# The Syllogism Simpliciter in Radulphus Brito and John Buridan

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I have no words; my voice is in my sword, thou bloodier villain than terms can give thee out.

\*Macbeth\*, act 5, scene 4\*

#### 1 Introduction

In the first chapter of the *Prior Analytics*, Aristotle defines the syllogism thus:

A syllogism is an argument  $[\lambda \acute{o}\gamma o\varsigma]$  in which, certain things being posited, something other than what was laid down results by necessity because these things are so.<sup>1</sup>

This raises a few questions. For one, what kind of things are involved here? Aristotle was famously the first to use letters as logical signs—are letters things? Or does a syllogism have to be *about* something? And if so, do those things have to be true? As always,  $\lambda \acute{o} \gamma o \varsigma$  also caused some trouble: does a syllogism have to be an argument? And is the conclusion part of a syllogism, or is it just something that results from it? These were questions of much debate in the Latin medieval scholasticism of the 13th and early 14th century.

Another important issue for medieval logicians was the scientificity of their field. While Aristotle had not regarded it as a science,<sup>2</sup> they were adamant to prove otherwise, often in the very first questions of their commentaries on the texts of the *Organon*. The requirements to be met were formulated by Robert Grosseteste in the 1220's:

Scientia most strictly so-called is comprehension of what exists immutably by means of the comprehension of that from which it has immutable being. This is by means of the comprehension of a cause that is immutable in its being and its causing.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Aristotle, *Prior Analytics*, transl. Striker, book 1, chapter 1, 24b17–19. Συλλογισμὸς δέ ἐστι λόγος ἐν ῷ τεθέντων τινῶν ἕτερόν τι τῶν κειμένων ἐξ ἀνάγκης συμβαίνει τῷ ταῦτα εἶναι (eds. Cooke and Tredennik). The definitions in the *Topics* and *Sophistical Refutations* are virtually the same.

<sup>&</sup>lt;sup>2</sup> Zupko, *John Buridan*, 35.

<sup>&</sup>lt;sup>3</sup> Pasnau, "Science and Certainty", 358.

That the subject matter of logic does not change seems self-evident. But how can it be also unchanging, one, and, crucially, really *exist*? Radulphus Brito (c. 1270–1320) and John Buridan (c. 1300–1361) answered the issue by constructing two very different logical systems. Brito's is one of second intentions—logic is about concepts in our mind, which have a real connection to extramental reality. It is a system based on the modist axiom that the world really is as we understand it. Buridan's is very far from this. To him, logic is a science of discourse, a *scientia sermocinalis*. This means that logic is a science about words, which are not caused by anything in the world, but simply signify things in it by convention. To Buridan, the *Prior Analytics* is simply about the term "syllogism". To Brito, it is about the syllogism *simpliciter*.

Two ideas pervade this paper: the syllogism *simpliciter* and logical hylomorphism. Despite not really being present in Aristotle's works, the two concepts emerged early on in their reception. What are they? Everyone seems to agree that the syllogism *simpliciter*, henceforth SS, is what Aristotle is talking about and making use of in his *Prior Analytics*. The core idea is that it is a syllogism *sine additione*, *tout court*, in itself. But beyond this, there is little consensus about the SS. It is simple in the sense that it is not about anything—in the 13th century, everyone agrees with Robert Kilwardby (c. 1215–1279) that the SS is not *contracted* to any matter, that is, it is neither demonstrative, dialectical, euristic or sophistical.<sup>4</sup> Already here, then, we see an introduction of hylomorphism in relation to the SS. While this is, in nature, a very Aristotelian move, Aristotle himself did not apply his metaphysical terminology to his logic (with two somewhat peripheral exceptions).<sup>5</sup> But already in Alexander of Aphrodisias, the first commentator on Aristotle, distinctions between logical form and matter crop up. Logical hylomorphism became standard talk in Arabic, and, some time later, medieval Latin commentaries.<sup>6</sup>

This paper shows how Radulphus Brito (c. 1270–1320) brings the two ideas together, defining the SS as "the syllogism considered with respect to the matter and form of a syllogism insofar as it is a syllogism—absolutely considered in this way" and placing it in his logical system of second intentions. I then compare—mostly for the sake of elucidation—Brito's conception of the SS with that of Buridan, who effectively reduces it to the term "syllogism", solving many of the

<sup>&</sup>lt;sup>4</sup> Aristotle lists the kinds of syllogisms in book 1, chapter 1 of the *Topics*. The list may not be conclusive to Aristotle: "let the aforementioned be the species of deductions, for the purpose of capturing them in outline" (Aristotle, *Topics*, book 1, chapter 1, 101a17–18).

<sup>&</sup>lt;sup>5</sup> Physics 195a18–19 and Metaphysics 1013b19–20. Identified by Barnes, "Logical Form and Logical Matter", 40, and Dutilh Novaes "Reassessing Logical Hylomorphism", 340 respectively. (Brumberg-Chaumont, "Logical Hylomorphism", 19n2). The passage in the *Metaphysics* is very close to the one in the *Physics*: "All the causes we have mentioned fall into four especially plain groups. Letters are the cause of syllables, their matter of artefacts, fire and the like of bodies, their parts of wholes, and the hypotheses of the conclusion, as that out of which; and the one lot, the parts and so on, are causes as the underlying thing, whilst the other lot, the whole, the composition, and the form, are causes as what the being would be."

<sup>&</sup>lt;sup>6</sup> Lagerlund, "Assimilation".

<sup>&</sup>lt;sup>7</sup> Brito, Quaestiones super Priora Analytica Aristotelis (QPA), book 1, question 2, solution. Dicendum quod syllogismus simpliciter est hic subiectum, id est syllogismus consideratus quantum ad materiam et formam syllogismi unde syllogismus est — absolute secundum istum modum considerandi ipsum.

issues with the SS, while still allowing it roughly the same conceptual functionality in his syllogistics. In the conclusion, I discuss some intersting parallels between the two authors with regards to the SS. While their basic conceptions of logic and the SS are fundamentally different. they often seem to arrive at, practically speaking, very similar ideas. Before doing any of this, however, we must quickly go through the historical background of the SS and logical hylomorphism most immediate to our authors.

While Brito's conception of the SS has been studied to some extent,8 this is a first attempt at a complete account, which places the concept within Brito's larger system of a logic of second intentions. Furthermore, developments in Parisian logic between the modistae of the late 13th century and Buridan's nominalism of the 1330's still consitute a significant gap in the history of logic. This paper does nothing to fill that gap, but perhaps by looking at how authors at the very edge of each side conceive of the SS, it can at least be bridged, to some extent.

#### 2 The Syllogism Simpliciter and Logical Hylomorphism in the 13th Century

The term "logical hylomorphism" is a modern invention. It was coined to describe a (modern) conception of logic as a formal discipline, i.e. one which only considers logical relations, with no regard for what "stuff" they might relate. But this is not the kind of hylomorphism the medievals dealt with. 10 To the authors we consider here, form and matter always come together, ontologically or conceptually speaking. Indeed, in the Aristotelian hylomorphism of the medievals, there is also the notion that a thing needs to have some matter which is proper to it. A table could not be made from fire, for example. What about the syllogism? What are the things which must be posited—what is logical matter? Julie Brumberg-Chaumont has given an overview of the three different senses in which late ancient and medieval commentators spoke of syllogistic matter:

- 1) Matter of the propositions, the logical "stuff", which may be necessary, possible or impossible to obtain. Fails if the truth-value of one or both propositions is false.
- 2) Matter of the syllogism proper—just the premises (and sometimes the conclusion) of which the syllogism is made, insofar as they are premises (and conclusion).
- 3) The "general (as opposed to individual) features of the semantic content of terms and propositions."11

<sup>8</sup> Mora-Márquez, "The Syllogism".

<sup>&</sup>lt;sup>9</sup> Mora-Márquez, The Thirteenth-Century Notion of Signification, 159.

<sup>&</sup>lt;sup>10</sup> Brumberg-Chaumont, "Logical Hylomorphism", 26. <sup>11</sup> Brumberg-Chaumont, "Universal Logic", 260–263.

Sense 1 is present in Boethius, the second most important authority for medieval logic. 12 The later Albert the Great would hold that a syllogism which either postulates or produces falsity is not a syllogism at all, since such an argument would not have the matter required for it to be a syllogism. This notion appears in the 1277 condemnations. <sup>13</sup> Sense 2 is closest, in terms of literal wording at least, to what Aristotle says in those aforementioned cases in the Physics and Metaphysics. To consider syllogistic matter in sense 2 is to consider the propositions in a syllogism simply as such, without any regard to their contents. Sense 3 evolved in response to the issue of the "metal statue": (every metal is natural, every statue is (in) metal : every statue is natural).<sup>14</sup> Although there are two true premises (there is no material sin in either sense 1 nor 2), the conclusion is obviously false, and the syllogism itself does not seem very valid. There is some kind of equivocity of "natural" in the syllogism—although the two instances of the word are semantically the same, they are used in two different kinds of predication, which connect to different "general features" in the semantic content of "natural". As this short overview suggests, the history of logical hylomorphism is a rich and fascinating one. For the purposes of this paper, however, I am primarily interested in it as it relates to the concept of the SS in the 13th century.

Both the concept of the SS and that of logical form and matter were important in the 13th century as tools for analyzing defective arguments. 15 Albert's condemned idea, for example, is that an argument which is materially defective (or sins against the matter—peccare was the favoured term<sup>16</sup>) in sense 1 of matter is not a syllogism at all, however formally all right such an argument might be. Kilwardby's answer is, to paraphrase, that it is only in matter in sense 2 that material sin disqualifies a syllogism. It is only if the argument does not have three terms and two propositions that it cannot be a syllogism.<sup>17</sup> Although there were many ideas about what syllogistic form is, everyone would agree that any type of violation against it would be equally disqualifying. The SS was used more as a standard against which one could "check" the syllogistic validity of an argument. Many questions have the form of "utrum syllogismus" circularis/ex falsis/etc peccat contra syllogismos simpliciter". To us in the 21st century, it might seem sufficient to ask "is this a syllogism?" But the medieval conception of the syllogism was not fixed, and crucially, not "formal" enough—using the SS, it seems, made sure no-one was bringing matter in sense 1 into the discussion. Although the definition of the SS might vary from author to author, the basic idea seems to be that it is a syllogism unde est syllogismus—insofar as

<sup>&</sup>lt;sup>12</sup> I mean not to say that sense 1 is possibly inherited from Boethius only. Boethius, In Ciceronis Topica, in Opera omnia, ed. J.P Migne (Paris:1847), 1047A (in Thom, "Syllogistic Form", 135n25). Ita in argumentationibus quas propositionibus compaginari atque conjungi supra retulimus, gemina erit speculationis et judicandi via. Una quae propositionum ipsarum naturam discernit ac judicat utrum verae ac necessariae sint, an verisimiles, an sophisticis applicentur, et haec quasi materiae speculatio est. It was defined by Ammonius (Brumberg-Chaumont, "Universal Logic", 260).

<sup>&</sup>lt;sup>13</sup> Brumberg-Chaumont, "Logical Hylomorphism", 30.

<sup>&</sup>lt;sup>14</sup> Brumberg-Chaumont, "Universal Logic", 260.

<sup>&</sup>lt;sup>15</sup> Hylomorphic analysis of defective arguments was already in place in Alexander of Aphrodisias, and it can be found in Arabic authors, such as al-Ghazâlî (Dutilh Novaes, "Form and Matter", 343).

<sup>&</sup>lt;sup>16</sup> Buridan would later point out that "peccare, proprie loquendo, non inuenitur nisi in hominibus liberum arbitrium habentibus" (Buridan, QAP, book 2, question 14, solution).

<sup>&</sup>lt;sup>17</sup> Thom, "Kilwardby on Syllogistic Form", 135.

it is a syllogism. So checking an argument against the SS could be done, for example, by substituting "contracted" terms with transcendent letters. So while (All dogs are cats, all cats are in space  $\cdot$  all dogs are in space) might be a bit hard to swallow, (AB, BC $\cdot$ AC) is not. Clearly, there is some notion of truth/validity in this kind of analysis.

Now, it must be stressed that even though these two tools for talking about defective arguments were widely used, exactly what they looked like was a matter of some dispute. Most authors agreed that the matter of a syllogism is its terms and propositions. Beyond that, however, there was not so much unity. Is the conclusion part of the matter or the form? Is the inferential power part of, or a result of, or an additional requirement of syllogistic form?<sup>18</sup> As for the SS, the main divide in the 13th century stood between Albert and Kilwardby. Crucially, to again stress the type of hylomorphism we are dealing with here, the SS is, as far as I know, never described as the form of "actual" syllogisms. 19 There was, however, some debate about the separate nature of the SS. Albert had held that the SS was a mere abstraction, something present in all syllogisms but with no separate being.<sup>20</sup> To Kilwardby, the relationship goes the other way, so to speak. To him, the SS is a formula for syllogisms, 21 much like Aristotle's famous example of how the geometrical circle relates to concrete circles in the world.<sup>22</sup> Kilwardby says that the SS is the form of the demonstrative or dialectical syllogisms, but that the SS as the subject matter of the Prior Analytics is not the form of the syllogism. This is instead a kind of syllogism which can be expressed with transcendental terms such as A, B, and C.23 In what follows, we will see how Brito defines syllogistic form and matter as that which constitutes the syllogism unde syllogismus est, and how Buridan reduces the SS to the syllogism simpliciter loquendi. Both conceptions, I think, are in some ways closer to Albert; they lean more on a psychological ("considered as...") definition than an ontological one.

### 3 Radulphus Brito's Hylomorphic Conception of the Syllogism Simpliciter

Before going into Brito's definition of the SS, I would like to say something quickly about his logical system in general. To Brito, logic is about concrete secondary intentions. What does this mean? Broadly speaking, it means that syllogisms are about concepts, which have a kind of grounding in the real world. The challenge for Brito is to give a psychological understanding of logic (more on which below) while still maintaining the connection to extramental reality, avoiding relativism while still holding the human intellect as an integral part of logical activity.

<sup>&</sup>lt;sup>18</sup> See Brumberg-Chaumont, "Logical Hylomorphism", 19–31, for the many alternative approaches developed in the Middle Ages.

<sup>&</sup>lt;sup>19</sup> (Thom, "Kilwardby on Syllogistic Form", 134).

<sup>&</sup>lt;sup>20</sup> Brumberg-Chaumont, "Logical Hylomorphism", 30f.

<sup>&</sup>lt;sup>21</sup> Thom, "Kilwardby on Syllogistic Form", 134.

<sup>&</sup>lt;sup>22</sup> Brumberg-Chaumont, "Universal Logic", 269.

<sup>&</sup>lt;sup>23</sup> "The syllogism that is dealt with in the *Prior Analytics* is separable according to its being from both [the dialectical and the demonstrative syllogisms], for the syllogism that is in transcendental matter (as in the terms a, b) has neither probable matter nor necessary matter." Transl. Brumberg-Chaumont, "Logical Hylomorphism", 31n9.

As Ana María Mora-Márquez has explained, the roots of Brito's intentional logic are found in Avicenna's Logica. There, Avicenna explains that epistemic perspectives (universality and particularity, for example) are fundamental aspects to our understanding of the world. These are mental accidents—they "befall essences only as they exist in the intellect."<sup>24</sup> It is these accidents that logic is about. The logically relevant semantic content of "mammals" in a syllogism (all cats are mammals, all mammals are mortal) is that it is a genus. Such a syllogism is not about mammals in the world, then, but our understanding of mammals as a genus. To Brito, these second intentions are based in some mode of being which a thing can have. His second intentions are based in the first intentions of a thing's essence, which we first understand upon encountering it. Brito also distinguishes between concrete and abstract intentions. When you see a cat, for example, you first grasp its essence (whatever that might be). This is the concrete first intention. Then you understand the concept cat—this is the abstract first intention. Then you understand the substantiality of the cat: this is a concrete second intention. If you then go on to think about the concept of <u>cat</u> in terms of its substantiality, you are then grasping an abstract second intention. Again, Brito's logic is about concrete second intentions. A syllogism about cats, then, is not about actual cats in the world, but about the concept of cat, qualified according to one of its modes of being. 25 With Brito's system in mind, then, let us see how he fits the SS into it.

#### Brito defines the SS thus:

"the syllogism considered with respect to the matter and form of a syllogism insofar as it is a syllogism—absolutely considered in this way." <sup>26</sup>

This is a combination of the standard definition of the SS as the syllogism *unde syllogismus est*<sup>27</sup> with Kilwardby's conception of logical form and matter. Brito applies it to the *ex falsis* debate and the analysis of defective arguments:

I say that a false syllogism can be understood in two ways: either as false because it is false in form, and such is not a good syllogism; or false because it fails in matter required for the syllogism *unde syllogismus est*, and so it is not good<sup>28</sup>

<sup>&</sup>lt;sup>24</sup> Mora-Márquez, "Thirteenth Century Aristotelian Logic", 164.

<sup>&</sup>lt;sup>25</sup> Mora-Márquez and Costa, "Radulphus Brito", section 4.2.

<sup>&</sup>lt;sup>26</sup> Brito, QPA, book 1, question 2, solution. Dicendum quod syllogismus simpliciter est hic subiectum, id est syllogismus consideratus quantum ad materiam et formam syllogismi unde syllogismus est — absolute secundum istum modum considerandi ipsum. A similar definition shows up in his Quaestiones super Libro Topicorum Boethi, book 1, question 3, solution. [S]yllogismus simpliciter qui est subiectum in libro Priorum addit quendam modum considerandi syllogismus unde syllogismus quantum ad materiam et formam syllogismi absolute, qui modus accidit syllogismo in communi.

<sup>&</sup>lt;sup>27</sup> Brumberg-Chaumont, "Logical Hylomorphism", 25.

<sup>&</sup>lt;sup>28</sup> Brito, QPA, book 2, question 6, ad 1.5. [D]ico quod falsus syllogismus potest intelligi dupliciter: aut falsus quia est falsus in forma, et talis non est bonus syllogismus; aut falsus quia peccat in materia requisita ad syllogismum unde syllogismus est, et sic non est bonus [...].

I will first deal with the matter of the SS, which leads quickly into the question of the nature of the SS and how it relates to different kinds of syllogisms. After going through the form of the SS, I give a short analysis of how Brito distinguishes between the syllogism as an intention and as an *object of* intention, and what consequences this has for his syllogistic in general.

#### 3.1 The Matter of the Syllogism Simpliciter

Given Brito's definition of the SS, its matter is that which is required for a syllogism to be. This is matter in sense 2—Brito follows the condemnation of Albert's inclusion of truth in the definition of a syllogism. He differentiates between accidental and required matter of the syllogism:

If however it fails as regards the accidental matter, because of this it does not result that [the required matter] is not a constituent of the compound. In this way is the syllogism *ex falsis*, as it does not fail as regards the required matter for the syllogism *unde syllogismus*, but is only defect in the material conditions which belong to the matter itself, therefore etc.<sup>29</sup>

We see that what Brito calls "accidental" matter corresponds to matter in sense 1, and "required" to sense 2. This required matter, then, are three terms and two propositions.<sup>30</sup> So something like (AeB, AiB) or indeed (AaB, AaB) is not a syllogism. Note that Brito does not, as Kilwardby did, discuss this in terms of remote or proximate matter.<sup>31</sup> When Brumberg-Chaumont discusses syllogistic matter in sense 3, she makes this remark:

The idea will also perfectly fit the Avicennian notion generally adopted in the first decades of the thirteenth century that general matter (as opposed to individual matter), not just form, is part of the definition, in the case of realities that are a compounds of matter and form the form of which cannot be separated from its matter, such as men, animals, artefacts—recall that syllogisms are artefacts.<sup>32</sup>

This notion is clearly present in Brito's inclusion of matter (in sense 2, however) in his definition of the SS. But there is a more important issue to attend to. How can we grasp this required matter, the matter of the SS? Brito faces the issue of the scientificity of logic. If the SS is the subject matter of the *Prior Analytics*, which it is, the matter of the SS has to be somewhere to be found. For Kilwardby, this was easy; to him, the SS is expressed with transcendental matter. Brito cannot appeal to the same simplicity. What sort of a thing is the SS?

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<sup>&</sup>lt;sup>29</sup> Ibid. Si tamen peccet contra aliquia accidentia materiae, non propter hoc restat quin constituat illud compositum. Modo sic est de syllogismo ex falsis, quia non peccat contra materiam requisitam ad syllogismum unde syllogisymus, sed solum deficit in condicionibus materiae quae accidunt ipsi materiae; quare etc.

<sup>&</sup>lt;sup>30</sup> Brito, QPA, book 2, question 6, solution. Primo, quod habeat materiam syllogismi, quia habet tres terminos et duas propositiones. The three terms and two propositions are also given as "material causes": Brito, QPA book 1, question 1. Et etiam principia materalia, sicut tres terminos et duas propositiones.

<sup>&</sup>lt;sup>31</sup> Dutilh Novaes, "Form and Matter", 347f.

<sup>&</sup>lt;sup>32</sup> Brumberg-Chaumont, "Universal Logic", 264.

## 3.2 The Nature of the Syllogism Simpliciter

There are two aspects to the issue of the nature of the SS. First, it is an inquiry into the constitution of the SS itself. Secondly, we need to know how it relates to the contracted kinds of syllogisms. In the introduction, I explained briefly how Brito thinks that a syllogism is about concrete second intentions, which ultimately have their foundation in real things. When it comes to the SS, the pattern is repeated—only this time, it is the actual syllogisms themselves which are the basis of an abstract second intention, the SS:

In a way while the syllogism *simpliciter* is not in itself perceptible, still it is perceptible according to its parts because the terms from which it is made are perceptible. However this solution does not seem to be valid, as the syllogism here considered [in the *Prior Analytics*] is a syllogism not contracted to some matter. [...] So it ought to be said in another way that something can be intelligible in two ways: either primarily or secondarily and from the second understanding. [...] second intentions are not understood firstly but from the understanding of things upon which they are based.<sup>33</sup>

So the *Prior Analytics* is about the SS—not because the SS is there expressed with transcendental matter, but because when we see a non-contracted syllogism (AB, BC), we understand *secondarily* that AB and BC are two propositions, made from three terms, that somehow produce the conclusion AC. We do not know what those letters mean, indeed, what they even are, but that does not matter, as it were.<sup>34</sup> When Brito says that the SS is a way to consider a syllogism, then, this is the kind of consideration he has in mind: the SS is an abstract second intention, which is founded in actual syllogisms (the first intentions, relative to the SS). To put it less technically, the SS is an abstraction which we can make from any given syllogism.

This conception of the SS, as a way to consider a syllogism, ties into Brito's view on the generality of the SS. I mean "generality" in a technical sense—the question is whether the SS is a genus to the contracted types of syllogism. Kilwardby had rejected this notion,<sup>35</sup> and Brito does

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<sup>&</sup>lt;sup>33</sup> Brito, QPA, book 1, question 2, ad 1.3. Modo licet syllogismus simpliciter non sit secundum se sensibilis, tamen est sensibilis secundum suas partes quia per terminos ex quibus fit qui sunt sensibiles. Tamen haec solutio non vietur valere, quia syllogismus hic consideratus est syllogismus non contractus ad aliquam materiam. Modo si termini aliqui sunt sensibiles, hoc est ut sunt in aliqua materia speciali. Ideo dicendum est aliter quod aliquid potest esse intelligibile dupliciter: vel primario vel secundario et ex intellectione alterius. Modo de illo quod est primo intelligibile verum est quod est sensibile vel secundum se vel secundum sui accidentia. Sed illud quod est secundario intelligibile non oportet, sicut privationes intelliguntur ex intellectione habituum, et tamen privationes numquam sunt sensibiles. Eodem modo intentiones secundae non intelliguntur primo sed ex intellectione rerum supra quas fundatur.

The letters of the *Prior Analytics* are fully unknown: Brito, *QPA*, appendix 1, question 2, solution. *Minor declaratur, quia si syllogismus simpliciter procederet ex notioribus, tunc idem esset notius et ignotius se ipso, quia arguitur sic 'omne B est A; omne C est B; ergo omne C est A.' Modo si tu dicas quod praemissae sunt notiores conclusione, fiat conclusio maior et iungatur cum conversa minoris dicendo sic 'omne C est A; omne B est C; ergo omne B est A.' Illa conclusio erat maior primi syllogismi, ergo per te erit nota et ignota, quod falsum est; ergo etc. <sup>35</sup> Thom, "Syllogistic Form", 134.* 

so as well: the SS differs specially (per species) from syllogisms contracted to some matter.<sup>36</sup> But still, there is some kind of conceptual priority to the SS—it is certainly not on the same "level" as, say, a dialectical syllogism. In his commentary on the *Topics*, Brito explains that the SS is a modal whole (*totum in modo*) to those contracted types of syllogisms:

the syllogism simpliciter is not a genus to the dialectical or demonstrative syllogism [...] it is a modal whole with respect to them.<sup>37</sup>

A modal whole is one of the topics of Boethius' *De differentiis topicis*. The medievals defined it per Lambert of Auxerre:

A modal whole is a name or a verb taken without a determination with respect to itself taken with a determination, e.g., 'man' with respect to 'white man' and 'runs' with respect to 'runs well'. One draws an argument from it destructively in this way: 'A stone is not a man; therefore a stone is not a white man'. The Topical maxim from a modal whole: From whatever is removed from a modal whole its part is also removed.<sup>38</sup>

So this, then, is how the SS relates to the contracted types of syllogisms; while not more general, the SS is totally in all of them. This makes sense, given how we have just seen that the SS is an abstraction, which we can draw out from any kind of syllogism. Having seen what Brito thinks about the nature of the SS, let us now return to the specifics of its constitution.

## 3.3 The Form of the Syllogism Simpliciter

Of course, merely having three terms and two propositions at hand does not produce a syllogism. That matter has to be ordered in a certain way—by the form of the SS. But what is this form of the syllogism as "considered with respect to the matter and form of a syllogism insofar as it is a syllogism"? Brito does not really make a distinction between the form of the SS and that of the syllogism, as he does regarding the matter. There, an "actual" syllogism had both accidental matter (matter in sense 1) as well as that required matter, i.e. three terms and two propositions (matter in sense 2). One could imagine a parallel move for syllogistic form—one proper to a contracted syllogism, say, mood and figure (as in Kilwardby), and another, more general, which is proper to the syllogism *unde syllogismus est*—the form of the SS. It is possible that this distinction is implicit, but irrelevant, to the discussions we look at now, which deal with syllogistic form in general, i.e. that of the SS. At any rate, let us see what Brito says about the

<sup>&</sup>lt;sup>36</sup> Brito, QPA, appendix 1, question 2, ad 1.2. Et quando dicitur "quidquid inest inferiori et superiori," verum est ubi ponatur aliquid ibi pertinens ad differentiam inter superius et inferius, sicut non sequitur 'homo est species, ergo et animal,'quia ibi ponatur ista intentio 'species' quae pertinet ad differentiam inter syllogismum simpliciter et dialecticum, ideo non valet.

<sup>&</sup>lt;sup>37</sup> Brito, Quaestiones Super Librum Topicorum, book 1, question 8, solution. Ad istam quaestionem dicendum quod, omissis opinionibus aliorum, quia suae rationes tactae sunt in arguendo, quod syllogismus simpliciter non est genus ad syllogismum dialecticum et demonstrativum; secundo dicendum quod est totum in modo respectu illorum.

<sup>&</sup>lt;sup>38</sup> Lambert of Auxerre, *Logica*, 155. Brito agrees with it as well; he basically repeats it in his commentary on *De differentiis topicis* (Brito, *Quaestiones super Libro Topicorum Boethi*, book 1, question 3, solution).

form of the SS, starting from the more abstract and moving into increasingly granular levels of detail. First off, Brito explains that there really is *one* such form:

And if it is asked "in what way can there be one notion (ratio) of the simple intellect when that intelligible is composite?" it must be said that while the syllogism is a composite, it however is one form as an order of propositions in relation (comparatione) to a conclusion, and from the unity of this form comes the unity of this reason of the intellect, therefore etc.<sup>39</sup>

This is primarily to save syllogisms as objects of scientific knowledge; however composite a syllogism may be, considered as a syllogism (i.e. simpliciter) it has but one form. What is this form? Brito defines it as the order of propositions in relation to a conclusion. Again, the status of the conclusion is a bit unclear. But it was not part of the matter of the SS, so it cannot be something that is ordered by its form. Instead, the form of the SS is only that order of two propositions. The order does, of course, aim toward a conclusion, but this is not to say that the relationship with the conclusion is really a part of the form of the SS. Broadly speaking, this is reminiscent of the generally intertwined relation between Aristotle's formal and final causes.<sup>40</sup> On a more technical note, this is similar to the conception of syllogistic form in Anonymous Aureliensis II, where the inferential necessity of a syllogism comes about, given the right mood and figure. To him (presumably), however, the conclusion is part of the form of the syllogism.<sup>41</sup>

But Brito gives a more detailed account of the form of the SS, which does not mention the (somewhat accidental) conclusion:

the form required for a syllogism, namely the union of extremes in some middle term or the denotation of such a union, because this suffices for it to be a syllogism, for example, that the two extremes are denoted as united in some middle term.<sup>42</sup>

This excludes, of course, an argument like (A is B, C is C). But what really stands out here is the lack of any mention of inference or necessity. We have come very far here from Aristotle's "something else results by necessity because these things are so". Syllogistic inference is instead reduced to a mere matter of denotation: any conclusion is really just saying the same thing as the premises, but in a different way. Less dramatically, Brito's definition of syllogistic form dismisses any actual connection between what is signified in a syllogism—the union happens in

<sup>&</sup>lt;sup>39</sup> Brito, QPA, book 1, question 2, ad 1.3. Et si quaeratur 'qualiter potest habere unam rationem intelligendi simplicem cum impsum intelligibile sit compositum?' dicendum quod licet syllogismus sit compositus, ipsius tamen est una forma sicut ordo propositionum in comparatione ad conclusionem, et ex unitate illius formae sumitur unitas rationis intelligendi ipsius, ideo etc.

<sup>&</sup>lt;sup>40</sup> Cf. Physics II.8, 199b2–3. "That nature is a cause, then, and a cause in this way, for something, is plain." I do not mean that Brito thinks the conclusion is the final cause of the SS—see section 3.4.

<sup>&</sup>lt;sup>41</sup> Brumberg-Chaumont, "Universal Logic", 261.

<sup>&</sup>lt;sup>42</sup> Brito, OPA, book 2, question 6, solution. ...etiam habet formam requisitam ad syllogismum unde syllogismus, scilicet unionem extremorum in aliquo medio vel denotatione talis unionis, quia hoc sufficit ad hoc, quod fit syllogismus, puta quod duo extrema denotentur in aliquo medio uniri.

the soul. We understand this when he says that the order of the terms and propositions, i.e. the form of the syllogism, is only in the soul.<sup>43</sup> Also interesting is the exclusion of the conclusion—a syllogism, strictly speaking (the SS), is only two propositions which join three terms in a certain way.

## 3.4 The Syllogism as Intention—Where is the Conclusion?

In our investigation into Brito's hylomorphic conception of the SS above, we have glimpsed at times an underlying psychological understanding of syllogistic. We will now see more clearly how this relates to Britos's definition of the SS. We have seen that Brito does not think the conclusion belongs to the matter nor the form of the SS. Still, he is happy to agree with Aristotle and define the syllogism as an *oratio in qua quibusdam positis de necessitate sequitur aliud.*<sup>44</sup> Should not the matter of the SS, then, be three terms and *three* propositions, the conclusion being the third? Kilwardby had not thought so, and neither does Brito.

Brito says that a syllogism can be considered as an object of intention, or simply *as* an intention (in which case it has mental being).<sup>45</sup> This is, effectively, to distinguish between a syllogistic argument, and the syllogism as a kind of argumentation. Brito makes this distinction as well in his commentary on Boethius.<sup>46</sup> There, we understand that to Brito, the syllogism is not a species of *argumentum* but of *argumentatio*.<sup>47</sup> A syllogism is ultimately something an intellect performs. Kilwardby had seen the distinction be, but rejected it, opting for a less psychological conception of syllogistic.<sup>48</sup> A syllogism considered as an object of intention, then, is a "full" argument which has all the characteristics of a syllogism:

<sup>&</sup>lt;sup>43</sup> Brito, QPA, book 1, question 1, ad 1.4. Et si quaeras 'in quo est syllogismus tamquam in ultimato subiecto?', dico quod syllogismus pro intentione est in anima, et pro re subiecta intentioni quantum ad terminos est in illo ubi res est significata per illos terminos, sed quantum ad ordinem istorum terminorum et propositionum est in anima.

<sup>&</sup>lt;sup>44</sup> Brito, QPA, appendix 1, question 2, solution. Note that Brito makes a very different reading of GREEK than Striker, who translates it as "argument".

<sup>&</sup>lt;sup>45</sup> Brito, QPA, book 1, question 1, solution. Si enim accipiatur pro re subiecta intentioni, sic est ens. [...] Si accipiatur pro intentione, sic etiam est ens secundum intellectum. This is, to some extent, typical of Brito, who makes a similar move in his modist grammar, distinguishing between the way in which a word points out a mode of being in a thing (the modi significandi activi), and the way in which a mode of being in a thing is signified (the modi significandi passivi) (Pinborg, Die Entwicklung, 114).

<sup>&</sup>lt;sup>46</sup> Brito, Quaestiones super Libro Topicorum Boethi, book 2, question 1, solution. Ad dissolutionem huius quaestionis notandum est quod argumentatio et argument differunt et sunt diversae intentiones, quia argumentum est intentio attributa alicui obiecto complexo secundum tertiam operationem intellectus, ut habet virtutem inferendi conclusionem et hoc implicite. Argumentatio autem est intentio attributa tali complexo secundum quod ibi habetur explicite medium inferens conclusionem.

<sup>&</sup>lt;sup>47</sup> Ibid. Verumtamen propter dictum Auctoris, qui dicit quod syllogismus et inductio sunt species argumentationis, potest sustineri quod argumentatio pro intentione argumentationis sit genus ad syllogismum et inductionem etc., quia illud quod praedicatur in quid de aliquibus differentibus et secundum unam rationem univocam est genus ad illa. Sed argumentatio pro intentione isto modo praedicatur de istis. Quare etc.

<sup>&</sup>lt;sup>48</sup> Thom, "Kilwardby on Syllogistic Form", 140.

If it is accepted as a thing subject to intention, so it is a being. And something complex in which there are united extremes in the middle and between them in conclusion.<sup>49</sup>

Because it is a syllogistic argument "in the world", when we define it, it has to include its conclusion. This is a syllogism which we think *about*, to verify its validity, for instance. But it is quite clear in Brito that this is not an SS. Rather, the concept of the SS and a syllogism as intention appear, if not identical, co-extensive. But what does it mean for a syllogism to be an intention?

I say that the syllogism as intention is in the soul [...] as regards the order of its terms and propositions it is in the soul.<sup>50</sup>

So considered as an intention, the order of terms and propositions of a syllogism—syllogistic form—is in the soul. And this order, as we saw, is designed in relation to a conclusion. Considered as an intention, then, a syllogism does not include its conclusion. Rather, a syllogism is something that produces a conclusion—something we think *with*. But how does this happen?

an intelligible [thing] ought to be such in act as the intellect is in potency, so that there may be a being in act which can bring the intellect from potency to act, and such is the syllogism simpliciter well.<sup>51</sup>

So an intellect which understands a syllogism (AB, BC) will deduce (AC). It seems such an intellect would not have a choice, given that it correctly understands the premises. This is in line with the rhetorical roots of  $\sigma v \lambda \lambda o \gamma \sigma \mu \delta \zeta$ , where the speaker simply states premises, forcing his interlocutor to deduce the conclusion.<sup>52</sup> It is also similar to Brito's theory of meaning, where the semantic content of the speaker's speech is unavoidably understood by the hearer.

#### 4 Buridan and the Syllogism Simpliciter Loquendi

Before we turn to Buridan's conception of the SS, some background about his view on logic is needed. As I hinted at in the introduction, it differs fundamentally from Brito's. In general, Buridan revolutionized logic—he built a system of consequence in which the syllogism was but a part.<sup>53</sup> But here, we must focus on his syllogistics. Now, to Buridan, logic is a *scientia sermocinalis*, a science of discourse, meaning that logic is a "conventional system of classifying

<sup>&</sup>lt;sup>49</sup> Brito, *QPA*, book 1, question 1, solution. *Si enim accipiatur pro re subiecta intentioni, sic est ens. Est enim quoddam complexum in quo sunt extrema unita medio et inter se in conclusione.* 

<sup>&</sup>lt;sup>50</sup> Brito, QPA, book 1, question 1, ad 1.4. Et si quaeras 'in quo est syllogismus tamquam in ultimato subiecto?', dico quod syllogismus pro intentione est in anima, et pro re subiecta intentioni quantum ad terminos est in illo ubi res est significata per illos terminos, sed quantum ad ordinem istorum terminorum et propositionum est in anima.

<sup>&</sup>lt;sup>51</sup> Brito, QPA, book 1, question 2. ...sed intelligibile debet esse tale in actu qualis est intellectus in potentia, ita quod sit ens in actu quod possit deducere intellectum de potentia ad actum, et talis bene est syllogismus simpliciter.

<sup>&</sup>lt;sup>52</sup> See Crubellier, "Du sullogismos au syllogisme", and Dutilh Novaes, "The Syllogism", 219-223.

<sup>&</sup>lt;sup>53</sup> Lagerlund, "Medieval Theories", section 8.

the various modes and relations of human speech."<sup>54</sup> There is no connection to the real world, as there had been in Brito's logic of second intentions. Rather, the subject matter of the *Prior Analytics* is not the syllogism, to Buridan, but the term "syllogism". Similarly, the subject matter of the *Posterior Analytics* is the term "demonstration".<sup>55</sup> Buridan says that the science of the syllogism is a science of definition, not demonstration:

Grosseteste says about the second book of the *Posterior Analytics*, everything is known either by demonstration or by definition [...] I say that of the syllogism is had a science by definition, as that term "syllogism", signifying every syllogism, is definable; and it is incomplex, although the syllogism is complex.<sup>56</sup>

We see here also that Buridan can save the scientificity of logic in this way. Whereas Brito had to say that the subject matter of the *Prior Analytics*, the SS, had mental being as an intention, Buridan can simply say that it is the term "syllogism"—crucially, words exist, as "spoken sounds significant by convention [ad placitum]." *Ad placitum* is a key concept here, as Buridan dismisses any connection between things and words, which had been so crucial to the modists.

What about the syllogisms in the *Prior Analytics*, which are made of letters? Buridan rejects strongly the Kilwardbian notion that these letters are transcendent, or empty, or anything like that:

And some respondents may say that by "syllogism *simpliciter*" we ought to understand the form of the syllogism from non-significative terms, just as the terms "A" "B" "C" are. But without doubt, this is inconvieniently said: as those terms [...] are significative of three letters, because if it is asked by you "in what way are these letters spoken of?", you say that the are called "A" or "B".<sup>58</sup>

To Buridan, then, there is no such thing as an "empty" or non-significative syllogism.<sup>59</sup> Unsurprisingly, we find systematic parsimony in Buridan's logic. What kind of a concept can the SS be here? Buridan reduces it to an aspect of human speech:

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<sup>&</sup>lt;sup>54</sup> Zupko, *John Buridan*, 36.

<sup>&</sup>lt;sup>55</sup> Zupko, *John Buridan*, 38.

<sup>&</sup>lt;sup>56</sup> Buridan, QAP, book 1, question 1, argument 4. Item, si de syllogismo simpliciter esset scientia, hoc esset per demonstrationem, uel saltem per definitionem; sed neutro modo; ergo ... et caetera. Maior patet ex sufficienti diuisione: quia, sicut dicit Lincolniensis\*, secundo Posteriorum, omne quod scitur aut per demonstrationem aut per definitionem scitur. Ibid, ad 4. Dico etiam quod de syllogismo habetur scientia per definitionem, quia iste terminus 'syllogismus', significans omnes syllogismos, est definibilis; et est incomplexus, licet syllogismus sit complexus.

<sup>&</sup>lt;sup>57</sup> Zupko, *John Buridan*, 36.

<sup>&</sup>lt;sup>58</sup> Buridan, QAP, book 1, question 1, solution. Primo, propter iuuenes oportet uidere quid debeamus intelligere per 'syllogismum simpliciter'. Et aliqui\* respondentes dixerunt quod per 'syllogismum simpliciter' debemus intelligere syllogismum formatum ex terminis non significatiuis, sicut sunt isti termini 'A' 'B' 'C'. Sed, sine dubio, hoc est inconuenienter dictum: quia isti termini uocales 'A', 'B', C' sunt significatiui trium litterarum, ut si quaeratur a te "quo modo haec littera uocatur?", dices quod uocatur 'A' uel 'B'.

<sup>&</sup>lt;sup>59</sup> Ibid. Item, absurdum est dicere quod aliqua propositio sit constituta ex terminis non significatiuis, quia omnis propositio est constituta ex nomine et uerbo (reducendo participium et pronomen ad nomen, sicut facit logicus), et tamen omne nomen et uerbum est uox significatiua ad placitum, ut patet per definitionem nominis et uerbi in primo Peri Hermeneias.

You should not understand that this *dictio* "*simpliciter*" is a determination of the syllogism; instead you should understand that it is a determination designating a way of our speaking [...] "simpliciter" signifies that "without additions" [...] and so it is said in the second book of the Topics, "that without addition I call simpliciter"<sup>60</sup>

The "additions" which are removed are matter in sense 1, i.e. the "stuff" of contracted syllogisms. <sup>61</sup> We might wonder how the SS relates to those contracted kinds of syllogisms. Brito denied that it was a genus to them—rather, the SS was a modal whole (*totum in modo*). Buridan, who dedicates an entire question to this (*u. SS sit genus ad syllogismum dialecticum et ad demonstrativum*), agrees with this, but adds that the SS is a genus to the syllogisms of the different figures. There is, however, one very important difference from Brito here: the question of the generality of the SS is an inquiry into the relation between different terms, not things.

[N]o syllogism is a genus or modal whole (*totum in modo*) to the dialectical or demonstrative [...] But the question is whether the term "syllogism" may be the genus or modal whole to those terms "dialectical syllogism" and "demonstrative syllogism". 62

[T]he term "syllogism" is a modal whole to those [...] as a determination which is not quidditative or specific constitutes a modal part, and so it is here.<sup>63</sup>

We recognize this from Brito. But it is more obvious, I think, that the term "syllogism" is a modal whole to "dialectical syllogism" and "demonstrative syllogism" *et cetera*, as it really is in all of them, in a literal sense. As for the generality of the term "syllogism", Buridan says:

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<sup>&</sup>lt;sup>60</sup> Buridan, QAP, book 1, question 1, solution. Sciendum tamen est quod quando dico 'utrum de syllogismo simpliciter sit scientia', uel quando dico 'in libro Priorum determinatur de syllogismo simpliciter', uos non debetis intelligere quod haec dictio 'simpliciter' sit determinatio syllogismi; immo debet intelligi quod sit determinatio designans modum nostrum loquendi. [...] Quarto modo 'simpliciter' idem significat quod 'sine addito', et 'secundum quid' significat idem quod 'cum addito'; et ita dicitur, secundo Topicorum\*, "quod sine addito dico simpliciter dico", et sic accipitur in proposito. [...] Et ideo quando quaero utrum de syllogismo simpliciter sit scientia sensus est 'utrum loquendo simpliciter, id est sine determinatione, de syllogismo sit uerum dicere quod de ipso est scientia'; et hoc non est nisi absolute quaerere utrum de syllogismo sit scientia.

<sup>&</sup>lt;sup>61</sup> Buridan, QAP, book 1, question 4a. [...] modo syllogismus, id est iste terminus 'syllogismus', contrahitur ad syllogismum dialecticum et demonstratiuum per probabilitatem et necessitatem praemissarum; modo praemissae sunt materia syllogismi: ideo illae differentiae sunt materiales.

<sup>&</sup>lt;sup>62</sup> Buridan, QAP, book 1, question 4a, solution. Et statim potest dici quod nullus syllogismus est genus uel totum in modo ad dialecticum et demonstratiuum, quia nec iste nec iste, et sic de alii. Sed quaestio est utrum iste terminus 'syllogismus' sit genus uel totum in modo ad istos terminos 'syllogismus dialecticus' et 'syllogismus demonstratiuus'.

<sup>&</sup>lt;sup>63</sup> Buridan, QAP, book 1, question 4a, solution. Et de hoc pono duas conclusiones: prima conclusio est quod non est genus ad eos, secunda conclusio est quod iste terminus 'syllogismus' est totum in modo ad eos [...] Secunda conclusio patet: quia determinatio quae non est quidditatiua et specifica constituit partem in modo, et sic est hic.

[The term "syllogism"] is one genus, and its species are taken according to the diverse figures of syllogistics, as the differences between those figures come from syllogistically formal parts (*ex partes formae syllogisticae*).<sup>64</sup>

Here, we see traces of that Porphyrian analogy between genus-species and matter-form. The upshot of all this is that Buridan effectively reduces the concept of the SS like so:

syllogism *simpliciter* → syllogism *simpliciter loquendi* = "syllogism"

This does not mean, however, that the SS as a concept is otiose in Buridan's syllogistic. We can still check instances or types of syllogisms against the SS. Indeed, Buridan does so in his *Prior Analytics* commentary (*u. petitio principii peccet contra SS*). It is just that when checking a syllogism against the SS, what we are really doing is asking "is this a syllogism?", in the sense of "is this something which we could rightly call a syllogism?". Now, this conception of the SS is obviously not as rich as Brito's hylomorphic account of it, but it gets the job done, so to speak.

#### 5 Conclusion

To conclude, let us now look at some general differences and similarities between our two authors. It is perhaps superfluous to say that Brito and Buridan's conceptions of the SS are very different. They represent two opposing sides of (late) medieval Parisian logic—Buridan was one of the first masters to directly criticize his modist predecessors. 65 Their respective takes on the SS are characteristic of their general philosophical tendencies. With Brito's rich hylomorphic conception of the SS, it becomes a large and detailed concept. By defining the SS via matter and form, Brito can explain what it really means to consider the syllogism unde syllogismus est. Conceptually, it also reduces into one what was previously two separate tools—the SS and formal/material analysis of defective arguments—for checking for syllogistic validity. But Brito's conception of the SS also works as an argument for a psychological (as opposed to ontological) understanding of syllogistic. If we reduce a syllogism into its most fundamental ideas, that is, consider it *simpliciter*, we find that it is only two propositions which connect three terms in a certain manner. For one, this means that a syllogism does not have to be grounded in any actual fact of the world; as we saw, it is enough that a connection is denoted. For another, we see that the conclusion is not part of the SS. This means, I think I have proven, that Brito considers the inferential power of a syllogism to lie, in a way, both in the syllogizer and the syllogism. Because the premises are arranged in a certain way, i.e. one which can "bring the

<sup>&</sup>lt;sup>64</sup> Buridan, QAP, book 1, question 4a, solution. Et si tu quaeras utrum iste terminus 'syllogismus' sit aliquod genus, et si sic quae sint tunc eius species, respondeo quod ipse est unum genus, et eius species acciperentur secundum diuersas figuras syllogisticas, quia differentiae illarum figurarum se tenent ex parte formae syllogisticae. Si ergo iste terminus 'A' imponeretur ad significandum omnes syllogismos primae figurae, et 'B' syllogismos secundae figurae, et 'C' syllogismos tertiae figurae, tunc iste terminus 'syllogismus' esset genus ad omnes istos terminos 'A', 'B', 'C'. The use of those letters here is a bit confusing, but I do not think Buridan intends any relation to those "transcendental" terms of the Prior Analytics.

<sup>65</sup> Zupko, John Buridan, 40.

intellect from potency to act",66 the syllogizer is forced to deduce the conclusion. As we saw above, this is confirmed by Brito's idea in his commentary on Boethius that the syllogism is a species of argumentation, not argument.

If the concept of the SS is large in Brito, it is very small in Buridan. As we have seen, by defining the SS as a syllogism *simpliciter loquendi*, he effectively renders it obsolete with the introduction of material supposition. Because his logic is about words, not concepts or things,<sup>67</sup> the subject matter of the *Prior Analytics* becomes the term "syllogism". There is no need, indeed no way, to define a conceptual SS, much less to do so with respect to form and matter.<sup>68</sup> As for logical hylomorphism, it lived on in Buridan and beyond, but now in the shape of what Brumberg-Chaumont calls a "substitutional" conception:

In the present context, the way in which we here speak of matter and form, we understand by the "matter" of the proposition or consequentia the purely categorematic terms, i.e. subjects and predicates, omitting the syncategorematic terms that enclose them and through which they are conjoined or negated or distributed or forced to a certain mode of supposition. All the rest, we say, pertains to the form.<sup>70</sup>

So, Buridan applies the form-matter dichotomy when explaining how a formal consequence  $(P \rightarrow Q)$  is one which is always true in virtue of its syncategorematic terms, no matter what one might substitute the categorematic terms for. Such a consequence is said to "hold in all matter". Buridan also grants that hylomorphism can be a way to analyze whether something is a syllogism, but he does not connect this as strongly to the SS as Brito had done. We have also seen that Buridan explains that the dialectical or demonstrative syllogisms are contracted to some *matter* (in sense 1). Ultimately, however, Buridan seems to use hylomorphic analysis in a less

<sup>&</sup>lt;sup>66</sup> Brito, QPA, book 1, question 2. ...sed intelligibile debet esse tale in actu qualis est intellectus in potentia, ita quod sit ens in actu quod possit deducere intellectum de potentia ad actum, et talis bene est syllogismus simpliciter. <sup>67</sup> Zupko, John Buridan, 38 and 299n36.

<sup>&</sup>lt;sup>68</sup> Brumberg-Chaumont, "Logical Hylomorphism", 40f.

<sup>&</sup>lt;sup>69</sup> Brumberg-Chaumont, "Logical Hylomorphism", passim.

<sup>&</sup>lt;sup>70</sup> Buridan, Tractatus de Consequentiis, 22-23. Consequentia 'formalis' uocatur quae in omnibus terminis ualet retenta forma consimili. Vel si uis expresse loqui de ui sermonis, consequentia formalis est cui omnis propositio similis in forma quae formaretur esset bona consequentia, ut "quod est A est B; ergo quod est B est A" (transl. Dutilh Novaes, "Form and Matter", 354). See also Buridan, QAP, book 2, question 7a. Primo notandum est quod consequentiarum quaedam sunt formales, scilicet si in nullis terminis inueniatur instantia consimili forma obseruata; aliae dicuntur materiales, quae tenent ratione terminorum, ita quod in multis aliis terminis non tenerent, quamuis obseruaretur consimilis forma; and Buridan, QAP, book 1, question 11a, ad 4., and question 21a, solution; and Buridan, Summa Dialectica, Treatise on Consequences, 1.4.

<sup>&</sup>lt;sup>71</sup> Dutilh Novaes, "Form and Matter", 348.

<sup>&</sup>lt;sup>72</sup> Buridan, QAP, book 2, question 14a, solution. Sed improprie, siue transsumptiue, loquendo de peccare, peccare contra aliquid est apparere esse illud et non esse illud, sicut diceremus falsum denarium peccare contra denarium, eo quod non habet formam uel materiam debitam denarii. Cf. Brito, QPA, book 2, question 6, ad 1.5. [D]ico quod falsus syllogismus potest intelligi dupliciter: aut falsus quia est falsus in forma, et talis non est bonus syllogismus; aut falsus quia peccat in materia requisita ad syllogismum unde syllogismus est, et sic non est bonus [...].

committed way than Brito. Whether a supposed syllogism has the matter or form required of it is not important for whether it really *is*, but whether we can *call* it a syllogism.

When it comes to the nature of the SS, Brito and Buridan are closer than one might think. They both agree, for example, that the SS (which, again, Buridan reduces to the term "syllogism") is a modal whole to contracted syllogisms. This is because they both agree on the fundamental idea that the SS is an abstraction, which can be used to verify syllogistic validity. The difference between them is *from what* this abstraction is made. For Brito, it is a conceptual abstraction—the SS is a second intention, grounded in contracted syllogisms. For Buridan, the abstraction is merely linguistic. This is a fundamental difference, of course, but the practical results are not always very far apart. Consider the question of whether the SS proves its conclusion:

Brito: [T]o prove a conclusion can be reached in two ways: either *quantum* truth or falsity or *quantum* inference [*illatio*]. I say that in the first way the syllogism simpliciter does not prove, while in the second way it does well prove [its conclusion] [...] that proves its conclusion *quantum* inference which is "an *oratio* in which, certain things being posited, something else results by necessity." The syllogism simpliciter is in this [way], therefore etc.<sup>73</sup>

Buridan: The second conclusion is that [a syllogism which begs the question but still observes the right mood and figure] does not sin against the syllogism, as it is truly a syllogism [...] begging the question sins against the dialectical or demonstrative syllogism: as [they] proceed from known premises to a conclusion, which is not observed in begging the question.<sup>74</sup>

Both of our authors agree, then, that the SS is not something which really proves anything about anything—it does not fit the Ciceronian definition of the syllogism as producing confidence about a doubted thing. All the SS does is produce some kind of conclusion, given a certain order of some terms: to both Brito and Buridan, the syllogism is not a species of argument.<sup>75</sup> Again,

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<sup>&</sup>lt;sup>73</sup> Brito, QPA, appendix 1, question 2, solution. Ad quaestionem dicatur quod probare conclusionem hoc potest contingere dupliciter: vel quantum ad veritatem vel falsitatem vel quantum ad illationem. Modo dico quod primo modo syllogismus simpliciter non probat, tamen secundo modo bene probat. [...] Secundum probatur, quia illud probat suam conclusionem quantum ad illationem quod est "oratio in qua quibusdam positis de necessitate sequitur aliquid." Syllogismus simpliciter est huius, ergo etc. Interestingly, although it certainly is implicit, Brito does not apply a hylomorphic analysis here, as his close contemporary Simon of Faversham had done (Dutilh Novaes, "Form and Matter", 349).

<sup>&</sup>lt;sup>74</sup> Buridan, *QAP*, book 2, question 14a, solution. Secunda conclusio est quod petere principium, siue petitio principii, non statim, obseruans modum et figuram, non peccat contra syllogismum, quia est uere syllogismus. Et hoc probant quattuor rationes quae prius ad illam partem fuerunt adductae. Ultima conclusio est quod petitio principii peccat contra syllogismum dialecticum uel demonstratiuum: quia de ratione eorum est procedere ex praemissis notioribus conclusione, quod non obseruat petitio principii. Buridan is here talking about indirectly, implicitly, begging the question, as opposed to directly (AB, BC∴AB).

<sup>&</sup>lt;sup>75</sup> Brito, *QPA*, appendix 1, question 2, ad 1.1. Ad primam, cum dicitur "quod est argumentum," etc., verum est. Et cum dittur "syllogismus est argumentum," falsum est. Et quando dicitur quod "BOETHIUS dicit quod syllogismus est species argumentationis," ipse intelligit de syllogismo dialectico et talis bene probat, quia procedit ex notioribus. Cf. Buridan, *QAP*, book 2, question 14a, ad 4. Ad aliam, dico quod 'argumentum' non est superius ad 'syllogismum'

while this is conceptual to Brito (not all syllogisms are arguments), it is linguistic to Buridan (the term "argument" does not designate everything that "syllogism" does). In both authors, the SS can function as a tool to verify syllogistic validity. Because Brito brings matter and form into it, the SS becomes more of a multi-tool, if you will. Something can sin against the SS due to not having the required matter, or due to an improper form. To Buridan, it is a matter of definition: something is only rightly called a syllogism if it meets Aristotle's definition—note that Brito makes a similar move in the quote immediately above.

One might be tempted to say that both authors share a psychological conception of the SS. After all, none of them give it any extramental existence. But this would not be entirely correct, I think. Of course, Brito's SS is very psychological—it is an intention, a type of argumentation which leads a syllogizer to deduce a conclusion. But we must remember that to Buridan, "syllogism" is just a word. See how he solves the issue of whether the syllogism is an intelligible—whether it moves the intellect:

I say that it is not necessary that an intelligible moves the intellect [...] However it is true that it is necessary that something which moves be prior to what it moves, and so, when the intellect can be moved, it is necessary that there is a prior thing which moves [it], and this is the agent intellect, be it either a divine intellect or human.<sup>76</sup>

So when I am syllogizing (somewhat hazily) about dogs and cats being in space, it is not because there is a syllogism in me that I come to some conclusion—I am simply *thinking*. In a way, this is an even more psychological account than Brito's—but as regards the SS, that is, the term "syllogism", Buridan's conception is entirely linguistic.

This, as I said in the introduction, has been something of a first foray into the issue of the SS in Brito's logic. He tried to make the SS not too separate from real syllogisms, while still allowing it some kind of being on its own. His solution was to integrate two key concepts in 13th century logical theory, hylomorphism and the syllogism *unde syllogismus est*, into his definition, and place it in his system of intentions. This way, the separate conceptuality of the SS—that it has mental being—was saved, but, because the actual syllogisms in which it is based are grounded in reality, it has some connection to the real world. This stands in extreme contrast to Buridan, for whom logic is a *scientia sermocinalis*, not *conceptualis*. His nominalism rendered many of the

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sed ad 'syllogismum probantem'. Multi enim sunt syllogismi qui non sunt argumenta quia non sunt innati facere fidem de conclusione dubia, ut 'omne B est A, omne C est B; ergo omne C est A'. Et ideo argumentatio non diuiditur in syllogismum secundum eius totam communitatem, sed in syllogismum probatiuum.

<sup>&</sup>lt;sup>76</sup> Buridan, QAP, book 1, question 1, ad 6. Ad ultimam, dico quod non oportet quod intelligibile moueat intellectum. Nam si habeo conceptum communem, scilicet specificum, hominis, ego per illum conceptum omnes homines de mundo intelligo, et tamen illi qui sunt in Roma forte numquam mouerunt intellectum meum nec sensum. Dico etiam quod non omne mouens est nobilius suo moto: asinus enim potest mouere hominem, et tamen non est nobilius homine. Tamen uerum est quod necesse est aliquod mouens esse nobilius suo moto, et ideo, cum intellectus possibilis moueatur, necesse est dare motorem nobiliorem, et ille est intellectus agens, siue sit intellectus diuinus, siue humanus.

issues Brito faced, including that of the SS, irrelevant. This is typical for any comparison between Brito and the nominalists; while Brito is often successful in defending the modist system he inherited, the high degree of technicality and plurality of concepts with which he does so magnifies the elegance of the corresponding nominalist solution.<sup>77</sup>

As always, more research is needed. In this paper, I have enjoyed editions of Brito's commentaries on the *Prior Analytics* and Boethius' *Topics*, but any account of his logic worthy of the name will have to incorporate his commentary on Aristotle's *Topics*, which is currently being edited by Ana María Mora-Marquez. And, to state the obvious, a proper edition (not to discredit Hubien) of Buridan's commentary on the *Prior Analytics* is well overdue.<sup>78</sup>

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<sup>&</sup>lt;sup>77</sup> Cf. Pinborg, *Die Entwicklung*, 363-364 (Danish summary).

<sup>&</sup>lt;sup>78</sup> I would like to thank Ana María Mora-Márquez, for her supervision and indispensable support; Julie Brumberg-Chaumont, for generously supplying me with her articles on logical hylomorphism; my teachers, Jenny Pelletier and Gustavo Fernandez Walker, for being such excellent mentors during my studies in Gothenburg; and Filip Kumlien, my good friend and student colleague, for our discussions which contributed immensely to this paper.

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