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Émilie Du Châtelet's Theory of Simple Beings

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Abstract

The first part of this paper investigates the purpose, methodological approach, and fundamental thesis of Du Châtelet's theory of simple beings. The paper shows that 'simple beings' in Du Châtelet is a theory concerned with the understanding of extended bodies. The second part of the paper shows that her theory of simple beings, while it has important roots in both Leibniz and Wolff, is remarkably different from theirs. Thus, contrary to a common thread in the literature, Du Châtelet's theory of simple beings does not commit her to an ontology that can be equated with that of Leibniz or Wolff. Instead, her theory of simple beings is faculty-centred and draws a fundamental and novel distinction between the phenomenal realm of the senses and 'real' substances, which can only be grasped through the understanding.

Keywords

simple beings – monads – Du Châtelet – Leibniz – Wolff – substance

The present paper is divided into two parts. The first and main part investigates the purpose, methodological approach, and fundamental thesis of Du Châtelet's theory of simple beings in the *Institutions physiques*. The second part compares Du Châtelet's theory of simple beings with those of Leibniz and Wolff and points out that Du Châtelet's theory of simple beings does not commit her to an ontology that is in any way equivalent to Leibniz's or Wolff's. Du Châtelet's theory of simple beings is uniquely faculty-centred and draws a primary distinction between the phenomenal realm of the senses

and ‘real’ substances, which can only be conceived of and determined by the understanding.¹

What is a ‘simple being’? The answer to this question is, in the first instance, not at all obvious. We cannot see simple beings like a ‘chair’, a ‘human being’, or ‘red’, and we cannot refer to examples of simple beings as we can with numbers, e.g. ‘two chairs’. If we wish to find out what simple beings are in Du Châtelet there is only one way to achieve this: we must uncover what simple beings are a theory for. The overtly necessary enquiry into what ‘simple beings’ are, and the intriguing theory it reveals, was neglected at the outset of contemporary Du Châtelet scholarship in the 1960s to 1980s.² This is because the theme of ‘simple beings’ in the *Institutions physiques* was approached from the pre-assumed notion that ‘simple beings’ is not a theory of her own. I call this line of interpretation the thorn in the heel of Du Châtelet scholarship. The thorn is the thesis, most prominently propounded by Gardiner Janik, that Du Châtelet essentially ‘adopts’ the concept of simple beings by assimilating Leibniz’s and Wolff’s ontology, specifically with the purpose of grounding Newton’s physics. Gardiner Janik’s (1982, 103) idea in this thesis is that “we cannot attribute any original metaphysical doctrines to mme Du Châtelet,” and that Du Châtelet, in order to establish a fundament for Newton’s physical theories, simply developed a confused and partly misunderstood³ conflation of Leibniz’s and Wolff’s metaphysics, which lacks any original content of her own.⁴ The result of Gardiner Janik’s interpretation is an oversimplified account of Du Châtelet’s so-called world picture, in which Leibniz-Wolffian simple beings form one tier, material atoms another, and visible objects a third tier:

Having established a role for the principle of sufficient reason, mme Du Châtelet proceeds to explain its connection to Wolffian ontology (which

1 Du Châtelet uses the term ‘concevoir’ and ‘conception’, cp. §120: “l’Entendement seul peut les [êtres simples] concevoir”. Concevoir is conceive of or conceive in English.

2 Brading (2019, 58ff), Detlefsen (2019), Stan (2018), and Hagengruber (2022) have addressed this issue within the context of their respective investigations.

3 Gardiner Janik (1982, 102): “Mme Du Châtelet’s sudden and complete adoption of central doctrines of Leibniz and Wolff (including those she did not fully understand, like the identity of indiscernibles or the pre-established harmony) in the 1739 rewriting of the *Institutions* can be explained only on the supposition that she had recognised how imprecise and vague was the connection supposedly linking the methodological and philosophical topics discussed in the first half, and the specific theories of physics expounded in the second half, of her book.”

4 Gardiner Janik (1982, 107): “Even though her grasp of the detail of Leibniz’ and Wolff’s theories was still elementary, she realised, I think, that by reconciling them with Newtonian science she could find a way out of a paradox which was soon to become apparent to other philosophers as well.”

she mistakenly equated with that of Leibniz). [...] In consequence, she adopts the absolute distinction between non-extended 'êtres simples'—unobservable but truly real substances—and material atoms—the convenient fictions (êtres composés) which figure in mechanistic accounts of observable (and hence equally fictional) phenomena. Consequently, she replaces the 'two-tier' world picture of Newton, composed of atoms and their normally visible aggregates, with a 'three-tier' picture, in which atoms themselves are material extended aggregates of 'êtres simples', and normally visible objects simply larger, more complex aggregates yet.

GARDINER JANIK 1982, 106

My claim is *not* that everything in the above quote is wrong: Du Châtelet was certainly influenced by both Leibniz and Wolff in her theory of simple beings, and her simple beings are indeed fundamental to her understanding of atoms (should they exist), just as they are to other everyday visible objects. But the crucial questions, which are not addressed here, are (1) what Du Châtelet wishes to resolve by appealing to simple beings; (2) how she 'arrives' at simple beings, i.e., what the reasons were that led her to simple beings; and (3) in what way her theory of simple beings is embedded in her metaphysical framework. By investigating these questions, we will see that Du Châtelet has an entirely autonomous theory of simple beings, which is not in any way an unconscious amalgamation of Leibniz's and Wolff's theories.

There are two reasons for terming the view that Du Châtelet does not have a metaphysical doctrine of her own the thorn in the heel of Du Châtelet scholarship: (1) Gardiner Janik may be most explicit about this reading of Du Châtelet but she is certainly not the only scholar with this view. Many Du Châtelet scholars of her generation (e.g., Barber 1967, Iltis 1977) call for a similar categorization and approach to her metaphysics. (2) The account of Du Châtelet's 'worldview' with respect to simple beings as put forward by Gardiner Janik, and as a result of her interpretation of Du Châtelet's unoriginal metaphysical theory, continues to be influential. This is partly due to the fact that Gardiner Janik's contribution provided, when it first appeared, a detailed insight into the historical development of the *Institutions de Physique*, which was in many ways a trailblazing initiative in the newly emerging contemporary Du Châtelet scholarship. The uptake of Gardiner Janik's interpretation of Du Châtelet's worldview in more recent scholarship is for example evident in Detlefsen and Janiak (2013/2018, 17), terming Gardiner Janik's interpretation of Du Châtelet's 'three-tier' world picture "helpful" in their Stanford Encyclopaedia article on Du Châtelet and the fact that Detlefsen calls this picture "generally true" in her 2019 paper. Similarly, Lascano (2011, 247) describes Gardiner

Janik's study an "excellent overview of the structure of, and influences on, the *Institutions*." Neither Lascano nor Janiak and Detlefsen, of course, suggest that Du Châtelet does not have any original metaphysical doctrines – what they take up is simply the result of the "three-tier" world picture and the idea of a fusion of Leibniz-Wolffian metaphysics with Newtonian physics. There are also several more tacit affirmations of Gardiner Janik's interpretation, which skip Du Châtelet's earlier metaphysical theory in chapters 1–6 of the *Institutions physiques* and view begin her 'metaphysics' with an isolated focus on her theory of simple beings, which is introduced in chapter 7;⁵ alternatively, they assume (also partly on the basis of Du Châtelet's own identification of her simple beings with Leibnizian monads) that Du Châtelet's simple beings are equivalent to Leibnizian monads and/or Wolffian simples (cf., e.g., Jacobs [2020]; Sloan [2019]).

In order to investigate Du Châtelet's theory of simple beings in its own right, we will investigate Du Châtelet's theory itself and then, in a second step, examine the similarities and differences between Du Châtelet and Leibniz and Wolff.

1 Du Châtelet's Theory of Simple Beings

1.1 *What is the Theory of Simple Beings in Du Châtelet a Theory for?*

Simple beings are introduced in chapter 7 of the *Institutions physiques*⁶ to provide an answer to the question of the sufficient reason for matter or extension.⁷ I will quote the passage in extenso because of its relevance for understanding what simple beings are intended to explain:

All bodies are extended in length, width, and depth. Now, as nothing exists without a sufficient reason, it is necessary for this extension to have a sufficient reason that explains how and why it is possible; for, saying that there is extension, because there are small extended particles, comes to

5 This is evident in a general lack of dedicated studies which focus on chapter 3 of her *Institutions physiques*, where she gives a definition of the concepts "on which the most important metaphysical truths depend" (Inst1742, §32—note the difference from the 1740 edition), and the fact that there are very few dedicated studies on the principles of knowledge in chapter 1.

6 Chapters 1–6 do not mention simple beings at all, but they will become relevant for a proper contextual understanding of Du Châtelet's theory of simple beings.

7 Matter is not mentioned in the quote; cf. for matter Inst1740eZ, §119.

saying nothing, since the same question will be asked about these small extended particles as about extension itself, and the sufficient reason for their extension will be asked about in turn. Now, as sufficient reason obliges us to state that a thing is different from what one is asking about, since otherwise no sufficient reason is provided and the question always remains the same, if one wants to fulfill this principle about the origin of extension, it is necessary to come in the end to something that is without extension, that has no particles, to give a reason for that which is extended and has particles. Now, a being without extension and without particles is a simple being; so, compounds, extended beings, exist because there are simple beings.

Inst1740eB, §120

We can see here that simple beings are to provide us with an understanding of (1) the existence of extension; (2) the existence of extended particles; and (3) the existence of extended bodies. We must delve deeper into Du Châtelet's theory in order to understand in what sense the understanding of the existence of extension, of extended particles, and of extended bodies is tied together. However, we can already infer from this quote that Du Châtelet treats particles as a type of compound. Hence, there are really only two notions at play in the explanandum of simple beings: (1) extension; and (2) bodies or compounds. Furthermore, we will note that Du Châtelet does not pose two questions, one about extension and one about bodies, but instead one question: The theory of simple beings is a theory about why and how it is possible that extended bodies exist, and why and how they exist in the manner in which they exist (as individuated, having force, etc.).⁸ But how exactly are simple beings to serve as an explanans for why and how extended bodies are possible?

1.2 *The Existence of Extended Bodies and the Intelligibility of Extended Bodies*

Du Châtelet's argument for the existence of simple beings in chapter 7 is that there must be a sufficient reason for extended bodies based on the universal validity of the principle of sufficient reason (PSR)—a principle she had established in chapter 1 as a fundamental principle of knowledge. Her argument is based on two premises and is, in short:

⁸ Cf. also Brading (2019, 58ff), Detlefsen (2019), Hagengruber (2022), Jacobs (2020), and Stan (2018), who all see simple beings as being a theory about extended bodies; however, they differ in their interpretation of how this theory has to be understood.

Premise 1: All existing bodies are extended.

Premise 2: PSR. Everything that exists has a sufficient reason according to which an intelligent being can understand how and why it is possible for it to exist. (Inst1742, §8)

Conclusion step 1: There has to be a sufficient reason for the extension of bodies.

Conclusion step 2: The sufficient reason cannot be extension (because extension has no explanatory value for the constitution of extended beings).⁹

Conclusion step 3: The sufficient reason for the extension of bodies has to be something unextended.

Step 3 of Du Châtelet's conclusion might at first, quite obviously, seem counter-intuitive and thus deserves closer attention. The sufficient reason for a mountain, we might believe, lies in the rocks that constitute it. The sufficient reason for a forest, we might believe, lies in the trees that make up the forest. The argument that extended bodies can only be explained through something unextended, i.e., the argumentative step from something extended to something unextended, is not at all obvious. Some of Du Châtelet's immediate predecessors and contemporaries rejected this kind of argument,¹⁰ and Du Châtelet herself is very aware of this opposition. She defends her reasoning with the following—at first glance perhaps unsatisfactory—explanation:

In order to give sufficient reasons and ones that satisfy the questioner about the possibility of a watch, it would be necessary to come to things that were not watches, this is to say, to springs, to cogwheels, to pinions, to the chain, etc.

Inst1740eB, §120

The argument she presents here is that the reason for something cannot be the same thing that it is, as in 'this is a plant because it is a plant' or 'what makes

9 Cf. Inst1740eB, §129: "Now, as sufficient reason obliges us to state that a thing is different from what one is asking about [...]."

10 Cf. Andreas Ortmann's comment in a letter to Bernoulli I: "On vint aussi à parler de monades, que je ne connaissais presque que de nom. Cette conversation m'en donna une idée un peu plus claire, [...] et je goûtais beaucoup le raisonnement de quelqu'un de la compagnie: Les monades, disait-il, sont des substances simples, indivisibles en un mot immatérielles. Cependant dans le système leibnicien la matière n'est qu'un composé de plusieurs monades, n'est-il pas contradictoire que la simple union de substances immatérielles puisse produire la matière?" Ortmann refers to a discussion in which Du Châtelet was present. Lettre 524, COR, 288.

it a watch is that it is a watch'. This is because there is no added explanatory value in these statements: the reason given does not make intelligible how and why something is the way it is. Hence, it is not a reason at all, according to Du Châtelet. Yet her example, we might be tempted to believe, leads to the opposite of what she wishes to establish: If watches can be explained through reference to springs and cogwheels, can extended bodies not be explained through reference to the smallest particles of matter? 'No' is Du Châtelet's answer, but why?

Du Châtelet is seeking a ground or sufficient reason that makes bodies, in the way they exist, understandable. She writes:

The question is not why extension exists, but how and why it is possible. Now, we saw above that the will of God is the source of the actuality, but not of the possibility of things. So, it cannot be resorted to in order to explain the possibility of extension.¹¹

Du Châtelet wishes to draw a distinction here between the question of 'why extension exists' and the question of 'how and why extension is possible'. She is only posing the latter question; that is, she wishes to explain the intelligibility of extended bodies, i.e., how and why they can or are to be comprehended. Thus, Du Châtelet makes clear that the explanandum in question is not why extended bodies exist, i.e., she is not seeking the source of the creation of extended matter or of actual beings, or why the corporeal world as a whole exists (which according to her cannot be understood and can only be explained through reference to God's will), but instead what makes extended bodies

¹¹ In chapter 5, Du Châtelet discusses how we arrive at the notion of extension in our representation if we represent several different things as one. She writes: "It follows from this that we cannot represent to ourselves several different things as being one, without this resulting in a notion that is attached to this diversity and to this union of things, and this notion we call Extension. [...] Since we represent to ourselves in extension several things that exist external to one another and are one through their union, all extension has parts that exist external to one another and are one; and once we represent to ourselves parts both diverse and unified we have the idea of an extended Being" (Inst1740eB, §77). It is important to note that the 'existence of extension' addressed in chapter 7 targets extended bodies, which are the substratum for the ideal beings of space and time. The 'existence of extension' in chapter 7 is to be differentiated from the 'notion of extension' in chapter 5 and a 'real extended being' is to be differentiated from the 'idea of an extended being': to Du Châtelet the abstract notions are (1) dependent on 'real beings' and (2) dependent on acts of the imagination and the understanding in the subject. The question that prompts the theory of simple beings in chapter 7 concerns the intelligibility of extended bodies, not how we arrive at a notion of extension in our representation.

intelligible. In so doing, she is explaining why something extended cannot render extension itself intelligible.

1.3 *Faculty-Centred: Simple Beings Are a Conception of the Understanding That Is to Render the Sensory Phenomenon of Extended Bodies Explicable*

We saw in section 1.1 that Du Châtelet establishes ‘simple beings’ as a sufficient reason for extended or compound beings on the basis of the PSR. Extended bodies for Du Châtelet are visible—they are phenomena of the senses (and in turn of the imagination).¹² Simple beings are to render this sensory phenomenon of the extension of bodies explicable through a conception that only corresponds to the understanding.¹³ She writes:

It must be confessed that this conclusion [the conclusion that extension of bodies can only be explained through unextended simples] astonishes the imagination, simple beings are not within its province, they cannot be represented by images, *and only the understanding can conceive [concevoir] them.*

Inst1740eZ, §120 (emphasis is mine)

Simple beings are a conception of the understanding, which is to render comprehensible how and why it is possible that extended bodies exist (and exist in the way that they exist).¹⁴ Du Châtelet’s determination of simple beings thus works with two premises:

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- 12 She writes: “[S]imple beings are completely different from compound beings, and they cannot be seen, touched, or represented in the imagination by any perceivable image” (Inst1740eB, §123).
- 13 Hagengruber (2022, 74) suggests that simple beings are “fictions” for Du Châtelet, because they play a specific role in making our understanding of extended beings explicable. I believe that fictions are related to the faculty of the imagination in Du Châtelet and that simple beings are better thought of as conceptions of the understanding based on the PSR. However, I agree with Hagengruber’s main point that simple beings play a role in making our understanding of extended beings explicable.
- 14 We might believe that ‘simple beings’ are essences, because Du Châtelet defines essential determinations as the ‘first determinations which make a being possible’ and ‘the first determinations which we perceive in a being’. However, she never refers to simple beings as essences—she calls them substances. A substance, according to Du Châtelet, is a substratum, which retains the essential determinations and the attributes, while the modes vary. Hence, simple beings cannot be understood as essences although they make ‘extension’ possible. This might be the case because her understanding of ‘essences’ concerns ‘beings’, while simple beings are only to explain why bodies, real beings, are *extended*.

1. We perceive phenomenal things about extended bodies through the senses and in the imagination, but these appearances are not explicable or understood without referring them to a conception of the understanding (this conception is simple beings).
2. We have to investigate extended bodies as they appear to us with 'the eyes of the understanding' and thereby uncover their intellectual sufficient reason.

Epistemically, the first premise is that we perceive appearances and can only on this premise ask for their sufficient reason. This sufficient reason is the conception of simple beings. When we determine 'simple beings', according to Du Châtelet's argument, we determine this conception of the understanding such that it in turn renders the attributes and properties of compound beings comprehensible to us. This reasoning leads us to a conclusion: we can only make sense of our understanding of appearances according to a substance that corresponds to the understanding if we assume that this substance is ontically primary (i.e., is the sufficient reason) for the phenomenal appearance.¹⁵ Thus, ontically, the second premise (the understanding, and simple beings as its conception) is 'the true reality' and the phenomenon of bodies is only an appearance of the senses, which cannot 'see' what can be 'perceived only by the understanding'. Du Châtelet's theory of simple beings is thus very explicitly an intellectualised theory about extended bodies: we can understand why and how compound beings exist in the way they do and are intelligible in the way they are only *because* their own origin lies in a conception of the understanding.¹⁶

Simple beings, as an idea that the understanding alone is capable of conceiving of, on the basis of the PSR, are in the end the only thing that is truly understandable and 'real' in compound beings, while their phenomenality and the 'objects that fall under our senses' are only (their) appearance. Du Châtelet writes (emphasis added):

15 By 'ontically' I mean that the substance must already be or exist for the phenomenal appearance to exist.

16 The 'understanding' is not an individuated faculty, but one that is the same in every intelligent human being. God has created the world with understanding. We can understand the world because it is understandable. We have to read Du Châtelet in the context of the Early Modern tradition, in which the Antiquity's conception of a logos was much more present than in contemporary 'mind' conceptions. However, insofar as every human being is 'intelligent', they all share the faculty of understanding, i.e., they are a subject.

[E]xtension must *seem* to us a Substance, for we see that it endures, and that it can be modified (§52). *But if we examine this idea with the eyes of Understanding* [les yeux de l'Entendement], we will be obliged to recognize that it is nothing but a Phenomenon, an abstraction of several real things, by the confusion of which we form for ourselves this idea of extension; it is from this confusion that arise almost all the objects that fall under our senses, and of which the realities are often infinitely different from the appearances (§53). Thus, if we could see distinctly [si nous pouvions voir distinctement] all that composes extension, this appearance of extension that falls under our senses would disappear, and our Soul would perceive only Simple Beings existing each external to the others, in the same way that if we distinguish all the small portions of matter differently moved, that compose a portrait, this portrait that is only a Phenomenon would disappear for us.

Inst1740eB, §134

Her expression “if we could see distinctly all that composes extension” is here quite clearly not meant in a sensory or imaginative sense of ‘seeing’ (for it is contrasted with that which falls under our senses).¹⁷ For the human being, simple beings, the only true substances, correspond to our understanding and not to our pictorial faculties. We cannot ‘perceive’ the true realities—we can only understand them.

The question, which is often posed in the literature, of how simple beings bring about extended bodies in the way we perceive and experience them in their phenomenality is, on this basis, resolved.¹⁸ The sensory perception of extended bodies is taken as a premise in Du Châtelet’s epistemic derivation of simple beings. She is then, as a result of her epistemic investigation into extended bodies, led to the ontic claim that simple beings are the true, real sufficient reason for the phenomena we see—a sufficient reason which only the understanding can conceive of. The fact that we do not see or perceive simple beings and with them the true realities (as God would) is due to the nature of our sensory faculties, and this is the source of the ‘confusion’ in our perception. The confusion in what we see, i.e., that we see the phenomena of extended bodies and not simple beings, thus does not ‘arise’ through the simple beings. Bodies, in the way they are sensorily perceived, have a content

17 “Pouvions” is an irrealis and expresses that we cannot see all that composes extension.

18 Brading (2019, 64), for example, writes: “We have seen that for Du Châtelet, bodies arise through how we represent multiplicities of interconnected, coexisting simples to ourselves.” Jacobs (2020, 10) writes: “Bodies are mental representations of multiplicities as unified wholes.”

that can be understood (this content is simple beings and their properties) and they appear to our senses in a confused way because of the nature of our sensory faculties, which cannot 'perceive' simple beings. The 'bottom-up' conundrum, i.e., how (phenomenal) bodies arise from simple beings,¹⁹ is thus not to be understood such that simple beings 'made' or 'constructed' bodies. Rather, the solution is faculty-centred in her theory: everything that can be understood with regard to bodies is due to simple beings, and everything else (their extension itself, their perishing, their divisibility, etc.) does not stem from simple beings, but from our sensory faculties, which cannot perceive the true substantial reality of bodies, i.e., simple beings, and only see an 'appearance'.²⁰

1.5 *What Are the Determinations of Simple Beings for Du Châtelet?*

There is a whole list of determinations or properties of simple beings, which Du Châtelet epistemically deduces from their explanatory value for the possibility of compound beings and their properties, and which she consequently posits to be ontically primary sufficient reasons for the properties of the apperential existence of extended bodies (Table 1):

TABLE 1 Explanandum (compound beings) and Explanans (simple beings)

Simple beings (eyes of the understanding)	Compound beings (senses/ imagination/images)
Explanans	Explanandum
No extension	Extension
Indivisible	Divisible
Simple	Compound
Have their origin only in God	Originate from other compound beings and God in their actuality, have their intelligible origin in simple beings
True Substances	Assemblage (of simple beings)— appearance of substance
Create one order and harmony that only God can see	Come about through simple beings

¹⁹ Cf. for the bottom-up conundrum, e.g., Brading (2019, 57 and 59ff).

²⁰ She writes in Inst1740eB, §133: "for all Mechanics that falls under our senses derives in the end, and in going back to the first source, from the superior and Metaphysical principles."

We can see in the list on the right that all properties of compound extended bodies²¹ are perceivable as images by our eyes and by our imagination: we can, for example, see that we can divide material bodies and that they are aggregates of parts that can be separated, for example when we cut our fingernails. To the contrary, we do not have an image we can perceive through the eyes or the imagination of anything in the left column: we cannot see something indivisible or a force as a tendency to act.²² So why does Du Châtelet think that it is reasonable to propose that all these things in the left column exist at all? Why do we need a theory of simple beings with respect to the intelligibility of extended bodies?

1.6 *Why We Need a Theory of Our Understanding of Compound Beings according to Du Châtelet*

Mechanistic theories of nature only focus on the right column. But there is a serious flaw in this approach, according to Du Châtelet, not with respect to its correctness; but with respect to its scope for our understanding of extended bodies. The first problem is that we can see that bodies change, but we cannot explain through our sensory perception why they change. What we perceive through our eyes does not make what I see (fully) understood. The second problem is that we can see that there are different unified bodies, e.g., 'a table', 'a human body', 'a rock', and that they persist while they can be modified. Thus, bodies appear to be substances to us. However, to Du Châtelet they do not correspond to the idea of a substance as something that persists because they are themselves subject to disassociation and perishing, e.g., when the table breaks apart, when the human being's body decomposes after death, and when the rock is crushed to sand. The problem is that the concepts which are being employed to understand phenomena, especially the concept of substance, do not correspond to our experience of the very same phenomena we apply them to. Simple beings serve to make it understandable that bodies are extended (and thus subject to change, perish, etc.) yet are intelligible to us (can be grasped as substances, force, activity, etc.; concepts, which in themselves are thought of as eternal).²³ Put differently: simple beings are to grant us a solution to an apparent paradox; namely, how it is possible that beings exist

²¹ With the exception of those properties that appeal to simple beings or to God.

²² The dissimilarity and the different states of simple beings are not known in themselves, according to Du Châtelet, because they cannot be sensed. The dissimilarity and the different states of simple beings are merely posited generally as an explanans for dissimilarity and states in our experience.

²³ Cf. Inst1740eB, §134: "[N]othing substantial perishes even though a Composite Being ceases to be, and even though it forms another Being through the different combination of its parts; since the Elements still continue to subsist, and to endure through any

as extended beings, which are subject to change and perish, yet that we can nevertheless understand those perishable beings by means of concepts of the understanding (e.g., substance, activity, matter), which imply subsistence and are in themselves not subject to change and do not perish.

To Du Châtelet, simple beings are a perfectly sufficient theory for our understanding of compound beings; i.e., she believes that the theory of simple beings addresses and solves these two problems regarding the scope of mechanistic explanations adequately.

1.7 *The Role the Theory of Simple Beings Plays for Du Châtelet's Metaphysics*

Du Châtelet maintains, however, that any given theory of simple beings might not, in the end, be correct:

It is regrettable, no doubt, that thinking people are not in agreement on the first principles of things; it would seem that the claim the truth has on our assent should extend to all notions and for all times. However, many truths have been fought over for whole centuries before being accepted; such was, for example, the true system of the world, and in our day, *forces vives*. It does not rest with me to decide if the monads of M. Leibniz are of the same case; but whether they are accepted or rejected, our researches on the nature of things will be no less certain; for, in our experience we never will arrive at these first elements of which bodies are composed and the physical atoms (§.172), though in their turn composed of simple beings, are more than sufficient to exercise our desire for knowledge.²⁴

Inst1742, §136 (please note that Zinsser/Bour translate 'expérience' as 'experiment')

separation that may happen to the parts that make up the Composite Beings. However, extension must seem to us a Substance, for we see that it endures, and that it can be modified (§52). But if we examine this idea with the eyes of Understanding, we will be obliged to recognize that it is nothing but a Phenomenon, an abstraction of several real things [...]."

- 24 Similarly, she presents the reasoning how an aggregate of simple beings can form a compound being, with some distance, as a conclusion of "the Leibnizians": "therefore, conclude the Leibnizians, an aggregate of simple Beings must be extended" (Inst1740eB, §136). And in §13: "Thus, it can be said that in M. Leibniz's system, it is a metaphysical-geometric problem, the state of an element being given, to determine the past state, present, and future of all the universe. The solution of this problem is reserved to the Eternal Geometrician who solves it at every moment insofar as he sees distinctly the relation of the state of each simple being to all the states, past, present, and future of all the other beings of the universe: but it will always be impossible for finite beings to have a distinct idea of this infinite relationship, that all things that exist have between them, because then they would become God."

In our research on the nature of things, in our experience, we cannot arrive at simple beings—and thus conclusions based on experience are not affected by whether or not the theory of simple beings is accepted or rejected. Hence, although simple beings seem a plausible theory to her, she clearly views simple beings as being only one possible and theoretical answer to the question of the first elements of the nature of things.

But how is it possible for Du Châtelet to allow for any doubt concerning the existence of simple beings if her ontology or ‘world-picture’ rests on them? The answer is simple: Du Châtelet provides us with a metaphysical theory concerning the understanding of beings in chapters 1–6. Her theory of simple beings from chapter 7 onwards is, to be sure, embedded in this theory, but this metaphysical theory is not dependent on her theory of simple beings. Du Châtelet was able to make her theory of simple beings a subject of doubt without undermining her metaphysics, because her metaphysics, which are self-evident and of absolute certainty to her, do not depend on simple beings (cf. also Detlefsen 2019, 20f).

In chapter 1, §4, for example, Du Châtelet asserts the absolute validity of the principle of contradiction.²⁵ In §8 she asserts the validity of the PSR with the same doubtlessness.²⁶ In chapter 3 Du Châtelet aims to define the concepts of essence, attribute, mode, and substance, on which, according to her, the most important metaphysical truths depend (Inst1742).²⁷ None of these definitions contain any doubt about their certainty.

Thus, we can summarize the role of the theory of simple beings within the framework of her metaphysics by stating that Du Châtelet

- 1) maintained that we cannot arrive at the elements or true substances of the nature of things through mere observation and experience (through the senses or the imagination).
- 2) held simple beings to be a reasonable theory for the explanation of the possibility of compound beings (based on the understanding).

25 She writes: “Contradiction is that which simultaneously affirms and denies the same thing; this principle is the first axiom, on which all truths are founded. Everyone readily agrees on this, and it would even be impossible to deny it [...]” And “This axiom [the PC] is the foundation of all certainty in human knowledge. For, if one once granted that something may exist and not exist at the same time, there would no longer be any truth, even in numbers, and every thing could be, or not be, according to the fantasy of each person [...]”

26 She writes: “The principle on which all contingent truths depend, and which is neither less fundamental nor less universal than that of contradiction, is the principle of sufficient reason. All men naturally follow it [...]”

27 Note that Du Châtelet changed this passage significantly in the 1742 edition in comparison to the 1740 edition.

- 3) thought that her metaphysics was not dependent upon the validity of her theory of simple beings.

2 Similarities and Differences between Du Châtelet's Simple Beings and Leibnizian Monads and Wolffian Elements

A detailed comparison of Du Châtelet's theory of simple beings with Leibniz's and Wolff's theories would take up much more space than I have here. The aim of this second part of the paper is to back up the claim that Du Châtelet's theory of simple beings is thoroughly misunderstood when approached from the assumption that it is an unoriginal amalgamation of Leibniz's and Wolff's theories of monads or simple beings. To achieve this aim, I will first turn to Leibniz and point to some similarities between Du Châtelet's views and his theory of simple beings, which he terms monads,²⁸ and then highlight some crucial differences. I will then do the same with Wolff.

Like Leibniz's monads, simple beings for Du Châtelet are the ontological foundation of corporeal bodies. Like Leibniz's monads, she calls simple beings 'the only true substances', while the corporeal bodies are reduced to 'phenomena' (cp. for monads as true substances in Leibniz e.g., AG, 213; Alexander, 25–26; for bodies as phenomena in Leibniz e.g., GP III, 657; GP VII, 296; GP IV, 484; GP VI, 589–90). Like Leibniz's monads, Du Châtelet's simple beings do not have a beginning, they do not cease to exist, and they are all individually different (cp. for Leibniz' monads AG, 213–215).

Du Châtelet's faculty-centred approach is not reflected in the same way in Leibniz. Unlike Leibniz's monads, simple beings as well as their properties in Du Châtelet's theory can, explicitly, *only* be conceived of by the understanding as an epistemic derivation from the phenomenal appearance of compound beings, which is explicitly taken as an epistemic premise in her theory.²⁹ Consequently, Du Châtelet never attributes any perception to her

²⁸ Leibniz also says that monads are simple (AG 213) and that they are beings (AG 89); Du Châtelet explicitly identifies her term 'simple beings' with monads (Inst1740eZ, §128). Hence, there is no clear terminological difference between monads and simple beings taken in their lexical meaning. The differences arise not through the different terms used, at least not mainly, but through their respective theory of what monads or simple beings are to explain, how we arrive at their determination, and what their determination amounts to.

²⁹ Hecht (2022, 189) compares Du Châtelet's *être simple* to Kant's *Ding an sich* on this basis.

simple beings and she asserts that their internal states cannot be known (on perception of monads in Leibniz see e.g., AG 214–215). While Leibniz explicitly excludes causal interaction between monads, Du Châtelet never asserts that causal interaction between simple beings is impossible (on Leibniz excluding causal interaction between monads see e.g., AG, 213–214). Her proof for the relationship between simple beings on the basis of the causal relationship of all past, present, and future compound beings can actually be seen to suggest the opposite, as Brading (2019) and Hecht (2022) propose.³⁰

A fundamental difference between Leibnizian monads and Du Châtelet's simple beings may be seen in the fact that monads in Leibniz's mature metaphysics ground corporeal beings in an essential way (monads are, for example, responsible for the reasonings in human beings) (AG 216–217; GPII 252; GPIV, 564), while the concept of essence and the concept of substance are two clearly differently defined concepts in Du Châtelet (cp. for essence Inst1742, §35ff.; for substance Inst1742, §52). This difference affects the entire principled lay-out of their metaphysics: while the definition of beings and their determinations, as well as our conceiving these beings in Du Châtelet, is independent of simple beings and set forth in chapters 1–6 (cp. Carus forthcoming), in Leibniz's mature metaphysics the theory of monads concerns the very principles of what beings are and how they are to be understood. In comparison, the theory of simple beings plays a secondary role in Du Châtelet's metaphysics, which is evident from her allowing for doubt about the truth of simple beings, but not about the principles of knowledge and the concepts of essence, attribute and mode and in turn substance.

What is Du Châtelet's relationship to Wolff's theory of simple beings or elements? As Stan showed in his 2018 paper on Du Châtelet's notion of substance, Du Châtelet's metaphysics is far more influenced by Wolff than by Leibniz.³¹ Du Châtelet herself indicates that she knew Leibniz's work in

³⁰ Lyssy (2022) argues, differently from Brading and Hecht, that simple beings in Du Châtelet do not interact and that the change of their states is intrinsic to each simple being in a similar way to Leibniz's monads. Hence, there are different positions in the literature about how close Du Châtelet is to Leibniz on this point, which is not essential to the present paper.

³¹ Similarly to Wolff's *German Metaphysics*, Du Châtelet uses the concepts of possibility and actuality to define essence, attributes, and modes. As I have shown in two previous papers and as shown in Wells's recent paper, there are also important differences between the foundations of Wolff's and Du Châtelet's metaphysics, which concern their understanding of the principles of knowledge and their definition of what a being is (cf. blanked for blind review, Wells 2023).

part through Wolff's writings (Inst1742, XII, 119).³² We thus must ask ourselves whether Du Châtelet's treatment of simple beings is not in fact to be attributed to Leibniz, but instead is simply the same as Wolff's.

To answer this question, let us first roughly sketch how Wolff's theory of simple beings differs from Leibniz's. Wolff does not adopt the name 'monads' but calls his simple substances 'elements' or 'simple beings', a name which Du Châtelet obviously borrows from Wolff. He thus already distances himself from Leibnizian monadology through this distinct terminology. Leibnizian monads and Wolff's elements or simple beings present some rather obvious differences, which Wolff explicitly points out. Wolff is, prior to the publication of Du Châtelet's *Institutions physiques* and along with many contemporaries, sceptical of Leibniz's attribution of perception to monads.³³ And, like Du Châtelet later, Wolff does not exclude causal interaction between his elements. He also introduces them, as with Du Châtelet, in the context of extended bodies and not with regard to the principal build-up of his metaphysics.³⁴ Yet despite these obvious similarities between Du Châtelet's and Wolff's simple beings, Du Châtelet, while giving her simple beings the Wolffian name 'êtres simples', explicitly identifies them with Leibniz's monads (Inst1740eZ, §128).

Gardiner Janik (1982, 106) maintains that this is simply a mistake on Du Châtelet's part and that Du Châtelet's distinction between what is 'real' and what is 'phenomenal' is not hers but Wolff's. She writes:

32 As Neumann (2022) points out, Du Châtelet possessed a French translation of the first 190 pages of Wolff's *German Metaphysics* by January 1737 (cf. also Reichenberger 2016, 63ff). Gardiner Janik (1982, 103) highlights, in her depiction of the development of Du Châtelet's metaphysics, a letter to Jean Bernouilli (30.06.1740), in which Du Châtelet writes that Samuel König had prepared extracts from Wolff's *Ontologia* and of the *Cosmologia generalis* in 1739. In the same letter, Du Châtelet herself writes that she had Wolff's *German Metaphysics*. Furthermore, Du Châtelet and Wolff conducted an epistolary correspondence, which, however, did end in mutual disillusionment: for Wolff because Du Châtelet did not become the apostle of his philosophy in France, which he had wished for, and for Du Châtelet because Wolff did not publicly take her side in the plagiarism dispute with König (cf. Reichenberger 2016, 64ff).

33 GW I. 2, §§598ff; *Monitum ad commentationem luculentam de differentia nexus rerum sapientis et fatalis necessitatis*; GW II. 9, §13; *Anmerkungen zur Deutschen Metaphysik*, GW 1.3, §§215ff; *Discursus praeliminaris de philosophia in genere*; GW II. 1-1, §160; *De habitu philosophiae ad publicam privatamque utilitatem aptae*, §1, 7, in: *Horae subsecivae Marburgenses* I; GW II. 34-1; *Ontologia*: GW II. 3, §684 *Anm. Cosmologia*, p. 14; *Psychologia rationalis*; GW II. 6, §6; École 1997, 136-137.

34 Cf. Look (2013, 179) on the position of simple beings within the *Ontologia*: "Indeed, it is not until this second part of the work, after some 400 pages of philosophical prose, that Wolff gives his account, first, of the nature of composite being (Part Two, Section One) and then of the nature of an ens simplex, a simple being (Part Two, Section Two)."

She sketches out Wolff's doctrine of 'êtres simples', a derivation from Leibniz's monadism which eliminated the purely metaphysical, dynamic, 'windowless' character of Leibniz's conception while retaining the features of non-spaciality and ontological primacy. And she adopts the resulting distinction of real and phenomenal worlds as characterised in Wolff's *Ontologia* [...].

However, taking into account that Wolff explicitly points out that his elements are not to be identified with Leibnizian monads in the *Cosmologia generalis*³⁵ and that Du Châtelet sees a clear distinction between Leibniz's and Wolff's systems with respect to simple substances,³⁶ it is doubtful that Du Châtelet's identification of her simple beings with Leibnizian monads was simply an oversight. Instead, we must recognize that despite the named similarities between her simple beings and Wolff's, there is a significant difference here too.

Wolff called his simple substances, albeit not bodily parts, elements of nature.³⁷ These elements of matter can thus be understood as non-extended and incorporeal, but nevertheless as non-metaphysical natural elements. For Du Châtelet, however, simple beings "are completely different from compound beings" (Inst1740eZ, §123). We can see that Du Châtelet views them as metaphysical when she writes, with reference to the Leibnizians:

Thus, from the Metaphysical union of the Elements [simple beings] flows the Mechanical union of the Bodies that we see; for all Mechanics that falls under our senses derives in the end, and in going back to the first source, from the superior and Metaphysical principles.

Inst1740eZ, §131

While she thus takes up the context in which Wolff introduces simple substances as well as their non-perception and their possible interaction, she retains the metaphysical status of simple beings from Leibniz's monads. Stan (2018, 485), in his otherwise thorough analysis, does not take note of this subtle but important difference. He recognises the main departure of Wolff from Leibniz when he writes:

35 *Cosmologia*, notes 11, 14.

36 Inst1740eZ, §119; cf. also Rey 2017, 245.

37 GW, I, 2, §604. Cf. for the elements in Wolff and their distinction from Leibniz's monads also Efferz (2014).

This marks his [Wolff's] radical difference from Leibniz: in Wolff's metaphysics, substance comes in two kinds. One is mind, or mind-like simples endowed with a *vis repraesentativa*. The other is "elements of bodies," simples equipped with (indeterminate) active and passive forces that underpin *physical* forces of motion and resistance to it. Wolff regards elements qua non-mentalistic "atoms of nature—physical points, one might call them," as he explains. He never ascribed perception to elements.

He then argues that Du Châtelet's 'metaphysics of substance' is thoroughly Wolffian. He writes (2018, 489):

These accumulated facts alter essentially our image of du Châtelet's foundations. Her basic substances are 'elements' equipped with physical forces, not mind-like unities endowed with analogues of perception. It is these forces that distinguish her elements from each other, not their respective complete concepts. They stand in real, direct relations, not insulated yet in pre-established harmony. For her, space and time are grounded in real relations between elements, not just abstractions from common perceptions by all basic substances. Her bodies are real aggregates exerting transeunt causation, not windowless intentional objects engaged in self-action. They are extended by their nature, not derivatively, and her basic dynamical laws come from Wolff.

It is certainly correct that Du Châtelet's simple beings are not mind-like in the sense of being endowed with analogues of perception. I also agree with Stan highlighting the close relationship between Du Châtelet's account of substance and simple beings and Wolff's. However, Stan's interpretation does not take note of the fact that extended bodies for Du Châtelet do not make up 'true reality' or 'substance', and that simple beings as 'the only true substances' are metaphysical entities, conceived of only by the understanding.³⁸ We can see thereby that Du Châtelet is not simply a 'realist' about substances and bodies either, as Stan suggests, because the understanding is the only faculty which conceives of the true substances and is thus the faculty which understands what the, doubtlessly real, phenomenon of body truly is. This, in turn, affects her understanding of what phenomena and what substances are

38 In the quote, Stan indicates that space and time are dependent on 'elements' for Du Châtelet; however, she does not mention simple beings in the chapters on space and time – the 'elements' in the space and time chapter are 'real beings'.

and distinguishes her from both Leibniz and Wolff, as recognized by Rey (2017, 253). I will now discuss this distinction in the conclusion.

3 Conclusion: Du Châtelet's Faculty-Centred Theory of Simple Beings and the Distinction between the Phenomenal Realm of the Senses and the True Reality of the Understanding

Du Châtelet's faculty-centred theory of the intelligibility of extended beings based on simple beings draws a unique picture of the distinction and relationship between the phenomenal realm of the senses and the 'reality' or 'truth' of the understanding. I am not the first to recognise this new epistemic space of what we know with certainty in Du Châtelet. Rey (2017, 253) already highlights this:

La situation philosophique d'Émilie du Châtelet ne peut se réduire [...] à une labellisation (leibnizienne ou wolffienne plutôt que newtonienne) [...]. Il me semble en effet qu'Émilie du Châtelet reconfigure le champ de la phénoménalité et sa fonction: un lieu d'intelligibilité de l'activité de la substance, et circonscrit dans le même temps un nouvel espace épistémique qui correspond à ce que nous pouvons savoir distinctement.

With our investigation into Du Châtelet's theory of simple beings in the background, we are in a position to understand this distinction and the relationship between that which corresponds with the senses and that which corresponds with the understanding in further detail. Let us thus take a closer look at Du Châtelet's distinction between simple beings and what is phenomenal. In §134 Du Châtelet writes:

The Composite Beings cannot subsist without the simple ones, nor can they receive any change that is not founded in the Elements; thus the Composite Beings are not Substances in themselves, but assemblies of Substances or of Simple Beings. For in the Composite Being, there is nothing Substantial except the Elements; all the rest, such as the size, the shape of the parts, how they are situated with respect to one another, the Physical qualities of Matter (such as duration, ductility, malleability, etc. that constitute the Composite Being), are nothing but Modes. [...] Consequently, nothing substantial perishes even though a Composite Being ceases to be, and even though it forms another Being through the different combination of its parts; since the Elements still continue to subsist,

and to endure through any separation that may happen to the parts that make up the Composite Beings.

Inst1740eB, §134

If we overlook Du Châtelet's metaphysical framework and jump into this section it may seem as if Du Châtelet has reduced all actual corporeal beings to mere phenomena, while asserting true substances, which we cannot know in their internal determinations. This would suggest very strong epistemic limitations: What we know about extended bodies is in this picture only phenomenal and not based on the understanding; and what we know about true substances was derived from this phenomenal world and is limited to merely asserting their existence. This conclusion, however, is entirely at odds with Du Châtelet's repeated assertion of the possibility of knowledge and certainty in the first chapter and with her position that the PSR establishes a 'real world' in distinction from an 'imaginary world' (Inst1740eZ, §8).

How, then, is her distinction between corporeal phenomena and reality to be understood? I suggest that the distinction is based on the faculty through which we arrive at a certain conclusion: the principles of the understanding, even if applied to the phenomenal world, provide us with certainty, while the senses and that which we know through the senses only are reduced to phenomenality. She writes in §134:

However, extension must seem to us a Substance, for we see that it endures, and that it can be modified (§52). But if we examine this idea with the eyes of Understanding, we will be obliged to recognize that it is nothing but a Phenomenon, an abstraction of several real things, by the confusion of which we form for ourselves this idea of extension; it is from this confusion that arise almost all the objects that fall under our senses, and of which the realities are often infinitely different from the appearances (§53).

The realities, she writes here, are often different from appearances, but if we examine appearances (like extended bodies) with the eyes of the understanding, we discover those true realities of beings that underlie appearances and discover at the same time that the appearance is not 'the true reality'. The objects that 'fall under our senses', extended bodies, are phenomena, and if we apply our understanding to those phenomena we discover that the phenomena are grounded in certain concepts and principles which can be understood and which form the true realities.

If we understand Du Châtelet's distinction between the 'real' and the 'phenomenal' in this way, i.e., based on the faculties of the understanding and the senses, we can also make sense of the fact that Du Châtelet maintains in chapter 3 that we can know the essence of real compound beings, such as a rock, i.e., it being hard and heavy and divisible. The rock is not entirely phenomenal: we know it through the senses and through the understanding. The senses only give us phenomena, but these phenomena rest on something understandable, i.e., we can come to know them in their essence.

The proper contextualization of simple beings within Du Châtelet's metaphysics thus recognizes the distinction between what is phenomenal and true substances as a distinction between perception through the senses (and the imagination) and knowledge we gain through the understanding. What we know through the understanding is epistemically dependent on the phenomena and in turn renders phenomena intelligible.³⁹ The distinction between phenomena and simple beings is thus not a distinction between a real world of simple beings and a phenomenal world of real or extended beings. Rather, our understanding is applicable to phenomenal appearances, which are given in our sensual experience, (Inst1742, §1X) and renders phenomenal beings knowable to us on the one hand in their essence and on the other in their true substance; i.e., simple beings (which underly the essences we comprehend and preserve the essential determinations) (Inst1742, §52). While there are certainly important roots for this distinction present in Leibnizian and Wolffian philosophy, this clear and exclusively faculty-centred approach is unique to Du Châtelet.

Abbreviations

- AG Leibniz, Gottfried Wilhelm. 1989. *Philosophical Essays*. Translated and edited by Roger Ariew and Dan Garber. Indianapolis: Hackett.
- Alexander Leibniz, G.W. (1715–16) *The Leibniz–Clarke Correspondence, 1717*; trans. and ed. H.G. Alexander, Manchester: Manchester University Press, 1956.
- GW Wolff, Christian. 1965ff. *Gesammelte Werke* [Collected works]. Edited by J. École, H. W. Arndt, C. A. Corr, J. E. Hofmann, and M. Thomann. Hildesheim: Georg Olms.

39 Hagenruber (2022) draws attention to the fact that Eberhard uses Du Châtelet's definition of 'phenomena' (without naming her as the source) with the intention of proving to Kant that his transcendental terminology is already present in the 'Leibniz-Wolffian' school. The faculty-centred approach as presented here makes it understandable why he drew on Du Châtelet's conception in order to back up his claim, and not on Leibniz's or Wolff's.

- Inst1740eB Du Châtelet, Émilie. (1740) 2017. *Foundations of Physics*. Translated by K. Brading. <https://www.kbrading.org/translations>.
- Inst1740eZ Du Châtelet, Émilie. (1740) 2009. *Foundations of Physics*. In *Selected Philosophical and Scientific Writings*, translated by I. Bour and J. Zinsser, edited by J. Zinsser, 115–200. Chicago: University of Chicago Press.
- Inst1742 Du Châtelet, Émilie. 1742. *Institutions physiques de madame la marquise Du Chastellet adressés à M. son fils: Nouvelle édition, corrigée et augmentée considérablement par l'auteur*. Amsterdam: Aux dépens de la Compagnie.

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