Zabarella on Prime Matter and Extension

In his discussion of prime matter in De rebus naturalibus, Jacob Zabarella (1533-1589) defends the position that prime matter is extended. However, it is less clear how he accounts for its extension. There is an important text where he apparently suggests that prime matter is extended in and of itself (the intrinsically extended view). However, there are two other texts apparently stating that matter is extended in virtue of a distinct accident in the category of quantity (the accidentally quantified view). Each interpretation has been represented by a contemporary commentator, based upon the corresponding texts. However, I argue that a decisive reading based solely upon any particular text(s) is not available. Nevertheless, examining Zabarella's writing on the topic as a whole, the trajectory of his overall argument is remarkably sympathetic to Averroes, who famously took the accidentally quantified position. Thus, from this systematic feature, the accidentally quantified reading is more reasonable.

The sixteenth and seventeenth centuries saw a gradual shift from metaphysical theories of material objects that posited metaphysical parts (such as form and prime matter) towards what Robert Pasnau has called "corpuscularian" views embracing only "integral" parts—the empirically-accessible parts making up the material thing (e.g. a plant's branches, leaves, parts of leaves, etc.) Corpuscularian views would eventually help pave the way for the age of science. One topic at the center of the gradual shift was that concerning prime matter, which would eventually (largely) become understood in the modern era as matter that is extended, fully actualized, determinate in extension, and capable of explaining all natural phenomena. Interestingly, some of the key ingredients for the shift were already present during the medieval period, for the question of the relationship between prime matter and extension was hotly disputed during that period, resulting in a wide spectrum of positions taken by scholastic writers.² One way to classify these positions is to distinguish between those that take prime matter to be extended and those that do not. Theories claiming prime matter is extended can further be classified depending on how exactly they account for the extension of prime matter. On one view, prime matter is extended (or quantified) in and of itself, and hence not in virtue of anything else. On another view, prime matter is extended (or quantified) in virtue of a distinct accidental form (in the category of quantity) inhering immediately in prime matter. Following a convention introduced by Pasnau,³ I will refer to the former view as the intrinsically extended view and the latter the accidentally quantified view.

One philosopher who clearly defended the view that prime matter is extended was the 16th-century scholastic Jacob Zabarella, who wrote about prime matter in his *De rebus* naturalibus libri XXX. However, it is less clear whether he endorses an accidentally quantified or intrinsically extended view. There is an important text in which Zabarella states that prime matter is extended apart from any form. On the other hand, he states in two other texts that prime matter is extended in virtue of an accidental form. As a result, there is contemporary debate over which position Zabarella endorses, with Pasnau arguing for the intrinsically extended view and Guy Claessens endorsing the accidentally quantified reading.

¹ Robert Pasnau, Metaphysical Themes 1274-1671 (Oxford, 2011), 8-9.

² Robert Pasnau provides a careful survey of these positions in his *Metaphysical Themes*, chapter 4 "Matter and Extension", 53-76.

³ Pasnau, Metaphysical Themes, 53, 64.

⁴ There is broad consensus among contemporary commentators that Zabarella held that matter is extended, as articulated by the major commentators this article will discuss. In addition, Cees Leijenhorst writes that for Zabarella "matter is body, endowed with inherent magnitude." (Cees Leijenhorst, The Mechanisation of Aristotelianism. The Late Aristotelian Setting of Thomas Hobbes' natural philosophy [Leiden—Boston—Köln, 2002], 152) Appealing to Zabarella's *De reb. nat.* (col. 191), Dennis Des Chene also shares this interpretation, writing that Zabarella follows Averroes in the view that "prime matter is essentially endowed with indeterminate quantity" (Dennis Des Chene, Physiologia. Natural Philosophy in Late Aristotelian and Cartesian Thought [Ithaca—London, 1996], 348). Des Chene should say prime matter is necessarily, not essentially endowed with it, because I argue later that for Zabarella indeterminate quantity is a proprium.

While the two texts seem to support the accidentally quantified reading, the first text apparently discredits that reading. I will show that there are plausible ways a defender of that reading might effectively respond to that first text. However, I will argue that the two texts themselves that seem decisive for the accidentally quantified reading are not actually decisive, since such a reading would assume Zabarella accepted a thesis which Zabarella never articulates nor is there good reason to think he actually held it.

While the arguments described above are based mainly upon specific texts, an alternative approach that may shed light on Zabarella's position is to also examine more systematic features of Zabarella's work. Drawing on this approach, I will argue that when one examines Zabarella's entire sustained discussion regarding extension in matter, one will observe that he tends to be strikingly sympathetic with Averroes, who famously took the accidentally quantified position. This is not a knock-down argument, but I submit that it shows that it is more reasonable to take the accidentally quantified reading.

1. De rebus naturalibus libri XXX on extended matter

Let us begin by briefly examining the structure of Zabarella's writing about extended matter. In his major work on natural philosophy, *De rebus naturalibus libri XXX*,⁶ Zabarella dedicates two entire books to the topic of prime matter. A discussion regarding the specific topic of extension in prime matter, including his own account of extended matter, comes in Book II. In chapter VI of that book, Zabarella articulates the two questions which determine the structure of the remainder of the book, and they are:

Q1: Is prime matter body in the category of substance?

Q2: Is prime matter body in the category of quantity?

To understand these questions, one first needs to be familiar with the standard medieval interpretation of the distinction between 2 senses of 'body', a distinction tracing back to Aristotle's Categories. For Aristotle, body is a species of the category of substance, namely, corporeal substances. However, Aristotle also lists body as a species of quantity (in particular, he lists it as a species of continuous quantity, along with other species such as line and surface).⁷ This raises a puzzle because, firstly, body is listed in two distinct categories, and secondly, one might have thought body to be a quantified thing rather than a quantity itself. The medievals commonly resolved this puzzle by contending that 'body' is meant in two distinct senses both

⁵ Pasnau, in *Metaphysical Themes*, 68 fn 18, writes that Averroism claims there is "a single form of quantity," indeterminate in prime matter but "then made determinate in the composite", as understood by later writers such as Jandun, Auriol, and Pomponazzi.

⁶ Posthumously published in 1590. I use the 1966 Frankfurt edition, Jacopo Zabarella, *De rebus naturalibus libri XXX* (Venice, 1590), cols. 191-231.

⁷Aristotle lists body under the category of substance in chapter 5 of the *Categories*, Book II chapter 1 of *De Anima*, and other places. He lists body under the category of quantity in chapter 6 of the *Categories*.

having to do with extension. Namely, body in the category of substance is a kind of thing (corporeal substance) that is extended, while body in the category of quantity, which is a type of accident, is the source of such extension. The latter sense relates to the former as an accident to its subject.⁸

Interestingly, Zabarella takes up the second question (Q2) before the first. Zabarella begins discussing Q2 in chapter VI of Book II, where he notes that there are two well-known replies to this question, namely, Averroes's response and Aquinas's response. For Averroes, matter is itself quantified by having indeterminate dimensions as a perpetual accident (tamquam accidens perpetuum), which becomes determinate only with the onset of substantial form. Zabarella characterizes Aquinas as contending, in contrast, that there is no quantity in matter before the arrival of substantial form (*De reb. nat.*, col. 191). Zabarella endorses Averroes's position against Aquinas's, offering an argument for this decision in chapter IX and assessing the debate further in subsequent chapters.

As we will see later, Zabarella will clearly defend the view that prime matter is body in the category of substance and not quantity. So why does he pose Q2 here and endorse Averroes's response, even though the latter answers the question in the affirmative? The most reasonable explanation is that Zabarella mainly wants to signal here that he agrees prime matter is extended and wishes to set aside positions which claim that matter is not extended. Zabarella here does also indicate agreement with Averroes that matter is extended in virtue of an accidental form, but not in order to set aside extended-matter views differing on this point, since we will see below that he turns next to detailed discussions of other extended-matter views. Thus, his endorsement of Averroes here mainly signals his agreement that matter is

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For example, Aquinas writes "[B]ecause we name a thing as we know it, in many cases we impose names derived from exterior properties in order to signify the essences of things. Hence, names of this sort are sometimes taken properly for the essences of the things which the names were principally imposed to signify, but sometimes they are taken instead—less properly— for the properties because of which they were imposed. For instance, it is clear that the name 'body' was imposed to signify a certain genus of substances, and it was imposed because three dimensions are found in those substances. So sometimes this name is used to signify the three dimensions themselves, in which case 'body' is being used for a species of quantity." (*Summa Theologiae* 1.18.2, translated by Freddoso, A. J. [2014] http://www.nd.edu/~afreddos/summa-translation/TOC.htm) Although he does not have prime matter in mind, Aquinas observes that a name ('body') sometimes signifies the thing ("a certain genus of substances") but at other times it signifies the exterior property itself ("three dimensions"), through which we know the former ("we name a thing as we know it").

⁹ Aquinas might hold that matter *is* extended, in virtue of being part of something which is extended, namely, the matter-form composite. For this reading of Aquinas, see Jeffrey Brower, *Aquinas's Ontology of the Material World* (Oxford University Press, 2014), 150. Nevertheless, Zabarella characterizes Aquinas's as a view that prime matter is not extended, perhaps because on the latter's view prime matter is not an *immediate* subject for an accidental form or substantial form of quantity.

¹⁰ Whether Zabarella here is also indicating an overall Averroistic trajectory to his own arguments and account will be discussed at the end of this article. This is why I state that Zabarella here is "mainly" signaling an adherence to extended-matter views, since he might also be indicating his overall partiality towards Averroes's position.

extended. It is worth clarifying now, since it will be important later, that the position that matter is extended claims that prime matter has some extension or other, and stronger versions of this position might contend further that prime matter has a determinate magnitude of extension. As we have just seen, Zabarella holds that matter has indeterminate quantity, and thus does not defend the stronger version of the extended matter view.

Next, Zabarella tackles the first question (Q1) of whether prime matter is body in the category of substance. The discussion of this question, which occupies the remainder of the book from chapter XII onwards, gives Zabarella opportunity to contrast his position with other positions which agree that matter is extended, and the chance to detail his own account. In chapter XII, he tells the reader that he will be examining the accounts of Avicenna, Philoponus, and Averroes, regarding how matter is extended. The first position is that matter is extended because of an eternal substantial form inhering in it, which has later been called the "form of corporeity" theory of Avicenna (and also held by some others, including Albert the Great). The second is that instead of matter being a substance subject to three-dimensionality, matter is sheer three-dimensionality, which is the view of Philoponus. The third view, which Zabarella calls the common view, is that matter is body in the category of quantity but not in the category of substance. Although Zabarella does not indicate it as such, this is the view of Averroes, traditionally called the theory of "indeterminate dimensions". Chapters XIII to XVI then discuss and refute each account in turn, with the exception of Averroes's account, which does not receive any explicit treatment. From chapter XVII to the end of Book II, Zabarella defends his position that prime matter is body in the category of substance.

At this point, it is useful to revisit and refine the classification of positions on the spectrum of prime matter's relationship with extension. As I noted at the very beginning of the paper, we may begin by dividing positions holding that 1) prime matter is not extended (a position Zabarella characterized Aquinas as defending)¹², from those holding that 2) prime matter is extended. Theories claiming prime matter is extended can be further classified. For simplicity, I had earlier subdivided them by separating intrinsically extended views from those contending prime matter is extended through an accidental form; however, since neither of these classifications would accommodate Avicenna's view that matter is extended through a substantial form, we should instead proceed as follows: There are positions contending 2A) that prime matter is extended intrinsically, and those contending 2B) that prime matter is extended in virtue of a distinct form. The former (2A) can be further subdivided into positions claiming 2Ai) that prime matter is extended essentially (held by Philoponus), and those contending 2Aii) that prime matter is extended accidentally (held by Ockham, as we shall later

¹¹ I will show later in footnote 27 that William Ockham holds a version of the weaker view, and suggest that the possibility of this weaker view (rather than just the strong version) is important for Ockham's position.

¹² See footnote 8.

see). The group of positions holding that prime matter is extended in virtue of a distinct form (2B) can be further classified into positions claiming that 2Bi) that form is a substantial form of "corporeity" (held by Avicenna) and those claiming 2Bii) that it is an accidental form (held by Averroes).

As explained above, it is clear that Zabarella rejects position (1) and accepts position (2) that prime matter is extended. The question this paper tackles is whether Zabarella embraces the view that prime matter is intrinsically extended (2A) or that it is extended in virtue of a distinct accidental form (2Bii), as it is quite clear that Zabarella rejects 2Bi. In the following section, I will turn to some key texts. There is an important text apparently supporting the intrinsically extended reading, while there are two others that seem to support the accidentally quantified reading. Let us now examine these texts in turn.

2. Key Texts

The first text appears in chapter XVII, near the end of Book II, where Zabarella defends his position that prime matter is body in the category of substance.

(1) [P]rime matter, according to its own proper nature, apart from every form, is a body in the category of substance.¹³

Not only is prime matter a substantial body, it is thus by its own nature, "apart from every form". This appears to straightforwardly rule out the accidentally quantified reading of Zabarella, as that reading posits an accidental form which accounts for prime matter's extension.

Robert Pasnau takes the intrinsically extended reading of Zabarella on the basis of the above text. Pasnau writes that even though Zabarella seems to have earlier laid the groundwork for the accidentally quantified view, he then surprises the reader and "announces that matter is a body in its own right—or, in other words, that matter, prior to form, is extended". ¹⁴ If prime matter is extended prior to any form, then it cannot be extended in virtue of a form of quantity. Thus, for Zabarella, prime matter is extended in and of itself.

On the other hand, later in the very same chapter (XVII), Zabarella appears to also assert the accidentally quantified position. There, Zabarella offers two arguments that matter is a body in the category of substance, summarizing his position at the end of that chapter:

(2) This is—according to the order of origin—the first body in the category of substance, from which first emanates body in the category of quantity, and in which first inheres (body in the category of quantity) as its proper accident. Prime matter is the first

¹³ Zabarella De rebus naturalibus, col. 214, translated by Pasnau, *Metaphysical Themes*, 67. / "Ego puto primam materiam secundum propriam naturam, & seclusa omni forma esse corpus de categoria substantiae:"

¹⁴ Pasnau, Metaphysical Themes, 68.

subject of body in the category of quantity, and the latter emanates from the nature of matter itself; therefore matter itself is the first body in the category of substance.¹⁵

This is a complicated text, but notice that it is a syllogism. One can more easily see where the text supports the accidentally quantified reading by starting at its conclusion and working back towards the beginning and middle. Zabarella's conclusion is that prime matter "is the first body in the category of substance". This follows from the sentence earlier that "[p]rime matter is the first subject of body in the category of quantity", which "emanates from the nature of matter itself". That is, prime matter is the subject in which the accident (body in the category of quantity) inheres. After all, as the first sentence of the text asserts, prime matter (i.e. "body in the category of substance") is that in which body in the category of quantity inheres. Further, it inheres "as its [prime matter's] proper accident". Hence, we can draw from this text support for the accidentally quantified reading—prime matter is extended in virtue of an inherent accident: body in the category of quantity.

Another key text apparently supporting the accidentally quantified reading is a passage at the end of Book II, from Zabarella's epilogue of his writings about extended matter:

(3) From this nature of matter two properties emanate, which are never separated from it: one is a quantity which has no limit of its own [...] the other is that universal potency to receive all forms without distinction.¹⁷

Zabarella states here that quantity is a property emanating from matter. Hence, the reader should understand that it is a proper accident. Even though quantity is never separated from prime matter, the reader should also understand that quantity is not part of the essence of matter since it is an accident of matter.

Based on Texts (2) and (3), Guy Claessens endorses the accidentally quantified reading of Zabarella. Claessens writes:

¹⁵ Zabarella, *De reb. Nat.*, col. 217. Translated by Claessens, G. 'Francesco Piccolomini on Prime Matter and Extension', *Vivarium* 2012, 241. DOI: 10.1163/156853412X644605. "... haec si ita vera sunt, ut negari non possint, tali argumento utamur: Illud est primum corpus de categoria substantiae ordine orginis, a quo primo emanat corpus de categoria quanti, & in quo primo inhaeret tanquam proprium illius accidens; at prima materia est primum subiectum corporis de categoria quanti, idque ex ipsius materiae natura primo emanat; ipsa igitur materia est primum corpus de categoria substantiae."

¹⁶ Regarding the Aristotelian notion of a "proper accident" (*proprium*), a common example is the necessary but accidental human property of *risibility*. Just as risibility is necessary for humanity but not essential (unlike rationality), there can be "necessary accidents" of something which are not essential to it. For Zabarella, quantity is just such a proprium ("proper accident") of matter, as clearly stated above.

¹⁷ Zabarella, *De reb. nat.*, col. 231. Italics not in original. Translated by Claessens ('Francesco Piccolomini on Prime Matter and Extension', 242). / "Ab hac materiae natura duae proprietates emanant, quae ab ipsa nunquam separantur; una est quantitas nullum secundum se terminum habens […] altera vero est potestas illa universalis recipiendi omnes formas indistincte."

¹⁸ As the scholastics understood properties to be proper accidents and vice versa, the proper accident of Text (2) is the property of quantity, and this is plausibly the same property of quantity in Text (3).

From Zabarella's perspective, matter accounts for the corporeality of bodies and three-dimensionality only *accidentally* belongs to it. Only on the basis of those features prime matter can be termed 'body', i.e. as the *ratio corporis* and the subject of body, in the sense of dimensions.¹⁹

Matter is termed 'body' not only because it accounts for the corporeality of bodies, but also because it is the subject of "dimensions" (extension or quantity), which is an accident and property. Claessens argues that since Zabarella believes that matter is extended in virtue of quantity, which is an accident metaphysically distinct from matter, Zabarella must hold the accidentally quantified rather than the intrinsically extended position. Claessens's argument appears to be this: Prime matter, for Zabarella is extended in virtue of an accident (quantity). Claessens takes this to be clear from Texts (2) and (3). Next, Claessens appears to think it obvious for Zabarella or anyone to accept what we might call the "distinct-accident thesis", which contends that if quantity is an accident of matter, then it is metaphysically distinct from matter. We see that Claessens thinks this thesis is something Zabarella would obviously accept when Claessens argues that Pasnau is mistaken to defend an intrinsically extended reading:

Pasnau opposes (1) those who believe that prime matter is accidentally quantified [...] and (2) those who assert that prime matter is intrinsically extended [...]. *Prima facie*, we would label Piccolomini's theory 'intrinsically extended'. Remarkably enough, Pasnau puts Zabarella in this category [...]. However, as is obvious from the above, for Zabarella prime matter is only a body in the category of substance *because* it is the subject of body in the category of quantity. Ontologically, the latter is accidental to the former.²⁰

Claessens argues that for Zabarella, prime matter is extended in virtue of an accident inhering in it, because matter is the subject of the accident of quantity. This is how Claessens argues that rather than holding the intrinsically extended view (as does Zabarella's contemporary, Piccolomini), ²¹ Zabarella takes the accidentally quantified view, which claims also that quantity is metaphysically distinct from matter. But the only way Claessens argues validly here is by believing that Zabarella also accepts the distinct-accident thesis, that if quantity is an accident of matter, then it is metaphysically distinct from matter.

3. What about Text (1)?

I think that so far, Texts (2) and (3) are quite persuasive in support of the accidentally quantified reading. But how should one reconcile these texts with Text (1), which appears to

¹⁹ Claessens, 'Francesco Piccolomini on Prime Matter and Extension', 242. Italics in original.

²⁰ Claessens, 'Francesco Piccolomini on Prime Matter and Extension', 243. Italics in original.

²¹ Piccolomini was a contemporary of Zabarella whom Claessens interprets as holding a view that "matter is sheer three-dimensionality" (Claessens, 'Francesco Piccolomini on Prime Matter and Extension', 242). Piccolomini held what I called position (2Ai) at the end of Section 1, since he claimed extensionality is an essential feature of prime matter. (See Claessens 243-4).

state that matter is not quantified in virtue of any form? This text seemingly eliminates the accidentally quantified interpretation since on that view prime matter is quantified in virtue of an accident, and accidents are forms. So, Zabarella appears to be inconsistent.

However, a more appropriate interpretation of Text (1) is that the statement that prime matter is a substantial body "apart from every form" actually asserts that matter is extended apart from every *substantial* form, rather than apart from any form, even accidental. Two arguments from context support this interpretation: The first argument will closely examine Zabarella's discussion preceding the "apart from every form" remark, and the second argument will make use of the text *following* that remark.

Let us begin with the first argument. Recall that Zaberella's discussion before the "apart from every form" remark examines the views of Aquinas, Averroes, Avicenna, and Philoponus, spanning a number of chapters in Book II. Recall that Zabarella rejects all of these positions except for that of Averroes. Zabarella does not devote a single chapter to rehearse or repudiate Averroes's position. Instead, in Chapter XVII, Zabarella states he will defend the position that matter is a body in the category of substance, and this is where we find Text (1), that prime matter is a body in the category of substance "apart from every form". But what immediately precedes Text (1) shows that Zabarella is contrasting his position with those he has henceforth refuted: "Since up till now we have set forth all the opinions of the others, and we have forced back the arguments of each of them, now a declaration toward the truth must be approached. I think prime matter . . . "22

Two points from the above quotation are worth emphasizing, each of which highlight that the statement of his own position in Text (1) is meant to contrast with "all the opinions of the others". First, by stating that matter is body in the category of substance, which is subject to (the accident of) three-dimensionality, Zabarella distinguishes his position from Philoponus's view that matter is sheer three-dimensionality. The second and more important point is that when Zabarella remarks in Text (1) that matter is a body "apart from every form", he uses the term 'form' as a restricted quantifier denoting only *substantial* form. This is how he is using that term because when he states that matter is body "apart from every form", he is most plausibly distinguishing his position from that of Aquinas, who as we saw earlier was characterized by Zabarella as arguing that prime matter is not extended; extension arises only with the arrival of the various substantial forms. Zabarella is also distinguishing his position from that of Avicenna, who held that matter was extended in virtue of an eternal substantial form of quantity. So, we have good evidence from the context of the chapters preceding the above quotation that by "apart from every form", Zabarella is writing of every *substantial* form.

²² Zabarella, *De reb. nat.*, col. 214. "Quum hactenus omnes aliorum sententias exposuerimus, singulorumque argumenta retulerimus, iam ad veritatis declarationem accedendum est. Ego puto primam materiam . . ."

Thus, that text does not exclude an accidentally quantified reading that prime matter is quantified in virtue of an accidental form.

Turning now to the second argument from context, Zabarella goes on immediately after Text (1) in Chapter XVII to offer two arguments for his position. The first of these arguments provides an additional reason to interpret that his "apart from every form" remark pertains to substantial form. He offers this argument by asking what the common nature ("ratio corporis") of all bodies is. He then argues that the ratio corporis is either i) matter, ii) form, iii) a combination of matter and form, or iv) an accident. He argues by elimination that the ratio corporis is i) matter, but how he does so²⁴ is not important here. What is important is that since Zabarella here distinguishes ii) form from iv) accident, it is clear that by 'form' he has in mind substantial rather than accidental form. Since this argument by elimination appears immediately after the statement in Text (1) that matter is a body "apart from every form", by "apart from every form" Zabarella is most plausibly referring to substantial rather than accidental form. Thus, Text (1) is not grounds to reject a reading of Zabarella on which matter is extended in virtue of an accidental form.

4. A problem for the Accidentally Quantified reading

All of this so far might suggest a decisive case for the accidentally quantified reading since it enjoys the support of Texts (2) and (3), and possesses an acceptable explanation for (1). Indeed, the argument based upon (2) and (3) is the thrust of Claessens's case for the accidentally quantified reading. However, I will now show that there is a significant objection to this sort of straightforward argument. This straightforward argument takes Zabarella to accept the distinct-accident thesis. This is the thesis that if quantity is an accident of matter, then it is metaphysically distinct from matter. Thus, it is understood to follow that matter is not quantified in and of itself but in virtue of something else. However, there is no evidence that Zabarella endorses this thesis, nor am I aware of a text which gives reasonable grounds to conclude that he would endorse it. This constitutes a problem for arguments solely based upon Texts (2) and (3) because without the distinct-accident thesis, these arguments for the accidentally quantified reading do not go through.

However, even though the distinct-accident thesis is not articulated by Zabarella directly or indirectly, are there other reasons to think he accepts it? For instance, is the thesis self-evident, or would not accepting it be incoherent? Regardless of the correct answer as to whether an accident must be metaphysically distinct from its substance, it is clear the answer is not obvious, for if it were, there would not have been such significant scholastic debate about

²³ Zabarella, *De reb. nat.*, col. 215.

²⁴ See Claessens for a good interpretation of this argument by elimination ('Francesco Piccolomini on Prime Matter and Extension', 240).

it.²⁵ In other words, in the scholastic context, the distinct-accident thesis would not have been deemed self-evident. Thus, even though Zabarella contends that quantity is an accident inhering in matter, because there is uncertainty whether Zabarella holds the distinct-accident thesis, the argument based on that thesis fails to go through.

To bring out this problem even more, we can turn now to William Ockham's account to illustrate how a scholastic author can coherently reject the distinct-accident thesis. In other words, since Ockham can advance an account that quantity inheres in matter as an accident while coherently contending they are not metaphysically distinct, then it is possible that Zabarella does the same. Hence, even though Zabarella believes that quantity inheres in prime matter as an accident, it could still be possible that Zabarella holds the intrinsically extended position.

In his *Summula philosophiae naturalis*, Ockham states that matter is extended *per accidens*:

(4) It should be known that although the proposition 'matter is extended' holds *per accidens*, distinguishing what holds *per accidens* from what holds *per se* in the first mode, still that proposition is necessary and always true and holds *per se* in the second mode, because it is impossible for there to be matter without extension [...]²⁶

It can be seen, then, that Ockham holds that matter's extension is accidental. However, Ockham is also emphatic in the text immediately following Text (4) that he rejects the accidentally quantified view that quantity is a thing (*res*) distinct from matter. Ockham begins his argument by stating that the parts of matter "can never exist in the same place. As a result, matter always has part distant from part, and this is for matter to be extended and quantified or dimensioned, because dimension, quantity, or extension is nothing other than the distance of one part from another." Hence, matter is extended but extension just is "part distant from part". Ockham continues:

(5) And just as matter does not have part distant from part on account of *something else* that attaches to it ..., so it is not extended through any such *res*. Rather, just as the distance of one part of matter from another is not some absolute *res* distinct from those parts, so neither are the extension and quantity or dimensions distinct *res*. ²⁸

In other words, matter's extension is not "something else" inhering in it, not a *res* metaphysically distinct from matter. Prime matter is extended, and this simply falls out of the

²⁵ See Pasnau, *Metaphysical Themes*, chapter 10 "Real Accidents" for a treatment of this scholastic debate about whether accidents have any proper being of their own distinct from their substance.

²⁶ William Ockham, *Summula philosophiae naturalis*, I.13 (VI:191). Translated by Pasnau, http://spot.colorado.edu/~pasnau/research/ockham.summula1.pdf, 2012.

²⁷ Ockham, Summula phil. nat., I.13 (VI:191).

²⁸ Ockham, Summula phil. nat., I.13 (VI:191).

acceptance of matter's nature.²⁹ Thus, Ockham clearly takes the intrinsically extended position. Yet, he had earlier asserted that matter is quantified *per accidens* just as Zabarella held. Now, to demonstrate that the *per accidens* claim can be coherently maintained together with the intrinsically extended view, all we need is to show one possible way they can both be consistently held. Ockham, as we saw in Text (4), states that 'matter is extended' holds *per accidens*, *per se* in the second mode. Pasnau's interpretation of Ockham's claim that 'matter is extended' *per se* in the second mode is that extension is necessary but not part of the essence of matter.³⁰ So, on this reading, extension or quantity (the accident) is not in matter's essence but is a non-essential property or feature emanating from that essence. Even so, extension's being a non-essential feature is consistent with its not being distinct from matter (e.g., although risibility is not the essence of humanity like rationality is, it is still possible that risibility holds as a feature of humanity itself rather than in virtue of something besides humanity). So, on this possible (and indeed plausible) reading of Ockham's claim that matter is extended *per accidens*, Ockham offers a scenario where quantity in matter is accidental, ³¹ and yet the intrinsically extended view can be coherently maintained. In other words, Ockham illustrates how one can

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²⁹ For Ockham, matter has some magnitude of quantity or other. Quantity is an accident in the sense that it is "contingently predicable of things"; just as an animal must have some color but what shade it has is contingent, matter must take some quantity or other, but the magnitude is contingent. (Summula phil. nat. I.13 [VI:192-3]). In this sense, matter intrinsically has indeterminate quantity (I had called this the weaker version of the extended matter view). This stance allows Ockham to avoid the charge that a distinct accident is needed for a specific quantity. For a good discussion of Ockham's view on the magnitude of quantity in matter, see Pasnau (Metaphysical Themes, 68-69), where he shows that Ockham contends that the magnitude depends on whatever acts on it externally. ³⁰ Pasnau offers this treatment: "[b]oth Ockham and Zabarella expressly say that 'matter is extended' is necessary per se, but secundo modo rather than primo modo, which is to say that it is true not in virtue of extension's being part of the essence of matter, but in virtue of matter's being part of the essence of extension." (Metaphysical Themes, 75 footnote 29) Incidentally, matter's being part of the essence of extension does not imply that extension is metaphysically indistinct from matter; what is implied would be that the property being material is one of the essential properties of extension. But it does not follow from this that extension is metaphysically indistinct from matter, any more than squareness is metaphysically indistinct from four-sided-ness follows from being four-sided is one of the essential properties of squareness. (Four sided things include rhombuses, so squareness cannot be indistinct from four-sided-ness, otherwise squareness would not be distinct from being rhomboid.) ³¹It might seem from a text in Ockham's *Reportatio* that for him all accidents would be metaphysically distinct from their substance. If so, then this stance is at odds with my reading of Ockham above. Quoting the *Reportatio* text, Pasnau writes that Ockham's "attempt to eliminate most kinds of accidents [...] is driven by the conviction that if an accident exists it must really exist, as a 'true thing, distinct from substance.'" (Pasnau, Metaphysical Themes, 200) In response, however, the text Pasnau quotes actually states that "when an accident is a distinct thing from a substance and a true thing, it truly has an efficient cause." (Rep IV.8 in William Ockham, Opera philosophica et theologica [St. Bonaventure: Franciscan Institute, 1967-89. VII:141]) / "... cum accidens sit res distincta a substantia et vera res, habet vere causam efficientem." (quoted in [Pasnau, Metaphysical Themes, 200 fn 2]). Here, Ockham is speaking of real accidents which are distinct from substance, stating that they have an efficient cause (which is probably its substance). The text does not state that there are no accidents which are not distinct from their substance. So, this text gives no grounds to infer that quantity, for Ockham, cannot be an accident of matter which is not distinct from its substance.

coherently reject the distinct-accident thesis. Furthermore, since we have not been shown evidence that Zabarella holds that thesis, then it is reasonable to remain agnostic about his stance on it. However, since a Claessens-styled argument for the accidentally quantified reading turned on Zabarella accepting that thesis, the argument for that reading of Zabarella is undermined. After all, it is possible that Zabarella, like Ockham, takes the intrinsically extended stance despite assertions that quantity is an accident of matter.

Now, it is true that Ockham in Text (4) states that 'matter is extended' holds *per* accidens, while Zabarella in Text (2) also states that quantity is a proper accident inhering in prime matter, emanating from it. One might thus think that Zabarella's position is more metaphysically robust than Ockham's, that is, that Zabarella must think quantity is distinct from matter whereas Ockham does not. However, to think that Zabarella's position is more metaphysically robust for this reason is simply to presume he holds the distinct-accident thesis. But this is precisely what is being disputed. Second, Ockham asserts implicitly that quantity is a proper accident inhering in prime matter. By stating that quantity is an accident of matter, he implicitly asserts that quantity inheres in prime matter. He had also stated that quantity was necessary but not part of the essence of matter, and so also implicitly asserts that quantity is a proper accident. Ockham only rules out that such an accident inhering in prime matter is "something else"; i.e. distinct from matter. As Ockham accepts that quantity is a proper accident inhering in prime matter, it is likely he would accept that quantity emanates from prime matter—after all, Ockham argues that quantity in prime matter falls out of the latter's nature. Of course, Ockham views all of this through the lens that quantity is not distinct from matter. I have established that Ockham implicitly asserts that quantity is a proper accident inhering in prime matter. So, whatever Zabarella's position is, as expressed in Texts (2) and (3), that position might only be as metaphysically committed as Ockham's. Ockham clearly defends the intrinsically extended reading, and thus we cannot give Zabarella an accidentally quantified reading simply on the basis of Texts (2) and (3).

5. A new argument for the accidentally quantified reading

Let us take stock of the debate so far. There seemed to be a decisive case for the intrinsically extended reading, anchored by Text (1). However, this interpretation is defective because prime matter's being extended "apart from every form" most plausibly refers only to substantial (but not accidental) forms. On the other hand, we might think a decisive argument for the accidentally quantified reading can be based on Texts (2) and (3). However, we have seen that this sort of argument is also not decisive since it depends upon a questionable assumption.

How then should one interpret Zabarella? It is clear that though the texts above do come closest to revealing whether Zabarella took an intrinsically or accidentally quantified

view, those texts are still not decisive. Thus, one must look beyond individual passages and make use of more systematic features of Zabarella's writings. One notable feature is Zabarella's tendency to be sympathetic with Averroes in the course of his sustained discussion about extended matter. Developing below this line of reasoning, I will build the case that Zabarella takes the accidentally quantified position. While I do not take this to be a decisive or knock-down argument, it nevertheless shows it is more reasonable to think Zabarella holds the accidentally quantified view. At the very least, my argument constitutes a serious challenge to the intrinsically extended reading.

As we saw above in Sections 1 and 3, Zabarella in Book II sides with Averroes against Aquinas in the course of making his own arguments about prime matter, stating that Averroes held matter is quantified while Aquinas denied this. And, to contrast his position with other extended-matter views and to detail his own account, Zabarella lists 3 views: those of Avicenna, Philoponus, and Averroes (though not explicitly named). This much was already explained in those sections above, but now consider the following points of elaboration: First, against Avicenna's view, Zabarella actually uses standard Averroistic arguments to criticize the position (Chapters XIII-XIV). Second, at the end of his refutation of Philoponus's view, Zabarella claims that Aristotle would agree with the third view (Averroes's position) that prime matter derives its extension from an accident in the category of quantity. In much of Book II, then, Zabarella maintains an Averroistic trajectory.

This does not escape Pasnau's notice; he points out that near the beginning of Book II, although Zabarella emphasizes that prime matter has no actuality, "[s]till, it must have extension, he [Zabarella] argues, reciting many of the standard arguments for Averroism.".³³ These arguments feature in Zabarella's assessment of Aquinas's debate with Averroes. However, presumably Pasnau believes that the Averroistic arguments do not stop appearing there, since Pasnau expects Zabarella to come to an Averroistic conclusion later in Book II. Indeed, we saw that the standard Averroistic arguments and the Averroistic allegiance continue to appear in his discussion of the positions of Avicenna and Philoponus. This constitutes what I call the Averroistic trajectory of Zabarella's argumentation. However, Pasnau believes Zabarella then proceeds to make an abrupt turn, for what follows is Text (1), which expresses that matter is extended "apart from every form": "But just when it seems that Zabarella will

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³² "His igitur omnibus Aristotelis testimoniis ostenditur, primam materiam secundum suam naturam non esse corpus. His moti argumentis recentiores omnes asserunt, materiam non habere aliam corporeitatem, quam illam, quae est accidens de categoria quanti; substantiam vero ipsius nulla ratione posse dici corpus, sed esse substantiam incorpoream; quae fuit tertia opinio a nobis proposita ab initio." (De reb. nat., col. 214) Zabarella will later argue that prime matter is body in the category of substance, as I will explain.

³³ Pasnau, Metaphysical Themes, 68.

defend some version of the Accidentally Quantified View, he announces that matter is a body in its own right—or, in other words, that matter, prior to form, is extended."³⁴

The first thing to point out is that, as explained earlier, taking the intrinsically extended reading on the basis of Text (1) is not justified since, as we saw earlier, "every form" plausibly refers only to substantial forms. The second and more important thing to notice is that Pasnau grants the Averroistic trajectory of Zabarella's writing. I argue that since the trajectory of Zabarella's argument is Averroistic from the start, then it is more reasonable to interpret Zabarella's view of extended matter in an accidentally quantified light. This interpretation finds even more corroboration after Zabarella finally finishes his arguments for his considered view that matter is body in the category of substance (Chapter XVII), because he states in the next chapter that out of the ancient philosophers only Averroes shared his position on extended matter. Thus, not only is the trajectory at the beginning and afterwards Averroist, but so is its conclusion.

This is not to say that Zabarella's view on extended matter is exactly the same as Averroes's. In Chapter XII, Zabarella lists the positions of Avicenna, Philoponus, and then the "common view" (*opinio communis*). Though this latter position is not explicitly identified with Averroes in the chapter, the view is unmistakably Averroes's position³⁶ that (among other claims, contends that) prime matter is not body in the category of substance, but in the category of quantity. As for himself, Zabarella articulates a fourth view:

(6) After having considered and rejected all these opinions, I will show that prime matter, in its first notion and understood in the purity of its nature, is nothing else but a body in the category of substance [...]³⁷

Zabarella thus takes the position that prime matter is body in the category of substance instead of quantity. Even though he does not agree with Averroes on this point, I wish to now show that this gives no grounds to think that Zabarella takes the intrinsically extended position. Recall that Averroes had held two theses. The first, for which he was more well-known, was that matter is extended in virtue of a perpetually inherent accidental form of indeterminate

³⁵ Zabarella, *De reb. nat.*, col. 219. "[I]taque si ioannes dixisset, primam materiam ita esse corpus de categoria substantiae, ut esset substantia dimensionibus subiecta, non ut esset ipsaemet dimensiones, nihil esset, in quo eum reprehendere hac in re possemus; in hoc tamen eius confessionem accipimus, quod dicit primam materiam esse corpus de categoria substantiae, quod nos quoque asserimus. Averroes quoque idem sensit, ut ostendere possumus multa eius dicta perpendendo in variis locis".

³⁴ Pasnau, Metaphysical Themes, 68.

³⁶ As to why Zabarella does not explicitly identify Averroes with the third position, a plausible explanation is that he does not want to appear to reject Averroes's account, since as shown earlier the trajectory of his own arguments is Averroistic and so he essentially agrees with Averroes about extended matter.

³⁷ Zabarella, *De. reb. nat.* col. 206. Translated by Claessens ('Francesco Piccolomini on Prime Matter and Extension', 240). "Ego vero his omnibus sententiis consideratis, atque rejectis ostendam primam materiam in sua prima notione, & in suae naturae puritate acceptam nil aliud esse, quam corpus de categoria substantiae," This text appears immediately before Text (4) and overlaps with it.

dimensions that is distinct from matter (i.e., the accidentally quantified position). The second thesis was that matter is a body in the category of quantity. In Text (6), Zabarella clearly rejects the second thesis. On the other hand, Zabarella is clear that he accepts at least part of the first thesis, that matter is extended in virtue of an accident (quantity, understood as indeterminate dimensions). The question, then, is whether his commitment to matter as body in the category of substance suggests he does not fully embrace Averroes's first thesis, namely, the part contending that the accident is distinct from matter. In other words, the question becomes: is an intrinsically extended position more probable given Zabarella's view that matter is body in the category of substance rather than quantity? I do not think so. Indeed, the accidentally quantified view becomes more plausible on Zabarella's account (rather than Averroes's) for two reasons.

First, bear in mind that on Zabarella's view quantity would inhere in matter, with matter understood as its subject. Thus, Zabarella's view is plausible that matter is body in the category of substance (rather than category of quantity), since matter's being a substance would straightforwardly explain how it can serve as the subject in which an accidental form would inhere. Further, in Zabarella's second argument for his considered view (Chapter XVII), he argues that while incorporeal substances do not have dimensions, a substance which is subject to three dimensions would be corporeal and thus be a *body* in the category of substance: "[S]ubstantial body is that substance which is subject to three dimensions". 38 Thus, I argue Zabarella thinks that prime matter being a body in the category of substance is simply a more plausible way to account for the accidentally quantified position. Second, his position is more consistent with the aforementioned standard scholastic understanding of body in the category of substance being the extended thing, while body in the category of quantity is the accident which is the source of extension. Thus, given one's acceptance of this standard scholastic understanding, the accidentally quantified view (that matter is an extended thing in which quantity inheres) is then more plausible on a conception of prime matter as body in the category of substance rather than quantity.

At the very least, our investigation so far indicates that there is no reason to think the intrinsically extended position is more probable given Zabarella's position (body in the category of substance rather than quantity). The burden of proof is on the intrinsically extended interpreter to produce such a reason. Thus, given that Zabarella's account of matter retains an inherent accident of quantity and given that the trajectory of his overall argument regarding the nature of extended matter is Averroistic, the accidentally quantified reading of Zabarella is more reasonable.

³⁸ Zabarella, *De reb. nat.*, col. 217. "[*S]ubstantiale corpus esse illam substantiaiam quae tribus dimensionibus subiecta est*". Translation provided by Claessens ('Francesco Piccolomini on Prime Matter and Extension', 241), which also contains a good discussion of Zabarella's second argument.

This interpretation also allows us to explain why Zabarella makes one of his remarks later in Book II. Recall that after finishing his arguments for his considered view, Zabarella remarks that out of the ancient philosophers only Averroes held his view on extended matter.³⁹ But as we just saw, their accounts on extended matter are not identical. The most reasonable explanation for Zabarella's remark is that he fully accepts the first Averroistic thesis, the accidentally quantified reading, and thus sees himself as taking a position firmly within the Averroistic tradition.

In summary, we saw that Zabarella's assertion that prime matter is by nature a body subject to three dimensionality, apart from every form, is not a decisive argument for an intrinsically extended reading, since by 'form' Zabarella refers to substantial form. Texts asserting that prime matter is extended in virtue of an accident inhering in it seemed to establish the accidentally quantified reading. However, these assertions by Zabarella also do not decisively show which view he favors since we have no evidence that he also believes that an accident of matter must be metaphysically distinct from matter. All of this underscores the unusual complexity and difficulty of discerning exactly what Zabarella thought about matter's relationship with extension, since any given text by itself can be interpreted in both an intrinsically extended or accidentally quantified way. However, this article addresses this difficulty by showing that, although a knock-down argument for either of these views is not available, once we recognize that the entire tenor and trajectory of Zabarella's overall argument is Averroistic, it becomes clear that it is more reasonable to interpret his account of extended matter in an accidentally quantified light.

³⁹ Zabarella, *De reb. nat.*, col. 219. See footnote 33.