

# Qua-Objects, (Non-)Derivative Properties and the Consistency of Hylomorphism

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## Abstract

Imagine a sculptor who molds a lump of clay to create a statue. Hylomorphism claims that the statue and the lump of clay are two different *colocated* objects that have different *forms*, even though they share the same *matter*. Recently, there has been some discussion on the requirements of consistency for hylomorphist theories. In this paper, we focus on an argument presented by Maegan Fairchild, according to which a minimal version of hylomorphism is inconsistent. We argue that the argument is unsound or, at best, it just points to a well-known problem for hylomorphist theories. Additionally, we explore some general consequences of this fact.

**Keywords** hylomorphism; having properties (non-)derivatively; qua-objects; matter/form; colocated objects

Imagine a sculptor who molds a lump of clay to create a statue. It is usually said that, in virtue of being in the same place at the same time, the statue and the lump are ‘colocated’ (in some cases, this is so for the whole career of the statue and the lump of clay, cf. Gibbard 1975). *Hylomorphism* states that objects such as the statue and the lump of clay (and also lumps or pieces of other materials, and chairs, rocks, tigers, or human beings) have two components: *matter* and *form*. According to the theory, this distinction allows us to explain two conflicting intuitions that arise in situations involving colocated objects, such as the statue and lump of clay. On the one hand, by Leibniz’s Law, they seem to be two different objects, as they have different properties (for example, they have different sortal or modal properties). Hylomorphism claims that they are two different objects with different properties because they have different *forms*. On the other hand, they share many of their other properties, like their weight, shape, position, microphysical composition, etc., so that one might be tempted to conclude, contrary to what was claimed before, that they are the same object. Hylomorphism claims that they share these properties because they share another of their components, their *matter*, and, therefore, the fact that they share the aforementioned properties is not a good reason to conclude that they are the same object after all.

Recently, there has been some discussion on the requirements of consistency for hylomorphist theories (Fairchild 2017; Robertson Ishii and Salmón (2019); Jacinto and Cotnoir (2019)). In this paper, we will focus on the work of Maegan

Fairchild, who, in her (2017), presents what she claims to be a minimal version of hylomorphism and argues that it is inconsistent. Our purpose is to show that, even granting that Fairchild’s version of hylomorphism correctly captures the motivations behind hylomorphist views in the literature, her argument to purportedly show that the minimal version she presents is inconsistent is not sound. We show this with the use of a distinction usually accepted by hylomorphists between instantiating a property in a derivative way and instantiating a property in a non-derivative way. After presenting Fairchild’s argument in sections 1 and 2, we will defend its unsoundness in section 3. Finally, in section 4 we will explore some interesting general consequences that follow from our discussion.

## 1 Fairchild’s Argument

Although there are different specific versions of hylomorphism, Fairchild (2017) does not focus on any particular account; instead, she considers what she claims to be a *minimal* version of it, which she calls ‘simple hylomorphism’.

Before characterizing simple hylomorphism, let us fix the terminology. Following Fine (1982, 1999, and 2008), Fairchild calls ‘qua-objects’ the objects that have both a *form*, which they *embody*, and a *base* (what we called before, in the case of the statue and the lump of clay, their ‘matter’). We refer to them using expressions of the type ‘ $a/F$ ’ where  $a$  is the base and  $F$  is the form of the qua-object.

According to Fairchild, the following two principles characterize *simple hylomorphism*:

**Existence.** Given any property  $F$  and object  $a$  such that  $F(a)$ , there is some object  $b$  such that  $b = a/F$ .

**Uniqueness.** For any properties  $F$  and  $G$  and any objects  $a$  and  $b$ ,  $a/F = b/G$  iff  $a = b$  and  $F = G$ .

*Existence* takes into account the idea that arbitrariness should be avoided; that is, hylomorphists have to be permissive enough concerning forms in order to take account of all ordinary objects, and, besides, they must do so while avoiding arbitrariness concerning which properties are eligible as forms. This is why, as Fairchild claims, we are led to Existence. The principle states that for *any* instantiated property, there is a qua-object that embodies it. *Uniqueness* is meant to establish the identity conditions for qua-objects.

As we have said, Fairchild argues that simple hylomorphism is inconsistent (p. 34). Her argument is the following. Consider, first, the property  $N$  such that, for any object  $x$ ,

$N(x)$  if, and only if, there is a property  $F$  and an object  $y$  such that  $x = y/F$  and  $\neg F(x)$ .<sup>1</sup>

Next, Fairchild argues in favor of the following claim:

(E) There is an object  $a$  such that  $N(a)$ .

<sup>1</sup>That is to say,  $x$  embodies a property that it does not instantiate.

Let us grant, for the moment, (E) and see how the alleged inconsistency follows.<sup>2</sup> Note first that, by Existence, given  $N(a)$ , it follows that there is an object  $b$  such that  $b = a/N$ . We then have two possibilities, either  $N(b)$  or  $\neg N(b)$ :

- (i) Suppose, first,  $\neg N(b)$ . Then,  $b$  embodies a property (to wit, the property  $N$ , for  $b = a/N$ ) such that it does not instantiate. Accordingly, given the definition of  $N$ ,  $b$  does instantiate  $N$  after all. Therefore, if  $\neg N(b)$ , then  $N(b)$ . Since we are supposing that  $\neg N(b)$ , we conclude  $N(b)$ , which leads us to a contradiction.
- (ii) Suppose, second,  $N(b)$ . In this case, there must be a property  $F$  and an object  $y$  such that  $b = y/F$  and  $\neg F(b)$ . But by Uniqueness, and given that  $b = a/N$ ,  $F = N$  and, therefore,  $\neg N(b)$ . We conclude that if  $N(b)$ , then  $\neg N(b)$ , which, as before, leads us to a contradiction.

At this point, it is worth noting that Fairchild overstates her conclusion: instead of being justified in concluding that simple hylomorphism is inconsistent, she is only justified in concluding that simple hylomorphism is inconsistent with (E), so that, if (E) is true, then simple hylomorphism must be false.<sup>3</sup>

In the following sections, we will examine and finally reject Fairchild's arguments for (E), showing that, pending further considerations, her argument for the falsity (according to her, *inconsistency*) of simple hylomorphism is unsound.

## 2 Fairchild's Arguments for (E)

Fairchild presents two main arguments in favor of (E). Recall that she needs to show the existence of an object  $a$  such that  $N(a)$ ; to wit, an object  $a$  such that there is an object  $b$  and a property  $F$  such that  $a = b/F$  and  $\neg F(a)$ . Let us see how she argues.

**1st Argument.** The first argument depends on the following *distinctness assumption*:

(DA) For any objects  $x, y$  and any property  $G$ , if  $x = y/G$ , then  $x \neq y$ .<sup>4</sup>

Notice, now, that if there is an object  $b$  and a property  $F$  such that  $F$  is had by *only*  $b$  (and by no other object), then we obtain the needed result, for, by Existence, there is some object  $a$  such that  $a = b/F$  and, given that  $a \neq b$  (by (DA)) and that no object other than  $b$  is  $F$ , it follows that  $\neg F(a)$ . Hence,  $N(a)$ .

So it is sufficient to show the existence of an object  $b$  and a property  $F$  such that  $F$  is had only by  $b$ . Fairchild considers two kinds of examples. First, she considers an object  $b$  and the property *being identical to b*; then, since, by (DA),

<sup>2</sup>Robertson Ishii and Salmón (2019) claim that there is no such property as  $N$  (referred to as ' $S$ ' by them), although it is the case that there is an object  $a$ , an object  $y$ , and a property  $F$  such that  $a = y/F$  and  $\neg F(a)$  (what they call a 'stone-caster'). This is so because they deny the validity of the unrestricted comprehension principle of property abstraction, which claims, roughly, that for each open formula, there is a corresponding genuine property (see Robertson Ishii and Salmón 2019, pp. 3-4 and Fairchild 2017, fn. 10). Fairchild (2017) already considers this objection and offers a reply to it (p. 36-37), which, of course, is challenged by Robertson Ishii and Salmón (2019, p. 13). Be that as it may, we will show that, *even granting full unrestricted property comprehension*, Fairchild's arguments for (E) are not correct.

<sup>3</sup>A similar point is made by Robertson Ishii and Salmón 2019, page 6.

<sup>4</sup>That is to say, qua-objects are always distinct from their bases.

$b \neq b/\text{being-identical-to-}b$ , the qua-object  $b/\text{being-identical-to-}b$  does not have the property *being identical to  $b$*  and, hence, we achieve what we were looking for, namely,  $N(b/\text{being-identical-to-}b)$ . As Fairchild herself claims, though, in cases like this, (DA) is not very plausible, for it is not clear how we can establish the distinctness of the object  $b$  and the qua-object  $b/\text{being-identical-to-}b$  given that they do not even differ in their modal properties.

This suggests, Fairchild claims, a restriction of (DA) to *contingent properties* (p. 35-6). Accordingly, she considers, as a second kind of example, Michael and the property *being God's favorite angel*. Let us suppose that Michael is God's (uniquely) favorite angel; then, as before, the qua-object Michael/*being-God's-favorite-angel* is not God's favorite angel, for, by (DA), it is not identical to Michael, and only the latter has the privilege of being God's favorite angel. Hence,  $N(\text{Michael}/\text{being-God's-favorite-angel})$ .

**2nd Argument.** Fairchild presents another argument that does not use (DA) and that only uses the principles of simple hylomorphism. Suppose there are two objects  $a$  and  $b$ , such that  $a \neq b$ , and three properties  $F$ ,  $G$  and  $H$  such that  $F$  is had by only  $a$ ,  $G$  is had by only  $a$  and  $b$  and  $H$  is had by only  $b$ .

We can now reason as follows. Given Existence, the objects  $a/F$  and  $a/G$  exist and, by Uniqueness,  $a/F \neq a/G$ . We now have two possibilities; either  $a = a/F$  or  $a \neq a/F$ :

- (i) If  $a \neq a/F$ , then  $\neg F(a/F)$  (for  $F$  is had by only  $a$ ) and, hence,  $N(a/F)$ .
- (ii) If  $a = a/F$ , then  $a \neq a/G$  (for, as we said,  $a/F \neq a/G$ ) and we have, in turn, two further possibilities; either  $b = a/G$  or  $b \neq a/G$ :
  - (a) If  $b \neq a/G$ , then  $\neg G(a/G)$  (for  $G$  is had by only  $a$  and  $b$ ) and, hence,  $N(a/G)$ .
  - (b) Suppose, finally, that  $b = a/G$ . By Existence, we have that the object  $b/H$  exists and, by Uniqueness, we have that  $b/H \neq a/G$ . Given that  $b = a/G$ , it follows that  $b \neq b/H$  and, hence,  $N(b/H)$  (for  $H$  is had by only  $b$ ).

### 3 Having Properties (Non-)Derivatively

In order to see why Fairchild's arguments for (E) are not correct, we need to consider a distinction that is typically endorsed by hylomorphists.

Hylomorphist theories, given their acceptance of distinct colocated objects, typically endorse a distinction between having a property in a derivative way and having a property in a non-derivative way. The precise understanding of this distinction and the terminology used can vary significantly across different accounts.<sup>5</sup> However, for our purposes here, the specific details of how the distinction is formulated by different accounts are irrelevant. What is relevant is the reason why the distinction is made in the first place. Consider a statue

<sup>5</sup>As a matter of fact, some prominent accounts of this distinction are from authors who would not see themselves as hylomorphists, such as Lynne Rudder Baker. This does not mean, of course, that these accounts cannot be adopted by hylomorphist theories. For different approaches (some of which are only partial) regarding the distinction between instantiating a property derivatively and instantiating a property non-derivatively (though these specific terms may not always be used) see, for example, Fine (1982), Baker (2000, 2007), Koslicki (2004), and Yablo (2004).

made out of a portion of clay.<sup>6</sup> Let us further suppose that the portion of clay weighs 10 kg. In this case, we have the intuition that the statue also weighs 10 kg. However, the portion of clay and the statue together do not weigh 20 kg. This apparently absurd situation is typically explained in the following terms: the portion of clay has the property *weighing 10 kg* in a non-derivative way, but the statue has the same property in a derivative way. This distinction helps us understand why we have the intuition that the statue also weighs 10 kg. Roughly speaking, but sufficient for the purposes of this discussion, we can say that the fact that the statue weighs 10 kg in a derivative way means that the portion of clay instantiates the property *weighing 10 kg* in a non-derivative way, and additionally, the portion of clay *constitutes* the statue.<sup>7</sup> The exact analysis of this notion varies significantly in the various accounts found in the literature. Here we follow Fine (1982), who claims that qua-objects are constituted by their bases; thus, for instance, the qua-object that is the statue is constituted by its base, which is the portion of clay.<sup>8,9</sup>

The distinction between non-derivative and derivative ways of having a property can be used to show that Fairchild's arguments in favor of (E) are not correct. To be clear, in this paper we will use this typically accepted distinction among hylomorphists to show that Fairchild's arguments are unsound or, at best, they just highlight a well-known problem within hylomorphism, which is usually solved with the help of the distinction. We are not advocating for the

<sup>6</sup>Throughout the paper, we use 'piece of clay'/'lump of clay' and 'portion of clay' as Gibbard (1975, pages 188–9) proposes to use them in the following passage:

Take first the piece of clay. Here I do not mean the portion of clay of which the piece consists, which may go on existing after the piece has been broken up or merged with other pieces. I shall call this clay of which the piece consists a *portion* of clay; a portion of clay, as I am using the term, can be scattered widely and continue to exist. Here I am asking about a *piece* or *lump* of clay.

A lump sticks together: its parts stick to each other, directly or through other parts, and no part of the lump sticks to any portion of clay which is not part of the lump.

Thanks to an anonymous referee for prompting this clarification.

<sup>7</sup>It is worth noting that there may be another use of '*having a property derivatively*', which we'll refer to as '*derivatively\**', which is not relevant to the present debate and needs to be clearly distinguished from the one that is pertinent to our purposes. It is the following, in terms of an example: A portion of marble is massive in virtue of its proper parts being massive. In this case, we might say that the portion of marble has the property *being massive* derivatively\*. However, this is not our intended use of *having a property derivatively*. For, in this latter case, the relation between the portion of marble and its proper parts is *not* the constitution relation *but* the composition relation. The constitution relation, as we explain in the main text, is a relation between an object and its base, whereas the composition relation is a relation between one object and its several proper parts. Now, for an object that stands in the composition relation to its proper parts, the following principle might seem plausible: if *x* has *P* derivatively\*, then *x* has *P* non-derivatively\*. Indeed, in the example of the portion of marble above, we want to say that the portion of marble has the property *being massive* non-derivatively\*. However, for the case relevant to the present discussion, this principle is not plausible. Referring back to the example in the main text, if the fact that the statue weighs 10 kg derivatively implied that it weighs 10 kg non-derivatively, then placing the statue (and so the portion of clay) on a scale should yield a reading of 20 kg, not 10 kg as it actually does. Thanks to an anonymous referee for prompting this clarification.

<sup>8</sup>For some different accounts of the constitution relation, see, for example, Fine (1982), Baker (2000, 2007), Koslicki (2004, 2008), Campdelacreu (2015) and Saenz (2015).

<sup>9</sup>For the sake of clarity, in all the examples we use in which an object *b* has a certain property derivatively because its base, call it '*a*', has the property, we will assume that *a* has the property non-derivatively (and not, for example, that *a*'s base, call it '*c*', has it non-derivatively, so that *a* and *b* both have it derivatively).

distinction and we leave the assessment of its merits and drawbacks to future research.

Notice that Fairchild assumes that there is only one way of having a property, which is why it seems reasonable to claim that Michael/*being-God's-favorite-angel* does not have the property *being God's favorite angel* (as Michael does). However, as we have just shown, hylomorphist frameworks typically acknowledge the two aforementioned ways of having a property. As we will argue next, this makes it reasonable to claim that Michael/*being-God's-favorite-angel* has the property *being God's favorite angel*, albeit in a derivative way, so that  $\neg N(\text{Michael}/\textit{being-God's-favorite-angel})$ . Furthermore, as we will see, hylomorphism has the resources to explain our ordinary intuition that there is just one God's favorite angel.

Consider the following toy argument:<sup>10</sup>

Suppose the portion of clay in our case example, let us call it '*a*', weighs 10 kg. Let us consider, next, the property *weighing 10 kg* and the qua-object *a/weighing-10-kg*, which, given Existence, exists. Now, let us reason by *reductio* in the following manner: suppose that the qua-object *a/weighing-10-kg* has the property *weighing 10 kg*. In this case, we would have two objects (*a* and *a/weighing-10-kg*, which are different, given Uniqueness), both weighing 10 kg. Therefore, the combined weight of these objects would be 20 kg, which is absurd. Hence, since *a* weighs 10 kg, *a/weighing-10-kg* cannot have the property *weighing 10 kg*; to wit,  $N(a/\textit{weighing-10-kg})$ .

The argument is incorrect because there is an alternative way out of the absurdity; namely, that *a/weighing-10-kg* weighs 10kg derivatively and, consequently, *a* and *a/weighing-10-kg* do not together weigh 20 kg.<sup>11</sup>

Note, firstly, that the aforementioned argument can also be applied to qualitative properties, such as *being brown*. In this case, we suppose that *a* is brown, and we consider the qua-object *a/being-brown*, whose existence is again guaranteed by Existence. Then, reasoning by *reductio* again, we suppose that *a/being-brown* is brown. That means that when we consider *a* and *a/being-brown* together, we have two different instantiations of the property *being brown* in the same sense as we have two instantiations of *being brown* in a situation where we have two different brown boxes in different locations. This, as before, seems absurd. Although the absurdity achieved in this case is more subtle than in the previous case, it is equally troubling. Finally, since it is the clay that is brown and, to avoid absurdity, we must have only one instantiation of *being brown* in the same location at the same time, we seem compelled to conclude that the object *a/being-brown* is not brown; thus, again,  $N(a/\textit{being-brown})$ . As before, the argument is incorrect because there exists an alternative way out of the absurdity; namely, that *a/being-brown* is brown derivatively; that is to say, *a* instantiates *being brown* non-derivatively and *a* constitutes *a/being-brown*.

Secondly, let us now consider the same argument as before, but with the property *being the only object that weighs 10 kg*—so that we conclude  $N(a/\textit{being-}$

<sup>10</sup>We are not claiming, of course, that Fairchild would accept this argument, but we will argue that this argument fails for reasons analogous to the ones that cause the failure of her arguments.

<sup>11</sup>Our toy argument is based on a recurring example found in the literature (see, for instance, the case as it is introduced at Koslicki 2004, pp. 335-6, and subsequently discussed throughout her paper).

*the-only-object-that-weighs-10-kg*). In this case, we must question whether the argument changes in any significant manner. We think that nothing essential hinges on considering the property *being the only object that weighs 10 kg* instead of the property *weighing 10 kg* and, consequently, that the argument is unsound for the same reason as before; that is, *a/being-the-only-object-that-weighs-10-kg* has the property *being the only object that weighs 10 kg* in a derivative way. At this point, it could be objected that, unlike in previous cases, our solution may not respect the ordinary intuition that there is only one object that is the only object weighing 10 kg. To see how the hylomorphist distinction between instantiating a property derivatively and instantiating a property non-derivatively can equally account for this ordinary intuition, consider the next ordinary case. Suppose Alice is flying to London in seat 38B. In this case, Alice's body is also flying in seat 38B. In cases like these, hylomorphists would claim that, in fact, Alice has the property *occupying seat 38B* in a derivative way, while Alice's body has the same property in a non-derivative way.<sup>12</sup> Accordingly, Alice has the property *being the occupant of seat 38B* in a derivative way because she is constituted by her body, which has the property *being the occupant of seat 38B* in a non-derivative way. This is how hylomorphism provides an explanation for our ordinary talk about *the* occupant of seat 38B, as only one of the colocated objects has the property *being the occupant of seat 38B* non-derivatively.

These two last cases (*being the only object that weighs 10 kg* and *being the occupant of seat 38B*) are analogous in the sense that both involve properties that, apparently, cannot be had by more than one object. Hylomorphists share the intuition that these properties cannot be had by more than one object. However, they argue that this intuition is explained by the fact that only one object instantiates the property in a non-derivative way.

Finally, returning to Fairchild's example, note that the property *being God's favorite angel* is of the same kind as the properties *being the only object that weighs 10 kg* or *being the occupant of seat 38B*. Thus, our intuition that the property *being God's favorite angel* cannot be instantiated by more than one object is explained, as before, by the fact that there is just one object (namely, Michael) that instantiates *being God's favorite angel* in a non-derivative way, while other objects might have this property in a derivative way, such as Michael/*being-God's-favorite-angel*. Consequently,  $\neg N(\text{Michael}/\text{being-God's-favorite-angel})$ .<sup>13</sup>

<sup>12</sup>See, for example, the discussion in Baker (2000, pp. 46ff.)

<sup>13</sup>At this point, the following objections might be raised. When considering the distinction between instantiating properties derivatively and instantiating properties non-derivatively, one might try to reproduce Fairchild's argument by slightly changing our understanding of *N*. Under this new understanding (let us call it *N'*), *N'(x)* (non-derivatively) if, and only if, there is a property *F* such that *x* embodies *F* and it is not the case that *x* instantiates the property *F* in a non-derivative way. In this case, one might defend that Michael/*being-God's-favorite-angel* is *N'*, as it embodies the property *being God's favorite angel* and it is not the case that it instantiates the property *being God's favorite angel* in a non-derivative way (for only Michael does). However, this is not the case. The distinction between derivative and non-derivative ways of instantiating a property also applies to the more complex properties of the type *instantiating the property being God's favorite angel in a (non-)derivative way*. Consequently, Michael/*God's-favorite-angel* does instantiate the property *instantiating the property being God's favorite angel in a non-derivative way*, albeit in a derivative way. Therefore, for reasons analogous to the failure of the original argument, it follows that  $\neg N'(\text{Michael}/\text{being-God's-favorite-angel})$ . Another objection, closely related, might run along the following lines. Consider the property *being God's favorite angel in a non-derivative way* and the qua-object Michael/*being-God's-favorite-angel-in-a-non-derivative-way*. It might be argued that this qua-object embodies a property that it does not instantiate, as only Michael is God's favorite angel in a non-derivative way. However, once again, this is not the case. Michael/*being-God's-favorite-*

We can argue analogously against the 2nd Argument. From the fact that  $a \neq a/F$  does not follow, pending further considerations, that  $\neg F(a/F)$ , for  $a/F$  could have the property  $F$  in a derivative way. Moreover, it would still be the case that only  $a$  is  $F$  in a non-derivative way, so that the intuition that there is just one object that is  $F$  would also be vindicated (and analogously for  $a/G$  and  $b/H$  in clauses (ii)-(a) and (ii)-(b) respectively).

To sum up, the problem with the arguments above (and with Fairchild's arguments) is that they equivocate between the notions of having a property in a derivative way and having a property in a non-derivative way. Furthermore, we have shown that this distinction aids in explaining our ordinary intuitions concerning properties that, apparently, can be had by just one object.

Finally, it is important to note that at the core of all these arguments (our toy arguments and Fairchild's) lies the problem that prompted hylomorphists to introduce the distinction between derivative and non-derivative ways of having a property. Hence, either Fairchild's argument is unsound (at least from the perspective of the hylomorphist theorist) or, at best, it just highlights a well-known problem of the hylomorphist theories, which is usually resolved through the distinction between derivative and non-derivative properties.

## 4 Final Remarks

### 4.1 Against Uniqueness

So far, we have seen that Fairchild's arguments fail because they do not take into account the distinction between instantiating a property in a non-derivative way and instantiating a property in a derivative way. This does not mean, of course, that simple hylomorphism, as presented in her paper, is a correct theory (or a consistent one, for that matter). One might use the following argument to show that this is not so. Consider a particular  $H_2O$  molecule, call it ' $a$ ', the property *being identical to  $a$* , call it ' $F$ ', and the property *containing hydrogen*, call it ' $G$ '. Note that both  $F$  and  $G$  are properties essential to  $a$ . Then, following Fairchild, there is no reason to suppose that  $a/F$  and  $a/G$  (which exist, by Existence) are different objects; as she says, they do not even differ in their modal properties (see **1st Argument** in Section 2). In fact, she acknowledges the plausibility of asserting that  $a = a/F = a/G$ . However, If we identify  $a/F$  and  $a/G$  we have an immediate counterexample to Uniqueness: according to this principle, and given that  $a/F = a/G$ ,  $F$  and  $G$  should be the same property, but they are not. Therefore, according to this line of thought, simple hylomorphism, as characterized by Existence and Uniqueness is, after all, a false theory.

As far as we can see, a response to this argument worth exploring could be to restrict Uniqueness to contingent properties. However, a response of this kind should be examined more carefully, which goes beyond the scope of our objectives in this paper.<sup>14</sup>

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*angel-in-a-non-derivative-way* has the property *being God's favorite angel in a non-derivative way* in a derivative way. Hence, it is not the case that it embodies a property that it does not instantiate; to wit,  $\neg N(\text{Michael}/\text{being-God's-favorite-angel-in-a-non-derivative-way})$ .

<sup>14</sup>In fact, Fairchild herself considers a weakening of Uniqueness that she claims would allow her argument to succeed, which she calls Extension (p. 38):



## 4.2 Essential and Contingent Properties

Another issue that we would like to briefly discuss concerns the possibility of an object  $a$  and a property  $F$  such that  $a$  is  $F$  non-derivatively and  $a/F$  instantiates  $F$  in a way that is somehow problematic for our analysis. We will now examine what we take to be all the relevant cases to demonstrate that this is not the case.

First, we can consider an object  $a$  and a property  $F$  such that  $a$  is necessarily  $F$  and  $a$  instantiates  $F$  in a non-derivative way ( $F$  can be a property necessarily had by any object, such as *being self-identical*, or it can be an essential property of  $a$  not necessarily had by other objects, such as *being a statue*). As we mentioned in the previous subsection, following Fairchild's insight, it seems reasonable to claim that the object  $a/F$  instantiates  $F$  in a non-derivative way as well, as there is no reason to suppose that  $a$  and  $a/F$  are different objects. Henceforth, such cases do not pose any challenges to our proposal.<sup>15</sup>

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**Extension.** For any  $F$  and  $G$ , if  $a/F = b/G$ , then for all  $c$ ,  $Fc$  if, and only if,  $Gc$ .

Note, though, that the counterexample to Uniqueness we just mentioned in the main text is also a counterexample to Extension and that, consequently, the latter is also too strong.

<sup>15</sup>Robertson Ishii and Salmón (2019, fn. 8) present what they consider to be a 'simple alternative' argument in favor of (E), even if, as they admit, the argument relies on a presupposition that is not generally accepted by hylomorphists; namely, the existence of non-qua-objects (see, for example, Sosa 1999). It should be noted that non-qua-objects, being the simplest objects at the bottom of reality, must be simpler than the simplest particles discovered by scientists, which are usually considered by hylomorphists as having matter and form. The argument proposed by Robertson Ishii and Salmón is the following one. Suppose  $o$  is a non-qua-object. Then, the qua-object *o/being-a-non-qua-object* apparently embodies a property that it does not instantiate. However, even if we grant the existence of non-qua-objects, this argument is not correct. The reason is that *o/being-a-non-qua-object* falls within the category we were just discussing in the main text; to wit, *o/being-a-non-qua-object* is the same object as  $o$ . This is so because this non-qua-object will have the property *being a non-qua-object* essentially, probably exhausting its nature (given that qua-objects are arguably essentially qua-objects, if a non-qua-object in the actual world were a qua-object in another possible world, then it would be essentially so in this possible world and, hence, a qua-object in the actual world. Contradiction.) Hence, as previously stated in the main text, and following Fairchild, there does not seem to be a basis for claiming that *o/being-a-non-qua-object* and  $o$  are different objects. Furthermore, note that, even if our analysis of this case were mistaken and, hence, *o/being-a-non-qua-object* and  $o$  were different objects, *o/being-a-non-qua-object* would not embody a property that it does not instantiate, because *o/being-a-non-qua-object* would have the property *being a non-qua-object* derivatively. An anonymous referee has brought to our attention an intriguing consequence of this discussion. The possibility we just considered implies that *o/being-a-non-qua-object* has the property *being a non-qua-object* derivatively and, at the same time, it has the property *being a qua-object* non-derivatively, which strikes them as a contradiction. There are at least three points that can be raised in response to this point. First, this last line of argument can be seen as further undermining the coherence of non-qua-objects (pace Ishii and Salmón). Second, in line with Baker (2000, 2007), a proponent of the distinction derivative/non-derivative could claim the following. As she claims, a statue constituted by a portion of clay is a statue non-derivatively and it cannot also be a portion of clay non-derivatively (in this case, this is so because hylomorphists argue that these are sortal properties and, as such, when an object has them non-derivatively they determine properties of their modal profile, such as *being able to survive being squashed* and *not being able to survive being squashed*). So, if the statue were a statue non-derivatively and also a portion of clay non-derivatively, it would instantiate the property *being able to survive being squashed* non-derivatively and *not being able to survive being squashed* non-derivatively. However, according to Baker, the statue is a statue non-derivatively and a portion of clay derivatively, and no contradiction follows from this. Similarly, a proponent of the distinction derivative/non-derivative could argue that no object can be a non-qua-object non-derivatively and a qua-object non-derivatively, on pain of contradiction. However, an object can be a qua-object non-derivatively and a non-qua-object derivatively, and no contradiction follows from this. To wit, it is by no means obvious that a contradiction follows from the fact that an object has a certain property non-derivatively and the negation of the property derivatively (this would indeed be the case if having a property derivatively implied having it non-derivatively, which, as we have

Second, let us consider cases where  $a$  has the property  $F$  contingently like, for example, properties concerning weight, color, height, etc.; or role properties, like *being the president of the United States*, etc. Under these circumstances,  $a/F$  will typically instantiate  $F$  in a derivative way. Furthermore, we have already seen how the intuition regarding properties that, apparently, can be had by at most one object can be explained by hylomorphist theories. Hence, none of these cases pose any difficulties for our analysis.

Third, suppose  $F$  is a property that is necessarily sufficient for being identical to an object  $a$  without being essential to  $a$ —like, for example, the property *being identical to  $a$  and being green* (where  $a$  is green). One might think that properties of this kind could rehabilitate Fairchild’s arguments. For example, suppose  $F$  is the property *being identical to  $a$  and being green*,  $G$  is the disjunctive property *being identical to  $a$  and being green, or, being identical to  $b$  and being brown*, and  $H$  is the property *being identical to  $b$  and being brown* (where  $b$  is brown). Then, Fairchild’s **2nd Argument** (see Section 2) could be employed to conclude that there is an object that instantiates  $N$ . However, this argument would not be correct for the same reasons we previously stated in regard to the original argument. It does not take into account the distinction between instantiating a property in a non-derivative way and instantiating a property in a derivative way; indeed, properties like  $G$ ,  $F$  and  $H$  can be instantiated derivatively. At this point, it is important to see that, according to our understanding of derivative and non-derivative instantiation, having a conjunctive property derivatively does not imply having each conjunct derivatively. For instance, instantiating the property *being identical to  $a$  and being green* in a derivative way does not imply instantiating the property *being identical to  $a$*  in a derivative way and instantiating the property *being green* in a derivative way. If this were the case, then  $a$  would instantiate the property *being identical to  $a$*  in a derivative way, which we have claimed to be impossible. Note that this behavior is not specific to our understanding of having a property derivatively; for example, instantiating the property *being the unique  $F$  and  $G$*  clearly does not imply instantiating the property *being the unique  $F$*  and instantiating the property *being the unique  $G$* .

Finally, note that we leave open the possibility of properties that can be non-derivatively instantiated by two different collocated objects. We think that this might be the case, for example, with properties like *existing at  $t_n$* . However, we do not see any compelling reasons why examples of this nature should present any challenges to our proposal.

Therefore, we conclude that no problematic cases of pairs of objects and properties can be identified that would threaten our analysis and explanation

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claimed in fn. 7, is false). Third, even if, in the worst-case scenario, we were compelled to accept an outright contradiction, we could still invoke the following alternative. Throughout the history of philosophy, a number of authors have defended the idea that objects can instantiate a property and its negation. In fact, in recent decades, this philosophical viewpoint, commonly referred to as *dialetheism*, has experienced a resurgence, primarily through the work of Graham Priest. (For some presentations and defenses of dialetheism see, for instance, Priest, Routley, and Norman 1989 and Priest 2006; for some criticisms see, for instance, Parsons 1990 and Oms and Zardini 2021; for a general overview, see Priest, Berto, and Weber 2018).

for why Fairchild's arguments ultimately fail.<sup>16,17</sup>

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<sup>16</sup>An anonymous referee has raised the following observation. Although Fairchild acknowledges that the argument she presents is 'Russellian' (p. 33), the structure of her argument can be best captured by the structure of the so called 'Russell-Myhill Paradox' (also known as 'The Appendix B Paradox'), which, as a matter of fact, can be replicated in other theories as well. Thus, for example, within the Structured Proposition Theory (SPT), the property *S* of *being a proposition that predicates a property that the proposition itself lacks* will easily lead to a contradiction (consider, for example, the proposition  $\langle\langle$ Socrates is married $\rangle, S \rangle$ , and note that this proposition instantiates *S* if, and only if, it does not). But, they continue, our diagnosis of Fairchild's arguments has no plausibility in the case of SPT. If this is so, then, they claim, the fact that two paradoxes that share the same structure have different solutions is an unwelcome outcome of our proposal. We think this is an interesting point, and although it goes far beyond the scope of this paper, we would like to offer some tentative thoughts. Note, first, that the referee seems to assume that having the same underlying structure implies being paradoxes of the same kind, which, in turn, implies requiring the same kind of solution. However, these claims are not without controversy (for some discussion, see, for instance, Priest 1994, p. 32; Priest 1995, p. 166; Smith 2000; and Oms 2019). Be that as it may, even supposing that something along these lines is the case and that, accordingly, if two paradoxes share their structure, they should receive the same kind of solution, we think there might be at least two ways to resist the referee's criticism. First, even granting that Fairchild's argument and the paradox of SPT just mentioned share the same structure and that, in consequence, they should receive the same kind of solution, it is not clear what is meant by 'having the same kind of solution'. Drawing on Chihara's (1979) distinction between the *diagnosis of a paradox* (that is, pointing at whatever is causing its paradoxical character) and the *treatment of a paradox* (the theoretical framework used to block it) one of us has argued in Oms (2019) that, given the appropriate level of abstraction (to wit; that the type of a paradox is given by the root of its paradoxicality; see Smith 2000 and Priest 2000), being the same kind of solution is compatible with blocking the paradoxes using different theoretical frameworks; that is, using different treatments. If this were the case, it would not be surprising that Fairchild's paradox could be solved by appealing to the distinction between instantiating a property derivatively and instantiating a property non-derivatively, while the SPT paradox we just mentioned could not. Second, note that our analysis of the failure of Fairchild's arguments might be taken to suggest that the root causing the alleged inconsistency of simple hylomorphism is not the structure of her arguments but the failure to recognize the distinction between instantiating a property derivatively and instantiating a property non-derivatively. If this is the case, what we have shown is not only that Fairchild's arguments for (E) are not correct, but also that the 'Russellian' self-referential structure of her arguments is not the root of its paradoxical character. Consequently, if we accept that the type of a paradox is determined by the root of its paradoxicality, Fairchild's arguments may not truly constitute a 'Russellian' (or 'Russell-Myhill') paradox after all.

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