter*: one philosopher, let's say, regards universals as occupying the ontologically fundamental role of substances *simpliciter*, while the other takes the substances *simpliciter* to be particulars. Given (ICS1) and (ICS2), the first philosopher's thesis: "The substances *simpliciter* are universals," is classified as contradictory (assuming that nothing is both particular and universal), since the criteria require that by definition something is a substance *simpliciter* only if it is a particular. The second philosopher's thesis: "The substances *simpliciter* are particulars," in contrast, is classified by (ICS1) and (ICS2) as trivial, since it simply follows from

clause (i) of the definition that the substances *simpliciter* are particulars. If we now attempt to remedy this situation by interpreting the two philosophers engaged in this dispute as subscribing to distinct criteria of substancehood *simpliciter*, then we reach the equally unfortunate result that these two philosophers, instead of being engaged in what appears to be a substantive disagreement over questions of ontological fundamentality, are now simply talking past each other, with each of them subscribing to a different criterion of substancehood *simpliciter*.

Given these considerations, I take it that clause (i) should be regarded as an unattractive addition to an independence criterion of substancehood *simpliciter*: it should turn out to be a philosophically interesting and meaningful question which taxonomic category or categories of entities (if any) satisfy a given criterion of substancehood *simpliciter* and whether these entities are particulars or universals. We thereby **(p.176)** arrive at the following first revision of Gorman's independence criterion in (ICS2), with the restriction to particulars deleted:

(ICS3) *Independence Criterion for Substances Simpliciter* (First Revision):

x is a substance *simpliciter* \equiv_{def} (i) there is no y such that
(a) y is not identical with x, (b) x is essentially identity
dependent on y, and (c) y is not one of x's proper parts;
and (ii) x is unified in the right way.²⁰

6.4.4 The Stipulative Exclusion of Proper Parts

As we have seen, one of the two ways in which Gorman's modified criterion in (ICS2) differs from Lowe's original criterion in (ICS1) is in its addition of clause (ii.c), which eliminates part-dependence as a possible threat to an entity's status as a substance *simpliciter*. I now want to consider the question of whether such a stipulative exclusion clause governing proper parts should be regarded as an admissible element in an independence criterion of substancehood *simpliciter*.²¹ In principle, considerations analogous to those I adduced in connection with the stipulative exclusion of non-particulars appear to be relevant in this context as well: for it ought not simply to be settled by fiat whether entities which are ontologically dependent only on their own proper parts can be classified as occupying the ontologically fundamental role of substances *simpliciter*. But instead of pursuing this line of argument, I will bring other issues to bear on the question of whether a clause excluding part-dependence should be considered an admissible component of an independence criterion of substancehood *simpliciter*.

(p.177) 6.4.4.1 The Possibility of Simple Substances *Simpliciter*

In a recent discussion of this issue, Patrick Toner has objected to the stipulative exclusion of proper parts from an independence criterion of substancehood *simpliciter* on the following grounds (Toner (2010)). In Toner's view, we should at least in principle allow for the possibility of substances *simpliciter* which are simple, i.e., entities which have no proper parts at all and which therefore, a fortiori, cannot ontologically depend on their essential proper parts. Possible examples of such simple substances *simpliciter* might include God, if God exists; minds, souls, or persons, according to certain conceptions of these entities; or physical simples, i.e., incomposite concrete particular objects which may be included in the inventory of fundamental physics. Toner asks:

Why accept that simple substances, which are self-sufficient in one way (a way that doesn't except dependence on their parts) are the same kind of things as "substances" that are self-sufficient in a very different kind of way (a way that does except dependence on their parts)?

(Toner (2010), p. 40)

If there are any simple entities which are not ontologically dependent on anything numerically distinct from themselves, then (ICS2), in Toner's mind, turns the category of substances *simpliciter* into a heterogeneous collection. For one thing, this category would then comprise these simple entities which are completely ontologically independent from everything else. These entities are admitted into the category of substances *simpliciter* by (ICS1)-(ICS3) without requiring any special exemption. But, in addition to these simple entities, the category of substances *simpliciter*, according to (ICS2) and (ICS3), would also include composite entities which may be ontologically dependent on their own essential proper parts, as long as these entities are not ontologically dependent on anything numerically distinct from them besides their own essential proper parts. These composite entities are admitted into the category of substances *simpliciter* by (ICS2) and (ICS3) only by way of the special exception clause governing proper parts. But why believe, Toner asks, that we have thereby arrived at a unified category? This stipulative exclusion strategy, so Toner argues, is analogous to allowing into the class of all flying things not only things that have the ability to propel themselves through the air by their own power, but also things that can be carried along by something else. This way of allegedly delineating the class of flying things does not yield a unified category; nor, in Toner's view, do we arrive at a unified category by allowing entities which ontologically depend on their essential proper parts to count as substances *simpliciter*, along with entities which have no proper parts and hence cannot ontologically depend on their essential proper parts.

6.4.4.2 The Threat of Heterogeneity

As Toner's observations bring out, as far as the simple substances *simpliciter* are concerned (if there are such entities), Lowe's original criterion in (ICS1), stated here with **(p.178)** the restriction to particulars deleted and a restriction to simple entities added, would do just as well as the modified criteria in (ICS2) or (ICS3):

(ICSS) *Independence Criterion for Simple Substances Simpliciter*:
x is a simple substance *simpliciter* \equiv_{def} (i) x is simple and
(ii) there is no y such that (a) y is not identical with x and
(b) x is essentially identity dependent on y.

According to (ICSS), the simple substances *simpliciter* are those entities which are simple and completely ontologically independent from everything else numerically distinct from them. Since these entities are simple, the question of whether they are appropriately unified presumably does not arise for them; nor is there any danger that such entities might depend ontologically on their essential proper parts, given their simplicity. There is therefore no need for the addition of Gorman's unity requirement in an independence criterion for simple substances *simpliciter*, just as there is no need for a clause exempting part-dependence.²²

The question now arises as to whether there are any composite substances *simpliciter* and, if so, whether a revised version of Gorman's independence criterion might be appropriate for composite substances *simpliciter*:

(ICCS1) *Independence Criterion for Composite Substances Simpliciter*:
x is a composite substance *simpliciter* \equiv_{def} (i) x is composite and (ii) there is no y such that (a) y is not identical with x, (b) x is essentially identity dependent on y, and (c) y is not one of x's proper parts; and (iii) x is unified in the right way.

According to (ICCS1), composite entities may qualify as substances *simpliciter*, as long as they are not ontologically dependent on anything besides their own essential proper parts and as long as they are appropriately unified.

Even if (ICCS1) carries promise as an independence criterion for composite substances *simpliciter*, Toner would no doubt object to the resulting bifurcation of the notion of substance *simpliciter* into the simple ones, on the one hand, and the composite ones, on the other, with each kind being governed by its own independence criterion. Toner's challenge to a proponent of an independence criterion for substances *simpliciter* who endorses a bifurcated account in the style of (ICSS) and (ICCS1) is to indicate wherein the alleged unity of the category of substances *simpliciter* lies. What, so he might ask, gives us the right

to think of both (ICSS) and (ICCS1) as criteria allegedly delineating a single ontological category, rather than two separate categories, viz., the simple entities which are completely ontologically independent, on the one hand, and the appropriately unified composite entities which are ontologically independent only in a modified way, on the other hand?

In response to Toner's worry concerning the apparent heterogeneity or disjunctiveness in the notion of substance *simpliciter* to which the bifurcated account indicated (p.179) here seems to lead, a proponent of such an account may at least point to the fact that there is after all a non-ad hoc and metaphysically significant distinction between simple entities and composite entities. Assuming that a criterion of substancehood serves as an indicator of a certain kind of ontological fundamentality, it is perhaps no surprise that there might be distinct roads toward ontological fundamentality, among them: one for simple entities and another for composite entities. For the time being, then, although I do feel the force of Toner's worry, I want to set it aside and examine instead the question whether (ICCS1) might be appropriate as an independence criterion for composite substances *simpliciter*. In what follows, I want to focus on a different challenge which arises for (ICCS1) as an independence criterion for composite substances *simpliciter*: this challenge centers on the selective emphasis on proper parts, as opposed to constituents more generally.²³

6.4.4.3 Proper Parts vs. Constituents

Something can be a constituent of a composite entity without being a proper part of it. For example, given widely held assumptions about sets (viz., in particular, those connected with the Iterative Conception of Sets), it is plausible to take the members of sets to be constituents of the sets constructed from them. In contrast, given widely held assumptions about parthood (viz., in particular, that parthood is transitive), the members of sets are not proper parts of the sets of which they are members.²⁴ In what follows, I use the term, "constituent," in such a way that proper parts are to be included among an entity's constituents; but the reverse cannot always be assumed to be true, since not all constituents are also proper parts, as the set-theoretic example just cited illustrates.

Why should the stipulative exclusion of proper parts from an independence criterion of substancehood *simpliciter* not also extend to constituents more generally? Insofar as any justification for this exclusion is given by those who endorse the stipulative exclusion of proper parts, the reasons stated would seem to carry over to non-mereological constituents as well. Gorman, for example, adduces the following considerations in favor of the exemption in question:

To say this [i.e., that composite entities may qualify as substances *simpliciter* even if they are ontologically dependent on their own essential proper parts] is, of course, only to follow up on Fine's own suggestion

when he says that a substance does not depend on anything “or, at least, upon anything other than its parts”. Nor is there any reason to fear that the move is *ad hoc*, as **(p.180)** it is a development of the pre-philosophical intuition that the theory of substance is intended to make sense of. Putting the point a bit vaguely, as pre-philosophical intuitions must be put, the things that philosophers come to call substances are not dependent on others but are instead self-sufficient in some way. Now a thing with an essential part is (of course) distinct from that part, but it does not follow that the thing is not self-sufficient, because this is not a way for the thing to be related to something *outside itself*. Expressed differently, the kind of independence here sought is not compromised by dependence that, so to speak, stays within the thing in question.

(Gorman (2006b), p. 151)²⁵

In a similar vein, Peter Simons remarks as follows:

An object A is *strongly dependent* on an object B if necessarily, if A exists, so does B, and B is neither A nor part of A. [...] An object is independent in the corresponding sense when it depends on nothing apart from itself and perhaps parts of itself, giving a sense to the idea of something depending on nothing “outside of itself”.

(Simons (1998), p. 236)

Both Simons and Gorman point to the idea that an entity’s ontological dependence on its own essential proper parts should be treated differently from an entity’s ontological dependence on entities numerically distinct from itself which do not number among the entity’s own essential proper parts for the following reason. In the second case (non-part dependence), the entity in question is ontologically dependent on numerically distinct entities that lie “outside” of it, while in the first case (part-dependence), the entity in question is ontologically dependent on numerically distinct entities (viz., its own essential proper parts) which do not lie “outside” of it. But whatever exactly is meant by “outside” in this context, surely if an entity’s proper parts do not lie “outside” of it, then neither do an entity’s non-mereological constituents.

Supposing then that entities which are ontologically dependent only on their own essential constituents more generally may also qualify as substances *simpliciter*, as long as they are appropriately unified, we arrive at the following revision of (ICCS1):

(ICCS2) *Independence Criterion for Composite Substances*

Simpliciter (First Revision):

x is a composite substance *simpliciter* \equiv_{def} (i) x is composite and (ii) there is no y such that (a) y is not

identical with x, (b) x is essentially identity dependent on y, and (c) y is not one of x's constituents; and (iii) x is unified in the right way.

Clause (ii.c) of (ICCS2) now allows back in some of the entities, e.g., sets, which were previously supposed to be excluded from the reaches of (ICCS1) by way of the restriction to proper parts. In addition to sets, we might also cite the following cases as possible further examples of entities which are arguably ontologically dependent only on their own essential constituents: quantities, collections, propositions, sentences, events, facts, states of affairs, and the like. All of these entities, if they are to be excluded from the category of substances *simpliciter*, would now have to be ruled out by way **(p.181)** of the unity requirement in clause (iii). This not only creates serious pressure for the as-of-yet unspecified unity requirement; it also makes us wonder whether clause (ii), i.e., the ontological independence requirement, is really doing any work at all in the so-called independence criterion for composite substances *simpliciter*. Given the long list of entities which are allegedly to be excluded from the category of substances *simpliciter*, even though they are arguably ontologically dependent only on their own essential constituents, it seems that a *unity* criterion for composite substances *simpliciter* holds more promise than an *independence* criterion, assuming that we can make good on the promise of spelling out in more detail in what respects the putative substances *simpliciter* are unified “in the right sort of way,” in contrast to other entities, such as sets, orchestras, committees, quantities, collections, mereological sums, propositions, sentences, events, facts, states of affairs, and the like. This line of reasoning seems to suggest the following significant change of direction in our attempt to provide a criterion of substancehood *simpliciter* for composite entities:

(UCCS) *Unity Criterion for Composite Substances Simpliciter*:
x is a composite substance *simpliciter* \equiv_{def} (i) x is composite and (ii) x is unified in the right way.^{26,27}

I will return to the role of unity in a criterion for composite substances later in this chapter and in Chapter 7. For the time being, I want to turn instead to a loose thread which arose in connection with the revised independence criterion for composite substances *simpliciter* in (ICCS2).²⁸

(p.182) 6.4.4.4 Intrinsicness

In the passages cited earlier, we saw that Gorman and Simons make at least an informal attempt at justifying the exemption for part-dependence by appeal to a distinction they allude to between what lies “inside” and what lies “outside” the boundaries of a given entity. According to Gorman, an entity’s ontological dependence on its own essential proper parts does not take away from the sort of “self-sufficiency” he regards as being required for an entity’s status as a substance *simpliciter*, since in that case the entity in question ontologically

depends only on what lies “inside” its boundaries. But non-part dependence, in his view, does disqualify an entity from being awarded the status of a substance *simpliciter*, since an entity’s ontological dependence on what lies “outside” of its boundaries diminishes the “self-sufficiency” he takes to be required for an entity’s inclusion into the category of substances *simpliciter*. On the basis of these considerations, we might therefore propose the following revision of (ICCS2), which makes the justification offered for the exclusion of proper parts explicit in clause (ii.c):

(ICCS3) *Independence Criterion for Composite Substances*
Simpliciter (Second Revision):

x is a composite substance *simpliciter* \equiv_{def} (i) x is composite and (ii) there is no y such that (a) y is not identical with x, (b) x is essentially identity dependent on y, and (c) y lies “outside” of x’s boundaries; and (iii) x is unified in the right way.

Since, for the proponent of an independence criterion for substancehood *simpliciter*, “self-sufficiency” is presumably merely another name for whatever is captured by the criterion of substancehood *simpliciter* in question, the notion of “self-sufficiency” that is appealed to informally by Gorman does not provide us with any additional information besides what is brought to the table by all the components of the independence criterion taken together. The question that is most relevant for present purposes then is what sense can be attached to the distinction between what lies “inside” the boundaries of a given entity and what lies “outside” of its boundaries.

The first thing to note in this connection is that we ought to separate ourselves right away from the spatial overtones that the distinction between what lies “inside” and what lies “outside” a given entity tends to evoke. (Hence the quotation marks around “inside” and “outside.”) In Section 6.4.3, I argued that the stipulative exclusion of non-particulars from an independence criterion of substancehood *simpliciter* ought to be regarded as inadmissible, since it has the unwelcome consequence that apparently substantive disputes in ontology are classified as either trivially answerable or as based on a contradiction. For similar reasons, an independence criterion of substancehood *simpliciter* should not be formulated in terms that can meaningfully apply only to concrete particular entities, i.e., entities which occupy regions of space-time. For then the thesis, “Only concrete particular entities are composite substances *simpliciter*,” would again trivially follow from the criterion of substancehood *simpliciter* in question, while the opposing thesis, “Some entities which are not concrete particulars **(p.183)** are composite substances *simpliciter*,” could not be coherently maintained by a reasonable philosopher who subscribes to (ICCS3). Hence, a dispute between two philosophers who find themselves drawn to these two opposing theses respectively would be mistakenly classified as non-

substantive. But I suspect that Gorman himself would wish to allow that the question of whether some composite substances *simpliciter* are not concrete particulars is substantive and can be a legitimate subject of dispute between two reasonably minded metaphysicians. If sets and other abstract entities, for example, are to be excluded from the category of substances *simpliciter* by (ICCS3), then it would seem that this criterion must at least be formulated in such a way that we can sensibly ask whether the entities in question satisfy or fail to satisfy the requirements stated by each of its clauses. It would be disturbing if sets and other abstract entities were denied the status of substances *simpliciter* only because the “outside”/“inside” distinction does not meaningfully apply to them.

A natural approach to the “outside”/“inside” distinction appealed to in (ICCS3) which does not require the stipulative restriction to concrete particular entities just cited is to understand it in terms of the distinction between what is *intrinsic* and what is *extrinsic* to a given entity.²⁹ Presumably, in whatever way exactly we construe the distinction between what is intrinsic and what is extrinsic to a given entity, any plausible account of this distinction should allow that we can just as sensibly speak of the non-mereological constituents of a non-empty set (i.e., its members) as being intrinsic to the set as we can speak of the mereological constituents of a concrete particular entity (i.e., its parts) as being intrinsic to the whole they compose. We thus arrive at the following reformulation of clause (ii.c) of (ICCS3):

(ICCS4) *Independence Criterion for Composite Substances*
Simpliciter (Third Revision):

x is a composite substance *simpliciter* \equiv_{def} (i) x is composite and (ii) there is no y such that (a) y is not identical with x, (b) x is essentially identity dependent on y, and (c) y is extrinsic to x; and (iii) x is unified in the right way.

If (ICCS4) strikes the proponent of an independence criterion of substancehood *simpliciter* as attractive, he would now face the non-trivial task of having to link his criterion for composite substances *simpliciter* to a suitable account of the intrinsic/extrinsic distinction. This requirement, for example, immediately rules out any appeals to the notion of substancehood *simpliciter* in an account of the intrinsic/extrinsic distinction, since such an appeal would then render the overall theory in question circular. Even if we grant the proponent of an independence criterion for substances *simpliciter* that the content of clause (ii.c) can be specified in a suitable fashion, however, we should note that (ICCS4) has some interesting consequences which may or may not **(p.184)** be found to be objectionable by those in favor of an independence criterion for composite substances *simpliciter*. For reasons of space, I will here only point to one such

consequence to which (ICCS4) may lead, depending on the additional metaphysical assumptions with which (ICCS4) is combined.

Consider artworks and artifacts more generally. Suppose Michelangelo's *David*, for example, is essentially identity dependent on the artist, Michelangelo, who created the artwork in question with the intention of achieving a certain artistic representational goal. Given Lowe's notion of essential identity dependence, in order for the sculpture in question to be essentially identity dependent on the artist who created it with a certain artistic intention in mind, there must be some function, φ , e.g., the "is the sculpture which was artistically created with a certain representational intention" function, such that it is part of the essence of the sculpture in question that it is the result of applying φ to Michelangelo. In other words, if the condition just stated in fact holds, then which sculpture the artwork in question, is at least in part fixed by reference to the artist who created it with the intention of achieving a certain representational goal. But the artist, Michelangelo, is presumably under any reasonable conception of the intrinsic/extrinsic distinction, extrinsic to the sculpture he has created. Thus, regardless of whether artworks are appropriately unified, such entities could not be awarded the status of substances *simpliciter* by (ICCS4), since their ontological dependence on a numerically distinct entity that is extrinsic to them constitutes a violation of clause (ii.c). If artifacts in general are essentially identity dependent on the artisans who produce, design, or invent them, perhaps with a certain creative intention in mind, then the same result follows more broadly for the entire category of artificially made objects. Those proponents of independence criteria of substancehood *simpliciter* who take it to be a desideratum of their account that artworks or artifacts more generally can be classified as substances *simpliciter* would thus have to weigh their options in the face of the possibility that these entities might be excluded from the category of substances *simpliciter*, due to the extrinsicness of their individuation conditions.^{30,31}

(p.185) 6.4.5 Matter-Form Compounds

In the foregoing sections, we have focused on two recent attempts at providing an independence criterion of substancehood *simpliciter* in the Aristotelian tradition, viz., E. J. Lowe's criterion, stated in (ICS1), and a modified version of it proposed by Michael Gorman, stated in (ICS2). I objected to the stipulative exclusion of non-particulars contained in both (ICS1) and (ICS2) on the grounds that this restriction makes it difficult to account for the apparently substantive nature of certain ontological disputes over questions of fundamentality. Moreover, our discussion of Gorman's stipulative exclusion-clause governing part-dependence seemed to indicate that unity might have an important role to play instead of, or at least in addition to, independence in formulating a criterion of substancehood for composite entities.

I now want to bring these considerations to bear on the question raised at the very beginning of this chapter, namely whether and how it might be possible to preserve the alleged substance status of at least some matter–form compounds. As I pointed out there, an apparent conflict emerges when we try to combine three central tenets popular among Aristotelians: (i) a hylomorphic analysis of concrete particular objects; (ii) an independence criterion of substancehood *simpliciter*; and (iii) the desire to include at least some matter–form compounds among the substances *simpliciter*. For if alleged candidates for the status of substances *simpliciter*, such as organisms, are analyzed in the hylomorphic fashion, as compounds of matter and form, one wonders whether they will not then turn out to be ontologically dependent on entities numerically distinct from themselves (viz., their form and possibly their matter as well), thereby jeopardizing their inclusion in the category of substances *simpliciter*. This question should certainly be of concern to Aristotelians who find themselves attracted to the three tenets at issue.

6.4.5.1 Lowe’s Strategy

When we attempt to apply Lowe’s criterion in (ICS1) to the case of matter–form compounds, we seem to run into the following problem. Suppose that a matter–form compound is numerically distinct from its form and matter. If, following Lowe’s definition in (ED3), a matter–form compound turns out to be essentially identity dependent on its form or its matter (assuming that the form or matter associated with a matter–form compound are particulars), then (ICS1) will exclude such compounds from the category of substances *simpliciter*. To prevent the outcome that matter–form compounds are disqualified from the status of substances *simpliciter*, Lowe therefore must deny one (or more) of the following claims:

- (1) A matter–form compound is numerically distinct from its form.
- (2) A matter–form compound is numerically distinct from its matter.
- (3) A matter–form compound is essentially identity dependent on its form.
- (4) A matter–form compound is essentially identity dependent on its matter.
- (p.186)** (5) The form of a matter–form compound is a particular.
- (6) The matter of a matter–form compound is a particular.³²

As noted earlier, Lowe opts for the denial of (1), among other things, and endorses an approach according to which concrete particular objects are *identified* with their particularized forms (see Lowe (1999)).³³ As discussed in Chapter 4, my own preference lies with a compositional approach to the form–compound relation (see Section 4.4.4).

6.4.5.2 Gorman's Exemption for Part-Dependence

If an independence criterion for substances *simpliciter* is formulated in such a way that it contains an exemption for part-dependence, constituent-dependence, dependence on what lies "inside" the boundaries of an entity, or dependence on what is intrinsic to the entity in question, along the lines of Gorman's modified criterion in (ICS2) and the series of revisions we have considered in (ICS3) and (ICCS1) through (ICCS4), then further possibilities are opened up for Aristotelians who wish to resolve the apparent conflict identified earlier between their commitment to hylomorphism, their sympathy for independence criteria of substancehood *simpliciter*, and their desire to count at least some matter-form compounds as substances *simpliciter*. For given the modified criterion and its subsequent revisions, a matter-form compound, assuming that it is appropriately unified, would be able to qualify as a substance *simpliciter* as long as those numerically distinct entities (if any) on which it is essentially identity dependent are either among its proper parts (in accordance with (ICS2), (ICS3), and (ICCS1)); or among its constituents (in accordance with (ICCS2)); or "inside" the boundaries of the matter-form compound in question (in accordance with (ICCS3)); or intrinsic to the matter-form compound in question (in accordance with (ICCS4)).³⁴ But I take it that, on any reasonable formulation of the hylomorphic position, the form and/or matter of which a matter-form compound consists would, at least in certain cases, satisfy one, or possibly more than one, of these conditions.³⁵ According to the mereological reading of the hylomorphic position, compounds of matter and form, strictly **(p.187)** and literally speaking, contain their form and matter as proper parts, thus qualifying as substances *simpliciter* under any of the versions of Gorman's criterion.³⁶ A modified version of this position is also available according to which the form and/or matter of which a matter-form compound consists are at least regarded as constituents, if not proper parts, of the entity in question. Even those who find neither of these interpretations of the hylomorphic position palatable may avoid the extreme measure taken by Lowe by endorsing one of the revised versions of Gorman's modified criterion I offered for composite substances *simpliciter* in (ICCS3) and (ICCS4).³⁷ Hence, even if matter-form compounds turn out to be essentially identity dependent on their form and/or their matter, they would not thereby be automatically excluded from the category of substances *simpliciter* given either Gorman's exemption for part-dependence or any of the revised formulations I offered subsequently.³⁸

But the objections I raised earlier speak against these sorts of approaches. For, as I pointed out in the preceding sections, once a Gorman-style exemption clause is added to an independence criterion of substancehood *simpliciter*, then all manner of composite entities which are apparently ontologically dependent only on their own proper parts (or constituents or what lies "inside" their boundaries or what is intrinsic to them) must be excluded from the category of substances *simpliciter* on other grounds (e.g., their lack of unity). The additional condition

on the basis of which unwanted composite entities are excluded from the category of substances *simpliciter* then does all the work in the so-called “independence” criterion of substancehood *simpliciter*. In this case, the independence component of this criterion becomes powerless and therefore redundant. For these reasons, an alternative criterion of substancehood for composite entities is called for.

6.4.5.3 Form as Principle of Unity

But there is a further and, to my mind, preferable option available to Aristotelians who already accept a hylomorphic analysis of concrete particular objects for independent reasons and who wish to preserve the substance status of at least some matter-form compounds. After all, according to the Aristotelian perspective, what distinguishes matter-form compounds from other, less unified, composite entities (e.g., sets, mereological sums, committees, and the like) is precisely that matter-form compounds contain within themselves a principle of unity which these other, less unified composite entities lack, namely, their forms. Traditionally, forms are assigned the special role of acting as the principle of unity within the matter-form compound, i.e., as that active principle within the matter-form compound which somehow ties together its material components into a single unified whole, as opposed to, for example, a mere heap, **(p.188)** aggregate, or plurality. Aristotelians thus would seem to be missing out on an important advantage they gain through their commitment to hylomorphism if they did not also capitalize on the special role of form as the principle of unity within the compound in their quest to formulate an adequate criterion of substancehood for composite entities. If we are to take this option seriously, as providing us with a credible route toward a unity criterion of substancehood for composite entities, we need to know more about what it means to designate form as that active principle which plays the role of the unifying the matter-form compound. It will be my aim in Chapter 7 to investigate further in what sense matter-form compounds deserve to be designated as more unified than other complex entities which lack the presence of form within them.

6.5 The Status of Forms

In this final section, I turn briefly to the question of how forms themselves fare with respect to the criteria of substancehood we have considered in this chapter. Interestingly, if we apply the definitions of ontological dependence reviewed above to the case of forms, we arrive at the result that, while forms are in some respects ontologically independent of matter-form compounds, they are also in other respects ontologically dependent on matter-form compounds.

Firstly, given that the form of a matter-form compound in some way figures into a matter-form compound’s criteria of identity (see Section 3.4.3), essence or real definition (see Section 3.4.2), it cannot also be the case that the criteria of identity, essences, or real definitions of forms in turn make reference to the matter-form compounds in which these forms are present, since otherwise a

vicious circularity would result. To illustrate, suppose that (in accordance with the individual forms hypothesis) what it is to be Socrates is to be some particular living organism composed of a particular human soul and some suitable body. Then, according to (ED4) and (ED5), Socrates is *constitutively essentially dependent* and *constitutively definitionally dependent* on his soul, since Socrates' soul is a constituent of Socrates' real definition or essence (narrowly construed). Moreover, Socrates is also *essentially identity dependent* on his soul, since, as required by (ED3), there is a function, φ , viz., the "hylomorphic composition" function (assuming the Uniqueness of Hylomorphic Composition), such that it is part of Socrates' essence that he is the hylomorphic compound which results from the presence of Socrates' soul in some suitable body. Since Socrates is (ED3)-(ED5)-dependent on his soul, we must assume that a statement of the criteria of identity, essence, or real definition of Socrates' soul does not in turn make reference to Socrates. Thus, it cannot also be the case that what it is to be Socrates' soul is to be, say, that active principle which results from "hylomorphically subtracting" Socrates' body from the particular matter-form compound that is numerically identical to Socrates. We must therefore proceed on the assumption that forms are ontologically independent of matter-form compounds, when ontological dependence is construed along the lines of (ED3)-(ED5).³⁹

(p.189) Secondly, however, when ontological dependence is construed in the modal-existential way, along the lines of (ND1) or (ND2), forms will turn out to be ontologically dependent on matter-form compounds. For one of the marks distinguishing *Aristotelian* from *Platonic* forms is that the former *cannot*, while the latter *can*, exist apart from the concrete particular objects with which they are associated. Whether Aristotelian forms are *rigidly* or *generically* existentially necessarily dependent on matter-form compounds depends on where we stand with respect to the dispute discussed in Chapter 3 over the ontological category to which forms should be assigned. If forms are construed as individual or particular entities, then necessarily each such form exists only if the *very* matter-form compound with which it is associated exists and, by (ND1), forms are therefore *rigidly necessarily existentially dependent* on these particular matter-form compounds. In contrast, if forms are taken to be universal or general entities, then the existence of each such form requires only that *some* matter-form compound *or other* of a certain kind exists and, by (ND2), forms are therefore *generically necessarily existentially dependent* on some matter-form compounds or other of a certain kind. Either way, however, forms will turn out to be ontologically dependent on matter-form compounds, when ontological dependence is construed with either (ND1) or (ND2) in mind.

Unless we somehow discount the modal-existential dependence of forms on matter-form compounds, we must therefore conclude that forms, like the matter-form compounds with which they are associated, do not qualify for the status of substances *simpliciter*, as long as we approach this notion through the

lens of ontological independence. At the same time, however, when we compare forms and matter-form compounds with respect to the number of ways in which each type of entity turns out to be ontologically dependent on entities numerically distinct from it, then forms overall are classified as ontologically dependent on matter-form compounds in *fewer* ways than matter-form compounds are classified as ontologically dependent on the forms that are associated with them. Thus, relatively speaking, even if forms do not gain admission into the category of substances *simpliciter*, they nevertheless ought to be recognized as *more deserving of substance status* or *more fundamental than* matter-form compounds, according to a *comparative* notion of substancehood or ontological fundamentality, when these notions are viewed with an ontological independence criterion in mind. Based on the considerations advanced in this and subsequent chapters, **(p.190)** we thus arrive at the following ranking of entities with respect to their relative or absolute fundamentality status:

- (I) Matter-form compounds are not substances *simpliciter* (in the non-taxonomic sense).
- (II) Matter-form compounds are *less deserving of substance status* (non-taxonomically) than the forms associated with them.
- (III) Matter-form compounds are *more deserving of substance status* (non-taxonomically) than other types of composite entities (e.g., heaps, mereological sums, sets, collections, quantities, etc.).⁴⁰
- (IV) Like matter-form compounds, forms are also not substances *simpliciter* (in the non-taxonomic sense).

6.6 Conclusion

In this chapter, I considered attempts by E. J. Lowe and Michael Gorman at defending an independence criterion of substancehood *simpliciter* and argued that the stipulative exclusion of non-particulars and proper parts (or constituents) from such accounts raises difficult issues for their proponents. The results of the present discussion indicate that, at least for the case of composite entities, unity has at least as much, and perhaps more, to offer than ontological independence and therefore ought to be explored further by Aristotelians in search of a defensible notion of substancehood. In Chapter 7, we will examine how unity might be used by Aristotelians in connection with a *comparative* conception of substancehood, to support the ranking of matter-form compounds as *more deserving of substance status* than other complex entities, by virtue of their highly unified nature.

The proper conclusion to draw from these considerations, in my view, is that neither matter-form compounds nor their forms should be regarded as substances *simpliciter*. In fact, at least for non-theists, it is not obvious that we have any reason at all to believe that there are substances *simpliciter*, at least as long as we approach substancehood in the manner of (IND) and (NICSS). This negative conclusion, however, should not prevent us from classifying matter-

form compounds or their forms as *more deserving of substance status than* other types of entities. But such a *relative* fundamentality ranking is not to be confused with a classification of matter-form compounds or their forms as belonging to the category of the *absolutely* fundamental or the substances *simpliciter*. At the same time, the importance of assigning matter-form compounds or their forms to their proper position within the hierarchy of the relatively fundamental should not be underestimated, since many of the most interesting metaphysical projects, especially those that are dear to Aristotelians, take place within the sphere of what, in absolute terms, would count as ontologically derivative.

Notes:

(¹) See also the Introduction to Part II for a brief discussion of what hangs on the question of whether an entity is, or is not, included among the substances. I give a more detailed elaboration and defense of the continued philosophical usefulness of the concept of substance in Koslicki (2015b), in particular in response to arguments to the contrary proposed in Simons (1998). The question of how an Aristotelian substance-ontology is to be squared with contemporary science briefly came up in Chapter 2, “Brief Interlude: Metaphysics and Science,” though a proper treatment of these difficult issues concerning the relation between metaphysics and science would unfortunately take us too far afield for present purposes.

(²) I have taken the liberty of replacing “man” with “human being” in Ackrill’s rendition of this passage.

(³) See also, for example, *Categories*, Ch. 5, 2b7–8: “Of the secondary substances the species is *more a substance than* [*mallon ousia*] the genus, since it is nearer to the primary substance.”

(⁴) Presumably, for the Plato of the middle period, only the form of the good would count as an absolutely fundamental entity. All the other entities in Plato’s middle period ontology (e.g., the other forms, the sensible particulars, or the mathematical objects) would receive only a comparative ranking depending on their relation to the form of the good.

(⁵) Proponents of ground-theoretic approaches to fundamentality (e.g., Schaffer (2009)) may feel that an entity’s designation as a substance in the non-taxonomic sense can be adequately captured by means of the grounding idiom. As I have argued in Koslicki (2015a), however, the notion of ground, due to its coarse-grainedness, is not, in fact, a helpful tool to accomplish this philosophical work.

(⁶) As noted earlier (see Section 5.2.1), when Aristotle states his ultimate subject criterion of substancehood in the *Categories*, he does not directly use a Greek term which is translated into English in terms of the vocabulary of dependence or independence. Nevertheless, Aristotle is commonly interpreted (and rightly

so, in my view) as putting forward an independence criterion of substancehood in this text. For the two key relations, *being said of a subject* and *being in a subject*, in terms of which Aristotle formulates his ultimate subject criterion of substancehood in the *Categories*, should be read as indicating two ways in which all the other entities depend ontologically on those entities which are classified in the *Categories* as primary substances, while the primary substances do not in turn ontologically depend on anything else in either of these two ways.

(⁷) Despite the apparent innocuousness of (NICS) and (IND), not all proponents of an independence criterion of substancehood would be happy with these formulations. For reasons which will concern us in more detail in Section 6.4, some independence theorists find themselves tempted to add various exemption clauses to the right-hand side of (IND), in order to disqualify an entity's ontological dependence on *certain* entities that are numerically distinct from the entity in question as irrelevant to that entity's status as a substance. (NICS) and (IND) are currently only intended as a starting point for our discussion; we will have occasion in what follows to consider various proposed modifications to (NICS) and (IND).

(⁸) In addition to the supplementary conditions proposed by Lowe and Gorman, which will concern us in more detail in the next section, independence theorists may also wish to expand (NICS) by requiring that the substances, in addition to being themselves ontologically independent, must also act as a sort of "ontological anchor" for all the other entities that are included in the ontology under consideration. According to this expanded necessary condition, endorsed, for example, by Aristotle in the *Categories*, everything which does *not* qualify as a substance (i.e., every entity, y , that is not ontologically independent and hence ontologically depends on some relevant, z , numerically distinct from y) ontologically depends on something which *does* qualify as a substance (i.e., on something that is ontologically independent). In what follows, I argue that we have reasons to reject (NICS) as an adequate statement of a necessary independence condition for composite substances, even when it is weakened in the way that Lowe and Gorman propose. Thus, adding a further necessary condition to (NICS) in the manner just outlined does not improve the situation for proponents of an independence criterion of substancehood. Going forward, I therefore focus on the simpler necessary condition stated in (NICS).

(⁹) In this respect, the contemporary practice of interpreting an independence criterion as yielding exclusively an *absolute* notion of substancehood diverges from Aristotle's practice in the *Categories* and *Metaphysics Z, H, Θ*. As we remarked in Section 6.2, Aristotle uses the concept of substance both in an absolute and in a comparative way in the *Categories*. In *Metaphysics Z, H, Θ*, the earlier ultimate subject criterion is still an important consideration, but no longer the only factor in evaluating whether an entity deserves to be assigned substance status. In these texts, we come across absolute, relational, and

comparative uses of the concept of substance as well as criteria of substancehood which go along with these.

(¹⁰) A brief review of how to understand E. J. Lowe's appeal to functions in the formulation of (ED3) will follow in Section 6.4. (For a more detailed discussion of (ED3), see Section 5.3.1.) In order for A to be essentially identity dependent on B, we suppose that it is part of A's essence that A is the result of applying a *composition* operation of some sort to B. (In order to maintain maximum generality, I leave open whether the composition operation in question satisfies the so-called "Weak Supplementation Principle," i.e., whether A must have some further constituent, C, disjoint from B.) In order for the essential relationship between A and B to be *functional*, we must suppose that, in any given circumstance, the application of the composition operation in question to B gives rise to a *unique* compound, viz., A. Thus, in the case of (ED3), the negative result derived in the main text only follows for composition operations which satisfy a principle analogous to the Axiom of Extensionality in set theory or the Uniqueness of Composition in mereology.

(¹¹) As discussed earlier (see Section 3.2.3), this assumption is rejected by identity theorists (e.g., Frede (1985, 1987a); Frede and Patzig (1988); Lowe (1999); and Whiting (1984, 1986, 1991, 1992)), who hold that a matter-form "compound" is (in some sense) numerically identical to its form.

(¹²) Of course, the second claim could be broken down further by separating the claim that forms are *constituents* of matter-form compounds from the claim that they are *essential* constituents of matter-form compounds. However, since I assume that anyone who accepts the former also accepts the latter, I focus only on the combined claim.

(¹³) Again, as indicated in the previous note, the third claim could also be broken down more finely into a claim concerning an entity's ontological dependence on its *constituents* more generally and a claim concerning an entity's ontological dependence on its *essential* constituents more specifically. For reasons which will become apparent shortly, however, this further differentiation turns out to be unnecessary, since only an entity's ontological dependence on its *essential* constituents will be judged to be relevant to the question of whether it should, for that reason, be disqualified from counting as a substance *simpliciter*.

(¹⁴) In what follows, I will refer to Lowe's and Gorman's criterion as an "independence criterion of substancehood," even though ontological independence is not the only component of their respective accounts. In proposing their respective independence criteria, it is clear that Lowe and Gorman have in mind substancehood *simpliciter*, rather than a comparative or relational use of the concept of substance. For an alternative proposal, see, for

example, Hoffman and Rosenkrantz (1994, 1997). The remainder of this chapter is extracted from Koslicki (2013b), with light revisions.

(¹⁵) (ICS1) is a slightly reformulated version of what is called “(SUB-2)” in Tahko and Lowe (2015). It should be noted, too, that, except for the addition of clause (i), (ICS1) embodies the conception of substancehood *simpliciter* which was seen to get us into trouble with the empty set and the number 0 in Section 5.3.4. In Section 6.4.3, we will encounter reasons to question the legitimacy of including (i) in a criterion of substancehood *simpliciter*.

(¹⁶) Gorman (2006a), p. 116. (ICS2) is a slightly reformulated version of what Gorman calls “RLS*.”

(¹⁷) Only essential, rather than accidental, parts are relevant to the question of whether an entity should be disqualified from its status as a substance *simpliciter* due to the fact that it is ontologically dependent on entities numerically distinct from itself (namely, in this case, its own proper parts). For clause (i.b) in (ICS2) narrows down the range of entities which might pose a threat to x 's status as a substance *simpliciter* to those entities, y , on which x is essentially identity dependent. But no entity, x , would count as essentially identity dependent on its accidental parts, since it would not be the case that there is a function, φ (e.g., the “is mereologically composed of” function) such that it is part of x 's essence that x is the result of applying φ to any of its accidental parts. Since x can survive through changes with respect to its accidental parts, x 's identity at any time or world at which it exists cannot be fixed by which entities, y, z, w, \dots , are its accidental parts at that time or world. In what follows, when I consider the question of whether the exclusion of proper parts from the criterion of substancehood *simpliciter* is admissible, I will therefore limit myself to the discussion of essential, rather than accidental, parts.

(¹⁸) As mentioned in Section 6.3, in order for the relation between an H_2O molecule and the oxygen and hydrogen atoms which allegedly essentially compose it to be *functional*, the composition operation in question must be assumed to yield a *unique* compound when applied to these constituents in any given circumstance.

(¹⁹) The restriction to particulars is also present in an independence criterion of substancehood *simpliciter* proposed in Schnieder (2006), according to which x is a substance *simpliciter* just in case x is a particular and there is no y such that x rigidly and permanently existentially depends on y . As our discussion of rigid and permanent existential dependence in Section 5.2.3.2 brought out, this construal of ontological dependence is subject to additional, and unrelated, difficulties as well.

(²⁰) Both Lowe's criterion in (ICS1) and Gorman's criterion in (ICS2) contain an additional restriction to particulars in clause (ii), which I have also removed in this revision of Gorman's criterion in (ICS3). According to this additional restriction, given that both Lowe and Gorman take it to be a settled question that only particulars may qualify as substances *simpliciter*, the only entities, *y*, which could pose a threat to an entity, *x*'s, status as a substance *simpliciter* are other particulars numerically distinct from *x* on which *x* is essentially identity dependent. But again we may wonder whether the exclusive focus on particulars is legitimate. If an entity, *x*, is essentially identity dependent on an entity, *y*, that is numerically distinct from it, then should *x*'s status as a substance *simpliciter* not thereby be jeopardized, even if *y* is a non-particular (e.g., a universal)? As far as I can see, this kind of possibility is already ruled out by other considerations and the second restriction to particulars in clause (ii) may therefore be safely removed. For suppose that it is part of Socrates' essence to be human and that *being human* is here construed as a universal. Still, the universal, *being human*, could not have a role in fixing Socrates' identity at every time and world at which he exists, since it is also part of the essence of many other particulars (Plato, Aristotle, etc.) that they exemplify the same universal. Thus, in order to determine which exemplar of the universal, *being human*, Socrates is at every time and world at which he exists presupposes that Socrates' identity is already settled.

(²¹) Gorman is again not alone in opting for the stipulative exclusion of proper parts from an independence criterion of substancehood *simpliciter*. Kit Fine, for example, states that "... a substance may be taken to be anything that does not depend upon anything else or, at least, upon anything *other than its parts*" (Fine (1995a), pp. 269–70; my emphasis). Similarly, Peter Simons offers an independence criterion of substancehood *simpliciter* in terms of what he calls "strong independence," which also explicitly excludes proper parts from its range: an entity *x* is strongly dependent on an entity *y* just in case necessarily, *x* exists only if *y* exists and *y* is neither identical to *x* nor a proper part of *x* (Simons (1998), p. 236; my emphasis). Simons' notion of strong independence is formulated in terms of what I called above "rigid existential necessary dependence" or (ND1) and adds further exemption clauses to it.

(²²) Notice, however, that (ICSS) still succumbs to the difficulty concerning the empty set and the number 0 mentioned in Section 5.3.4.

(²³) Gorman replies to Toner's heterogeneity worry in Gorman (2012) and argues that his account does in fact provide a unified criterion of substancehood *simpliciter*: the substances *simpliciter* are all and only those entities which are ontologically independent from all numerically distinct entities "outside" of themselves; this, according to Gorman, applies to both simple and composite entities. When we focus on what goes on "inside" the boundaries of an alleged substance *simpliciter*, however, we can still discern a difference between simple

and composite entities. The “inside”/“outside” distinction which is invoked by Gorman and others in an attempt to give at least an informal justification of the stipulative exclusion of proper parts from an independence criterion of substancehood *simpliciter* itself raises interesting questions to which we will turn shortly.

(²⁴) Though see Fine (2010) for a more generalized notion of parthood, closer to what I am calling here “constituency,” which allows for members to be parts of sets.

(²⁵) See also Gorman (2006a), p. 116, for a similar comment.

(²⁶) Given that ontological independence has now completely dropped out of the picture in (UCCS), Toner’s earlier heterogeneity worry arises again with a vengeance: if simple entities (supposing that there are any) qualify as substances *simpliciter* for one reason (their ontological independence) and composite entities qualify as substances *simpliciter* for a completely different reason (their unity), why should we believe that (ICSS) and (UCCS) point to a single ontological category, rather than two distinct ontological categories which have been misleadingly referred to with the same name? As noted earlier, the proponent of such a bifurcated account can at least draw on the non-ad hoc and metaphysically significant distinction between simplicity and complexity. Moreover, we may point out as well that simple entities are presumably also unified in the right way, due to their simplicity; in that sense, a unity account applies both to simple and composite substances *simpliciter*, but perhaps only trivially so in the case of simple substances *simpliciter*.

(²⁷) An interesting case to consider in connection with (ICSS) and (UCCS) is that of tropes. Lowe and Gorman take tropes to be entities which are both simple and essentially identity dependent on their bearers, viz., the concrete particular objects in which they inhere. They would therefore be excluded (correctly, in Lowe’s and Gorman’s view) from the category of substances *simpliciter* by (ICSS). Being simple, tropes are presumably also unified by default; but their unity is irrelevant to their alleged exclusion from the category of substances *simpliciter*, since they are subsumed under (ICSS), the criterion governing simple entities, rather than under (UCCS), the criterion governing complex entities.

(²⁸) Since Gorman is aiming for a criterion for substancehood *simpliciter*, clause (iii) of his revised independence criterion in (ICS2) puts to use the notion of unity in a *non-relative* way, by requiring the substances *simpliciter* to be “unified in the right way.” In contrast, I will employ unity as a *comparative* notion, according to which one entity or type of entity can be assigned a *higher degree* of unity than another. There is thus also the option of appealing to unity as a sufficient condition for a *comparative* notion of substancehood for composite

entity as follows: *x* is *more deserving of substance status* than *y* if (i) *x* and *y* are composite and (ii) *x* has a *higher degree of unity than y*. Moving to a comparative notion of substancehood, moreover, helps with Toner's heterogeneity worry as well, since this objection specifically targets approaches which classify a heterogeneous collection of entities as substances *simpliciter* or *absolutely* fundamental.

(²⁹) The question of how best to draw the intrinsic/extrinsic distinction has generated an enormous literature and I will not at present try to enter into this debate; but see, for example, Humberstone (1996); Lewis and Langton (1996); Sider (1996); and Yablo (1999) for discussion.

(³⁰) Those who find (ICCS4) attractive might respond to the consideration just raised by rejecting the central assumption used in generating it, viz., that artworks in particular and perhaps artifacts more generally are in fact essentially identity dependent on their creators, in Lowe's sense. The special metaphysical issues raised by artifacts will be investigated in more detail in Chapter 8. For present purposes, I am content to note that, given apparently plausible assumptions which at least cannot be dismissed out of hand, (ICCS4) will exclude these objects from the status of substances *simpliciter* as well as any other entities (if there are any) whose synchronic identity is fixed by appeal to numerically distinct entities extrinsic to them. The same result would have followed from any of the previous formulations of Gorman's independence criterion as well. Thus, it is not the addition of the extrinsicness clause in particular which generates the result that artworks and/or artifacts in general are excluded from the status of substances *simpliciter*; the most recent revision merely attempts to make explicit the motivation which presumably lies behind the exemption for proper parts in the first place. Alternatively, those in favor of (ICCS4) might also consider it to be an advantage that this criterion excludes artworks and artifacts from the category of composite substances *simpliciter* due to the extrinsicness of their individuation conditions.

(³¹) In addition, those who endorse the essentiality of origins will have to worry that a certain subclass of *natural* things as well will be excluded from the category of substances *simpliciter* by (ICCS4), on the grounds that they are essentially identity dependent on numerically distinct entities which are *extrinsic* to them (e.g., the particular egg and sperm from which a living organism originates).

(³²) In Section 6.4, I mentioned that Aristotelians might be tempted to reject at least one of the three claims, (a)–(c), cited there, if they wish to uphold (i)–(iii). (a) reappears here as (1). (b) and (c) will be considered shortly, in connection with the strategies open to Gorman.

⁽³³⁾ Lowe would no doubt be happy to deny (4) as well: since matter–form compounds can apparently survive changes with respect to their material parts, it cannot be the case, given (ED3), that the synchronic numerical identity of a matter–form compound is fixed by the matter which composes it at any time or world at which it exists. But the denial of (4) alone is not enough to escape our current quandary: for, as long as (1) and (3) still hold, a matter–form compound nevertheless threatens to be essentially identity dependent on an entity that is apparently numerically distinct from itself (namely its form) and its (alleged) status as a substance *simpliciter* would thus still be in jeopardy, even if (4) is rejected.

⁽³⁴⁾ The possibilities reviewed here present different ways of developing the denial of claim (c) cited earlier in Section 6.4.

⁽³⁵⁾ The qualification, “at least in certain cases,” is meant to take into consideration the case of artworks and artifacts more generally considered in Section 6.4.4.4, which (assuming that these entities are nevertheless considered matter–form compounds) might present us with an exception to the generalization that *all* matter–form compounds would fall under at least one, and possibly more than one, of the exemption clauses added by Gorman.

⁽³⁶⁾ This is the version of hylomorphism for which I argue in Koslicki (2008a) and which is also endorsed in Fine (1982) and (1999).

⁽³⁷⁾ Adherents to this variety of hylomorphism would be committed to the denial of claim, (b), cited earlier in Section 6.4.

⁽³⁸⁾ For alternative ways of spelling out the hylomorphic position, see, for example, Harte (2002); Johnston (2002, 2006); Rea (2011).

⁽³⁹⁾ Suppose that (following the universal forms hypothesis) what it is to be a human being is to be a living organism composed of *some* human soul and some suitable body. Then, the kind of thing, *human soul*, figures in the real definition or statement of the essence (narrowly construed) of the kind of thing, *human being*; and hence human beings in general are ontologically dependent on their souls, in the sense of (ED4) and (ED5). Proponents of the universal forms hypothesis are not committed to the claim that matter–form compounds are (ED3)-dependent on their universal forms, since this construal of ontological dependence concerns some particular entity’s being the very thing that it is at each time at which it exists. Thus, in light of the conflict identified above concerning (i)–(iii), one possible strategy for proponents of independence criteria of substancehood who also adhere to the universal forms hypothesis is to deny (5) (viz., the claim that matter–form compounds are essentially identity dependent on their forms; see Section 6.4.5.1). Nevertheless, the results derived

earlier for (ED4) and (ED5) hold for both the universal and the individual forms hypothesis alike.

(⁴⁰) The justification for (III) still awaits our discussion of unity in Chapter 7.

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