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Sophismatically Thinking about consequences from universal to singular propositions.

A case study from the *sophisma* OMNIS HOMO DE NECESSITATE EST ANIMAL

DRADF VERSION

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Introduction

This paper is dedicated to the problem of consequences from essential universal propositions to subordinated singular propositions within the refutations of the refutation (*improbatio*) of the OHNEA proposition (OMNIS HOMO DE NECESSITATE EST ANIMAL). By introducing some major topics for the study of medieval logic through the lens of sophismatic literature, it raises methodological issues in the history of logic, especially considerations upon the role played by logical practices.

Sophismatic practices were certainly among the most important intellectual practices at the Faculties of Arts during the Golden Age of the sophismatic way of doing logic and grammar, from the 1230s to the beginning of the 14th century. They probably represented the equivalent for logic (and for grammar) of the afternoon sessions of disputed questions that were progressively organized apart from the *lectio ordinaria* for (natural) philosophy, before logical questions were first testified (during the 1270s). Sophismatic practices were the basic, compulsory training for Bachelor (BA) candidates as respondent in the disputes organized by the masters during their class hours ; they corresponded to a major university rite of passage, the *determinatio* (the Lent disputations), where the candidate, who was allowed for the first time to conduct and determine an official public disputation, could gain the grade of Bachelor.¹ In Oxford, the *sophista*, named after his role in sophismatic disputations organized during class

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¹ See Weijers 1995.

hours, or internally, between students, was a BA candidate who benefited from a distinctive status at the Faculty of Arts.² The sophistic disputations kept on playing a central role after the emergence of logical disputed questions, some of them with a sophistic starting point (*i.e.* starting from a sophistic proposition), during the 1270s, and, later still, with the generalization of a sophistic way of thinking, outside logic and grammar, in natural philosophy and in theology, during the 14th century.³ Textually speaking, *sophismata* were disseminated in a great variety of texts, commentaries, and textbooks, beyond sophistic literature properly speaking. This oceanic production was composed of sophistic collections (*sophismata*), some of them being *reportationes* of actual disputes, systematically-organized sophistic treatises (*abstractiones, distinctiones, syncategoremata*),⁴ and sophistic guides (*sophistriae*),⁵ many of them practice-orientated.⁶

Alain de Libera has insisted upon the importance of the interactions between sophistic literature and Aristotelian philosophy as a whole, especially in its most “scholastic” areas, such as the theory of modalities in commentaries on the *Prior Analytics*:

L’ensemble de ces discussions est d’un grand intérêt pour l’histoire du genre des *sophismata*. On aurait cependant tort de croire que les arguments avancés et les distinctions invoquées restent limités à ce cadre, et que l’historien doit choisir entre le monde des *sophismata* et celui des commentaires. La discussion de l’*improbatio* d’OHNEA a une contrepartie dans l’exégèse des *Premiers analytiques*, et pour une raison simple : si le format du *sophisma* sert le cas échéant à tester la « règle » *PRAn*⁷ en dehors du cadre d’une *lectura* de l’œuvre aristotélicienne, OHNEA

² See, for instance, Gibson 1931, 115 (a 1316 status regulating the amount of money which can be borrowed by the *sophista*, distinguished from the bachelor and the master, whether regent or not). For the debate about the *sophista*, see Fletcher 1961, 125 s.; Libera 1989, 56 *sqq.*; Weijers 1987, 180-182; Teewen 2003, 120-121; Maierù 1994, 137-140. In his OHNEA *sophisma*, Siger of Brabant harshly criticizes the *sophista* who practices disputes only for glory and not in the search of truth, see *Écrits de logique, de morale et de physique*, 44-45.

³ Libera 1990; Ebbesen 1997; Ebbesen 1994; Ebbesen 1997; Murdoch 1975; Murdoch 1989. For an example of a sophistic theological treatise, see the Centiloquium ascribed to Strelley (first half of the 14th century), Gelber 2004, 81.

⁴ Libera 1985.

⁵ See Rosier-Catach, Grondeux 2006.

⁶ It should be remembered in this regard that the best-known collection of *sophismata* in the Middle Ages was not called *Sophismata*, but *De practica sophismatum*, according to the name given to the ninth treatise in the *Summula* by John Buridan himself. This can be read at the beginning of the first treatise and at the beginning of the ninth treatise in the *Summula*, as well as in the manuscripts that circulated. This practical treatise had a special status, since the author explicitly says that he does not want to include it in his book. We know from the manuscript tradition that it was indeed not always included, and that it often circulated independently in manuscripts throughout the Middle Ages. John Buridan specifies that what is at stake with the “practice of *sophismata*” is dealing with “their formation and their solution” (*Summulae de practica sophismatum*, 11). On this topic, see the introduction by Fabienne Pironet (Pironet 2004), XII-XXV.

⁷ “*PRAn*: Ex maiore (maiori) de necessario et minore (minori) de inesse ut nunc non sequitur conclusio de necessario.” Libera 2009, p. 197. For an easier identification, this paper will be referred to in the following way: Libera 2009 = Anonymus Liberanus. Alain de Libera offers here a very minimal formulation of the rule for the purpose of his discussion. As we shall see, the rule is not Aristotelian, since the LXL combination is valid for

est aussi bien utilisé comme test standard dans l'interprétation des *Analytica priora* et des *Topiques*. Les deux univers, celui du *sophisma* et celui de la *lectura* ou de l'exégèse, sont étroitement corrélés au XIII^e siècle, lequel est donc beaucoup plus « logicien » et beaucoup moins « scolastique », c'est-à-dire exposé à un double déficit logique, ici par rapport à Abélard, là par rapport à celui d'Ockham, qu'on ne le dit.⁸

Following this line of research, the present study tries to illuminate one aspect of these interactions and the role for which sophistic literature should be recognized, not only in the history of syllogistic, but also in the history of medieval logic and philosophy at large. The *sophisma* OHNEA was not just *employed* as a test for the validity of a pre-existing syllogistic rule, but it probably played an important part *in the genesis of the rule itself*, and then, as shown by Paolo Fait,⁹ in the adoption of one of the standard distinctions in late medieval logic, between *simpliciter* and *ut nunc* consequences.¹⁰

The chronological study of a series of OHNEA *sophismata* from the 1230s to the end of the 13th century shows that the “*ut nunc/simpliciter* rule” was first formulated as a general logical rule designated to solve some fallacies, and not as a specific rule for the regimentation of authorised instantiations for mixed modal LXL combination. As for the study of the semantics of proper nouns mobilised in the refutations of the refutation (*improbatio*) of the truth of OHNEA (in defence of the truth of OHNEA), it is another example of the way sophistic issues, whether found in sophistic texts or elsewhere, interact with epistemological, metaphysical, and logical problems deeply rooted in medieval philosophy and in the exegesis of the Aristotelian corpus: the ontological structure of individual substances, the status of singular propositions and their role in the verification of universal ones, the very possibility of formulating necessary truths about natural realities without presupposing an eternal world. The study of the *improbatio* in the OHNEA *sophisma* can thus be considered as part of an inquiry into a sophistic way of thinking about the foundations of logic and science during the 13th century.

The OHNEA *sophisma* is often associated with other *sophismata*, such as OMNIS HOMO EST ANIMAL (OHEA), HOMO EST ANIMAL (HEA) and CAESAR EST HOMO. It is rather in those associated *sophismata*, and not directly in the treatment of the OHNEA, that the casus ‘*nullo homine existente*’ is introduced, as noted by Alain de Libera.¹¹ The OHNEA *sophisma* also appears outside sophistic texts, such as commentaries on Aristotle’s logic.

Aristotle and suffers no counterexample whatsoever, contrary to the XLL combination which is rejected thanks to a counterexample that indeed includes a *ut nunc* proposition. Aristotle’s different attitudes for LXL and XLL combinations, which do not seem easily justified, gave rise to the famous “Theophrast problem” or the “two Barbaras problem.” The rule is read in a great variety of formulations in our texts. See below § 3.1.

⁸ Libera 2009 = Anonymus Liberanus, p. 201.

⁹ Fait 1999.

¹⁰ See K. Jacobi’s introduction to the volume *Argumentationstheorie*, (Jakobi 1993).

¹¹ Libera 2009 = Anonymus Liberanus, p. 184.

Our focus here is on a recurrent argument within the OHNEA *sophisma*, the refutation (*improbatio*) of the OHNEA proposition (against the truth of OHNEA), and, subsequently, its refutation. In the standard formulation of the *improbatio*, from the mid-13th century onward, an obviously false, singular necessity proposition, ‘*Socrates de necessitate est*’, is inferred from another singular necessity proposition ‘*Socrates de necessitate est animal*’ (step 2). This proposition has been itself syllogistically inferred from the sophismatic proposition OHNEA (step 1), thereby displaying the falsity of this very antecedent, *i.e.* the OHNEA proposition.

Improbatio of OMNIS HOMO DE NECESSITATE EST ANIMAL

Step 1 = Argument A1

Omnis homo de necessitate est animal

Socrates est homo

Socrates de necessitate est animal

Step 2= Argument C

Socrates de necessitate est animal

Socrates de necessitate est

‘*Socrates de necessitate est*’ is obviously false and obtained from a proposition itself obtained by A1, so that one premise of A1 must be false, namely ‘*Omnis homo de necessitate est animal*’ (‘*Socrate est homo*’ being obviously true).

This *improbatio* is itself refuted in our texts in order to save the truth of the OHNEA proposition. The refutation of the *improbatio* comes in two different lines of argument.

The first line consists in invalidating the *improbatio* at step 1. The first step of the argument is a mixed modal syllogism in LXL,¹² an argument we have labelled **A1**. A necessity singular proposition (‘*Socrates de necessitate est animal*’) is concluded from the OHNEA proposition as the major, and from the assertoric proposition ‘*Socrates est homo*’ as the minor.¹³ The

¹² Necessity/Assertoric(= *de inesse*)/Necessity.

¹³ For the *improbatio* to function the proposition ‘*Socrates est homo*’ must be considered as true, so that the falsity must stem from the OHNEA proposition. This is probably because ‘*Socrates*’ is conventionally understood in medieval logic as the proper noun for a presently existing man. The LXL syllogism in the first step of the *improbatio* contains singular propositions with proper nouns as their subject. It was probably understood as a companion to the Darii LXL combination in Aristotle’s system. This was considered a non-problem in the medieval period. Proper nouns and singular propositions were considered as naturally included in syllogistic arguments. This could be supported by the authority of Aristotle himself, through the use of singular terms in *echthesis* (exposition), and by the fact that expository arguments used by Aristotle in order to prove some syllogistic combinations were themselves considered by medieval commentators as instances of a special type of syllogism, the “expository syllogism” (*syllogismus expositivus*). In Robert Kilwardby, (*Notule Libri Priorum* I, 241-242), expository syllogisms are said to be done by “[*descensus*] *ad aliquod individuum signatum*.” Whereas Aristotle uses letters for denoting the individual “part” to which the argument descends, Robert Kilwardby regularly uses a special type of singular term in medieval logic, namely an expression composed of a demonstrative pronoun and of the noun of the species or the genus (here “C”) from which the descent is done in exposition, such as ‘*hic homo*’, see for instance *Notule Libri Priorum* I, 302: “*hoc C*.” The commentator here recalls the opinion of some people according to whom the expository term should be a “lower

argument is considered invalid because ‘*Socrates est homo*’ is described as a *ut nunc de inesse* (“as-of-now assertoric”) proposition, whereas only a *simpliciter de inesse* (“unrestricted assertoric”) proposition should be accepted in a Barbara LXL combination. Otherwise, the argument is a fallacy. If a false conclusion has been obtained from a non-valid argument, the falsity of the OHNEA proposition (the major) is not established.

The second line of argument against the *improbatio* consists in accepting as perfectly valid the first mixed modal syllogism **A1** but refuting the argument at step 2 as invalid. A necessity proposition *de secundo adiacente* (‘*Socrates de necessitate est*’) would there be fallaciously inferred from the necessity proposition *de tertio adiacente* concluded at step one (‘*Socrates de necessitate est animal*’): we have labelled this argument **C**. Once again, if a false consequent has been concluded in a non-valid argument, then the antecedent is not exposed as necessarily false.

A detailed examination of the first strategy shows that, although apparently only concerned with necessity propositions in a mixed modal syllogistic context, and only indirectly with existential import of assertoric propositions, it is bound to challenge the very coherence of logical theory at large. With the refusal of any inferential combination of *simpliciter* and *ut nunc* propositions, it tends to bar as fallacious any consequence from an essential universal proposition to a singular essential proposition, because their truth conditions would not be homogeneous regarding existential import. The second strategy offers a puzzling theory according to which singular essential propositions, in the same manner as universal ones, do not have existential import and they are unconditionally true, but on the condition of being eliminated as singular propositions, through analysis.

The disproof of the *improbatio* of the OHNEA proposition is an indirect proof of the OHNEA proposition. Together with various direct *probationes*, it often constitutes an important part of the discussions in texts belonging to a first stage of the history of the *sophismata*, in the *Syncategoremata* by Iohannes Pagus and by Nicholas of Paris. In a later stage, when *sophismata* were systematically divided in various *problemata*, the *improbatio* could constitute a division of its own in the OHNEA *sophisma*, as in the case of the Anonymus Erfordensis,¹⁴ where it is

universal,” like ‘snow’ for ‘white’: he acknowledges this possibility, but sticks to the exposition through singular terms all the same. This doesn’t mean that he allows singular terms to be introduced in syllogistic combinations in every context, as we shall see below when Robert Kilwardby’s “appropriation rule” will be discussed (§ 3.2.4). Some authors, such as Nicolas of Paris and Iohannes Pagus, would even insist that syllogisms should be made with singular subordinated propositions, as done in **A1**, not with particular propositions. In total opposition to the type of position advocated by Robert Kilwarby, Nicholas of Paris praises the inference from universal to singular propositions (*i.e.* with ‘*Socrates*’ as a subject) as the only one worth doing, because it is endowed with an informative content, while syllogisms with subordinated particular propositions are rejected as *petitiones principii*, where the middle term is not different from the subject of the conclusion: see Nicholas of Paris, *Syncategoremata*, 307-309. Iohannes Pagus also rejects the distribution of ‘*homo*’ in OHNEA with ‘*aliquis homo*’ and contends that it should be done in proper nouns such as ‘*Socrates*’: see Iohannes Pagus, *Syncategoremata*, 240.

¹⁴ Edition in Libera 2002.

associated with various tentative direct proofs (*probationes*) of the same proposition.¹⁵ The refutation of the *improbatio* was also often a sub-part of another problem, the one dedicated to the truth of the OHNEA proposition, as emphasized by Alain de Libera.¹⁶ The division concerned with the truth of the OHNEA thus contained tentative direct proofs of the OHNEA and indirect proofs, among which we find precisely the refutation of the *improbatio*. This problem is always distinct from other divisions, such as the problem dealing with the interpretation of the *syncategoremata* ‘*de necessitate/necessario*’, which generally comes first in the OHNEA *sophisma*.

The analysis of the necessity *syncategoremata* (‘*de necessitate/necessario*’) consists in a great variety of distinctions, which have been thoroughly listed and described by Alain de Libera.¹⁷ In a simplified presentation inspired by the discussions found in the Anonymus Liberanus¹⁸ and in the two Anonymi Alani (5 and 13),¹⁹ also observed in many other texts,²⁰ one could say that the necessity can bear on the relationship between the extremes, explained in terms of a hierarchical relationship between terms (*habitus/ordinatio termini*) or in terms of inherence (*coherens/inherentia*) – which could be an inherence of concepts, *i.e.* a conceptual inclusion – regardless of the absolute consideration of the terms individually. Alternatively, it can rely on a necessity of the relationship *and* on the necessity of the terms. This, in turn, engages the existence of the extremes or, sometimes more precisely, the existence of the subject of the proposition.

This thesis was condemned at Oxford in 1277:

Veritas cum necessitate tantum est cum constantia subjecti.²¹

The necessity of the terms can then rely on the *actual existence* of individuals denoted by the subject term, tested by the formulation of the casus ‘*nullo homine existente*’ as possibly not the case, because what would be required is the *necessary existence* of individual men. This would definitely ruin the possible truth of propositions such as OHNEA. With it, the possible truth of any scientific proposition about a contingently existing world would be destroyed as well. It is this disruptive approach that is followed in the *improbatio*: since the truth of the

¹⁵ For the description of the very complex structure of this *sophisma* and the several passages where the *improbatio* is dealt with, see below footnote 29. The *improbatio* also constitutes a separate problem in the not-yet edited *sophismata* Anonymus Cracoviensis (K) and Anonymus Alani 5 (alias P2), see Libera 2002, 213.

¹⁶ Libera 2009 = Anonymus Liberanus, 197.

¹⁷ Libera 2009 = Anonymus Liberanus, 185 *sqq.*

¹⁸ Libera 2009 = Anonymus Liberanus.

¹⁹ The OHNEA by the Anonymus Alani 13 has been edited in Libera and Gazziero 2008; the analysis is at p. 361. For an easier identification, this paper will be referred to in the following way: Libera and Gazziero 2008 = Anonymus Alani 13. The edition of the Anonymus Alani 5 is forthcoming.

²⁰ See Libera 2002, table page 189: H= *habitus* thesis, T= *termini* thesis, H+T a combination of the two.

²¹ *Chartularium universitatis parisiensis* 1, n. 474 [Oxford, 18th of March 1277], 558. See Libera 2002, 202; Libera 2009 = Anonymus Liberanus, 184-185.

OHNEA proposition entails the necessary existence of one of the individual instantiations of the species which appears as the subject term in the OHNEA proposition, a necessary existence which is blatantly impossible, the OHNEA is refuted. This move explains the need to refute the *improbatio* at all costs.

One solution consists in stating that the necessity mode relies on the necessary, natural relationship (*coherentia*) between concepts (*intellectus*). This relationship does not depend upon the actual existence of the thing conceptualized and signified by the terms.²² This solution is found in the Anonymous Erfordensis (alias ps-Robert Kilwardby),²³ associated with the notion that some propositions are in “natural matter.”²⁴ This allows the OHNEA and HEA propositions to be true *nullo homine existente*.²⁵ It might be considered a rather weak solution, since it seems to make OHNEA propositions bear upon our concepts and not on reality, as noted critically, later on, by the Anonymus Alani 13.²⁶ However, the Anonymous Erfordensis master probably had in mind a foundation in the realities conceptualized, but as conditionally related, and not as existing. The natural inherence between concepts is indeed based upon the relationship between the things signified as things (*homo/animal ut res significatum*), and this in turn is itself originally based upon the natural inherence of the things “as actually [existing] (*homo/animal ut res actu*),” although detached from this very existence; this allows a proposition like ‘*homo est animal*’ to be in natural matter.²⁷ The Anonymous Erfordensis accepts a direct proof of the OHNEA by a conjunction of singular necessity propositions, like ‘*Socrates de necessitate est animal*’, ‘*Plato de necessitate est animal*’, etc.,²⁸ and chooses the refutation of the *improbatio* at step 2,²⁹ which means that he judged the argument at step 1 of the *improbatio*

²² See Libera 2002, 209.

²³ See Libera 2002, 234; see also p. 237 (*convenientia intellectuum*). This position and the corresponding text in Anonymus Erfordensis (p. 234) are quote in the introduction in de Libera 2009, 185.

²⁴ The notion of “natural matter” is often wide, since it generally includes any type of necessary predication, that of proper (a convertible accident) included, see, for instance, Thomas Aquinas, *Expositio Libri Peri hermeneias*, 66. We cannot see from the OHNEA what the position of the Anonymus Erfordensis would be on that topic.

²⁵ See p. 225-226 for the HEA proposition.

²⁶ Libera and Gazziero 2008 = Anonymus Alani 13, 337.

²⁷ Libera 2002, 226.

²⁸ Libera 2002, 234-235.

²⁹ The structure of the arguments in the Anonymus Erfordensis is very complex: first a *probatio* (Libera 2002, 219); then an *improbatio* (219); then a *distinctio* (between two senses of ‘*de necessitate*’ considered as equivalent to ‘*necessario*’, 219-220); then the announcement of four questions (1. about the distinction, 2. about the truth or falsity of OHNEA, 3. about the truth of ‘*omnis homo est animal / nullo homine existente*’, 4. about the *probatio* and the *improbatio* themselves, 220); then the treatment of each of them (1: 220-222; 2: 222-223; 3: 224-226; 4: 226-227); then a *responsio* (1: 227-231, 2: 231-235, 3: 235; 4: 235); and eventually a *responsio ad argumenta* (235-237). The disproof of the *improbatio* appears in various places, not only in passages corresponding to the fourth question: it is dealt with first in the treatment of the fourth question (227), but only mentioning step 2; then it is more fully developed in the refutation of the *improbatio* within the answer about the truth of OHNEA, *i.e.* the second question (232 and briefly 235); then it is addressed in the answer to the

(A1) to be a perfectly acceptable mixed modal syllogism in LXL, where a true necessity singular proposition is concluded, and where ‘*Socrates est homo*’ is a *de inesse simpliciter*. The solution thus means that necessity singular propositions such as ‘*Socrates de necessitate est animal*’ would be in natural matter and would display a necessary relationship between the concepts corresponding to the extremes, a necessary relationship itself grounded in the conditional relationship of the things themselves (if it is Socrates, it is a man), whether they exist or not.

As shown by Alain de Libera, an alternative intermediary solution between concepts and actual things consists indeed in taking as the truth bearer of necessity propositions the relationship between essences and the essences themselves (whether formulated in terms of *esse quiddidativum*; *esse habituale*; *esse essentiae*).³⁰ The latter enjoy an *esse essentiae* independent from their *esse existentiae* in actual instantiations, and are thus “incorruptible” realities connected by a necessary relationship.³¹ A further difficulty then lies in explaining the way this solution does apply when consequences from universal to singular propositions are envisaged within the part of the *sophisma* dedicated to the proof (*probatio*) of truth of the OHNEA proposition: the solution then implies that singular propositions would also rely on the relationships between essences. The difficulty also appears in the refutation of the *improbatio* at step 2, that is, when one wants to defend the first step as a perfectly acceptable mixed modal syllogism in LXL, and the second step as a fallacy. It implies, as already seen for the “conceptualist” solution, to describe ‘*Socrates est homo*’ and ‘*Socrates de necessitate est animal*’ as *simpliciter* propositions in the same manner as ‘*Omnis homo de necessitate est animal*’. If one can easily imagine what are essences endowed with an *esse* of their own and connected by a necessary essential relationship for propositions such as ‘*omnis homo de necessitate est animal*’ or ‘*omnis homo est animal*’, it is less obvious for the term ‘*Socrates*’ in propositions such as ‘*Socrates de necessitate est animal*’ or ‘*Socrates est homo*’: the subject seems rather to qualify as “corruptible.” As puzzling as it may appear, however, the same type of argument is also employed in the case of singular essential propositions, and those propositions are described by some masters as even more unconditionally true than the corresponding universal ones (see below, § 4).

After a brief survey of the way 13th century logics of existence significantly differ from 14th century varieties (§1), we offer a description of the two strategies followed in order to dismiss the *improbatio* and save the truth of the OHNEA proposition. We suggest that, in an earlier

fourth question (about *probatio* and *improbatio*), p. 235, where, once again, only the step 2 is mentioned. This shows that the refutation of the *improbatio* at step 2 is clearly preferred by the Anonymus Erfordensis, and that the disproof of the disproof at step 1 is only a strategy mentioned, but not adopted: A1 is an acceptable syllogism in LXL.

³⁰ Libera 2002, 210.

³¹ Alain de Libera mentions the anonymous master of the ms. Worcester Q.13, William of Bronke and Richard Ruus de Cornouailles (Libera 2002, 210). The solution is also discussed in the Anonymus Liberanus, Siger of Brabant and Henry of Ghent, see Libera 2009 = Anonymus Liberanus, 193.

stage of the discussions, the *improbatio* was only a one-step argument, consisting in **A1** (§2). We then offer (§3) a detailed examination of the refutation at step 1 (**A1**), where the Aristotelian origins of the *ut nunc/simpliciter* distinction are clarified. A non-syllogistic stage of the “*ut nunc/simpliciter* rule” is delineated. We offer also a brief study the idea of “*ut nunc* terms.” The stress is put on the way the notion of a fallacious confusion of *simpliciter* and *ut nunc* predications could damage large portions of medieval logic (§3.1).

We then observe the various reformulations of the rule as a syllogistic rule (“*Ut nunc/simpliciter* syllogistic rule”), pointing at the ambiguities of the positions defended, as well as on the unsolved issues, such as the famous problem of the two Barbaras. We superficially introduce the solution offered by Robert Kilwardby, that is, the “appropriation rule.” We show how Kilwardby’s solution was recorded in a newly-identified English OHNEA *sophisma* in the manuscript Gonville and Caius 367/589 (§ 3.2).

We eventually turn to the paradoxes involved in the refutation at step 2 (§4).

The conclusion explores the metaphysical and semantical foundations of the discussions, namely the notion that individuals, as deprived of a proper form and definition, would not have logically proper names (even if they do have grammatical proper nouns³²). It shows the sharp contrast between the positions developed at the turn of the 13th century, where the universal validity of the LXL combination tends to be increasingly defended, together with the notion of an existential import for essential universal propositions (as will be generally the case during the 14th century), with the positions advocated by 13th-century masters. In addition to the positions held by many OHNEA *sophismata* in favour of the truth of not-existentially conditioned universal propositions (whether singular propositions have existential import (strategy 1) or not (strategy 2), two additional, original solutions are studied: the one defended by Nicholas of Paris (not-existentially committed but existentially conditioned necessity propositions), and the one defended by Siger of Brabant in his logical question about the truth of OHEA *nullo homine existente*. Here, the always-realized, existentially committed truth-condition of the OHEA proposition is based upon a necessary existence, or instantiation, of species, in sharp contrast with individuals.

1. Logics of existence: from 14th-century logic back to 13th-century logics

Since the definition of what is universal is that which applies at all times and in all places and has no counterexample, and since this definition was associated with a particularist ontology, adopted even by the most convinced of realist authors, consequences from universal to singular proposition were crucial for medieval epistemology at large. Those consequences are implied in theories of distribution (quantification) and of verification, as well as in syllogistic theory, as illustrated by issues discussed about **A1**. Singular propositions are generally defined in reference to the occurrence of “singular terms.” Those, in turn, are generally proper nouns,

³² Here “proper noun” refers to the grammatical proper noun, whereas “proper name” refers to a name that would be proper from a semantical/metaphysical/epistemological point of view.

demonstrative pronouns associated with the name of the species, and, sometimes, demonstrative pronouns alone.

In a standard theory, universal propositions with a universal quantification are analysed as equivalent to a conjunction of all the corresponding singular propositions, by the verification of which the verification of the universal proposition can be done:

'Omnis homo est animal' ⇔ 'Hic homo/Socrates est animal' ∧ 'Hic homo/Plato est animal' ∧ 'Hic homo/Cicero est animal', etc.

For a particular proposition, it is a disjunction of singulars:

'Aliquis homo est animal' ⇔ 'Hic homo/Socrates est animal' ∨ 'Hic homo/Plato est animal' ∨ 'Hic homo/Cicero est animal', etc.

Inferences from universal proposition to one of their singular subordinated propositions are thus granted:

'Omnis homo est animal' → 'Hic homo/Socrates est animal'

Those inferences are instrumental in the verification of universal propositions. It is then crucial that the antecedent and the consequent have the same truth-conditions regarding existence.

The problem is thus to decide if the antecedent, universal or particular, propositions in the above-mentioned consequences do have existential import.

The next problem is then to decide about the verification of the singular propositions themselves, on which the verification of all other propositions is grounded. Do they imply the existence of the individual to which they refer?

A glaringly obvious answer is that they do, in the same manner as particular propositions, often deceitfully labelled “existential propositions,” so that the question of their existential import is answered before it is even asked. In this model, existential import is also applied to universal proposition as a consequence of their verification being done through the verification of a conjunction of existentially conditioned singular propositions. Additionally, negative propositions containing an empty subject are all considered “vacuously true.”

As we shall see, not a single element of this standard description is self-evident in the context of 13th century logic. Moreover, it is often the case that not every ontological import is an existential import, since not every truth-maker is an actual being.

The problems of the descent to singulars and existential import were handled by 14th-century logicians. Their theories are far better-known and they have often been used as a point of reference from which to understand 13th-century logical texts. They do not, however, offer as clear a basis of reflection as one may think.

As is well-known, the reformulations of the propositions of traditional logic in terms of modern quantification theory fail to express the relational properties displayed by those

propositions³³. They describe traditional particular propositions as “existential propositions,” singular propositions as “Russellian propositions” obviously endowed with existential import, and universal propositions as implications devoid of existential import, thereby obscuring whole parts of medieval logic. These reformulations also make the square of opposition altogether utterly incoherent in case of an empty reference, with a I proposition (‘some A is B’), which is false (provided there is no A), the contradictory E proposition (‘No A is B’) true, and its O subordinate (‘Some A is not B’) false (once again because there is no A). On the contrary, as emphasized by Terence Parsons,³⁴ it should be said that, in the context of 14th century logic, affirmative universal propositions, in the same manner as their particular and singular subordinated propositions, do have existential import. As for negative propositions, whether universal or particular, they are always true for empty terms, that is they are “vacuously true,” regardless of the predicate, and the traditional square of oppositions remains coherent.

As seen, singular propositions represent the foundation for the verification of existentially committed universal and particular propositions, by “descent.” However, the theory of the verification of singular propositions in case of an empty subject term makes the whole matter quite difficult.

Standardly, the verification of the proposition means checking the existence of an intersection between the *suppositum* of the subject term and the *suppositum* or *supposita* of the predicate term. This is done, as far as the supposition of the singular subject term is concerned, by the verification of another proposition, where a demonstrative pronoun is in the subject position and the singular term, which was the subject term in the initial proposition, is now in the predicate position.

The existence of a *suppositum* for the singular terms in a proposition in personal supposition (like ‘*Socrates/hic homo is an animal*’) is thus ascertained by the fact that another, deictic proposition is true:

‘*Hic est Socrates*’ showing Socrates or

‘*Hic est homo*’ showing an individual man.

Does this presuppose that what is designated by ‘*hic*’ exists?

For John Buridan,³⁵ if Socrates is no longer on earth (*emptied* reference of ‘Socrates’), then the term will have no *suppositum*, and any affirmative sentence in which Socrates appears would be a false proposition. If there is no individual man to which the speaker can point here-and-there in front to him (*in prospectu*), then the same will go for ‘*hic homo*’. In both cases, however, something else must be pointed at, which would make the proposition non-vacuously false, but not incongruent (*incongruens*.) In the situation when there is nothing at all to point to, the presence of the pronoun ‘*hoc*’ as a subject term in a proposition will make this

³³ A propositions: Every A is B / $(\forall x) (Fx \rightarrow Gx)$; I propositions: Some A is B / $(\exists x) (Fx.Gx)$; E propositions: No A is B / $(\forall x) (Fx \rightarrow \neg Gx)$; O propositions: Some A is not B / $(\exists x) (Fx.\neg Gx)$.

³⁴ Parsons 2021.

³⁵ I offer here a brief reminder of the arguments developed in Brumberg-Chaumont 2016.

proposition incongruent and thus deprived of truth-value, because the mode of signification of the pronoun contains the necessary presence of its referent. The truth-value of the non-deictic singular proposition initially to be verified will be impossible to establish.

This explains John Buridan's position that, *de virtute sermonis*, properly speaking, one should not authorise a consequence from a universal proposition to a singular demonstrative proposition, because the antecedent ('every man is an animal') can be true and the consequent can be incongruent or false, as if someone would show a stone or show nothing at all saying 'this is this man' or 'this is Socrates', when verifying the singular proposition. Since those consequences are nevertheless vital to medieval logic, John Buridan's solution consists in authorising a "secondary" use of demonstrative terms in philosophical contexts, where deictic pronouns are "de-indexicalized." By 'this' (*hoc*), you do not actually refer to an individual present here-and-there in front of you (*in propectu*), but to a possible reference by someone (yourself or someone else) who could truly say 'this is X'. In the case of singular propositions, a true proposition including proper nouns such as 'Socrates' could be formulated by reference to someone else (or oneself) actually showing Socrates, as was the case, at least, for the one who originally imposed the name 'Socrates' during baptism.

William Ockham addresses the very same problems differently. The problem of the reference of demonstrative pronouns is solved by eliminating demonstrative pronouns from the mental language (or maybe suggesting a counter-subordination of pronouns to vocal proper nouns). The problem of the descent from true universal propositions to vacuously false singular propositions is solved by barring the descent in case of an empty reference: a singular proposition where the subject is empty, like 'Socrates is an animal' when Socrates doesn't exist, is just not the singular corresponding to the universal proposition 'every man is an animal'. If '*Socrates est animal*' is vacuously false, it is not a proposition subordinated to the universal proposition, and, as a consequence, it is not a counterexample that would make false the corresponding universal.³⁶

Singular propositions thus obviously have existential import for our two-14th century logicians, *i.e.* their being true requires the existence of one individual denoted by the subject term, or, to use the formula of 14th-century terminism, they need that the subject term can itself be truly predicated of a demonstrative pronoun, showing this very individual. Therefore, particular propositions and universal propositions must also have an existential import in order to have the same truth conditions with regard to existence.

The positions advocated by 13th-century authors certainly cannot be understood with the tools previously mobilized.

The sophismatic discussions from this period offer a complex picture. Not every ontological commitment is an existential import in the realist context of 13th-century logic, so that propositions can be devoid of existential import without having solely conceptual inclusions or terms relations as their truth-makers. As seen, in essential propositions, truth-makers can be relationships between essences and the essences themselves, considered in their *esse essentiae*.

³⁶ See Panaccio 2017.

Negative essential propositions are often not described as “vacuously true” when having an empty term as a subject, whatever the predicate may be, so that their opposite would be “vacuously false.” Rather, negative universal essential predications are described as not existentially conditioned, in the same manner as affirmative ones are: some may be true, some may be false, depending on the attribute that is predicated. The propositions have the same *supposita* to which the term ‘*homo*’ in personal supposition is distributed in universal propositions, whether negative or affirmative, when the attribute is ‘*animal*’. Consequently, the proposition opposite to OHNEA asserts that those are all men and denies that the same are animals, which is a blatant contradiction according to the Anonymus Alani 13³⁷. None of the two opposed propositions have existential import, however, because being *in actu*, on the one hand, and being *in actu* the *suppositum* of a species, on the other hand, are two different things:³⁸ the negative proposition is not “vacuously true” *nullo homine existente*, but false because it negates a necessary relationship between the essences signified by the terms ‘*homo*’ and ‘*animal*’. In the same line of argument, *nullo homine existente*, any negative proposition that would deny the existence of men, such as ‘*nullus homo est*’, would be self-contradictory if it was to be described as endowed with existential import (*i.e.* if the subject term had a supposition for presently existing men because of the present-tensed verb) — which it should not.³⁹ Both the Anonymus Liberanus⁴⁰ and by the Anonymus Alani 13⁴¹ explicitly describe affirmative and negative propositions as having the same truth conditions regarding existence, *i.e.* as not being existentially conditioned. It is not the case that all negative propositions bearing on empty subjects are “vacuously true,” and the opposite affirmative one “vacuously false,” whatever happens to be the predicate.

As for singular propositions, they were generally not considered as “obviously” endowed with existential import, so that the only remaining problem would be of dealing with the possible existential import of universal corresponding propositions. On the contrary, they were sharply discussed and considered as highly problematic, to the point of being either expelled from the list of authorised consequent propositions inferred from universal propositions, because of their existential import, or —as we shall see— authorised, but on the condition of being exposed as logically eliminable as *singular* propositions.

³⁷ Libera and Gazziero 2008 = Anonymus Alani 13, 338.

³⁸ Libera and Gazziero 2008 = Anonymus Alani 13, 351.

³⁹ Libera and Gazziero 2008 = Anonymus Alani 13, 353. The same goes for ‘*Socrates non est*’, when Socrates doesn’t exist any longer: ‘*Socrates*’ supposes for the non-existent. The same line of argument (*conductio rationis*) applies to common and singular terms, according to the anonymous author.

⁴⁰ “Veritas univoce dicitur esse \in/ propositione affirmativa et negativa. Sed ad veritatem propositionis negativa non exigitur vera entitas rerum; quare etc. Minor sic probatur, date enim quod non sit asinus nec capra, adhuc haec est vera: ‘*Asinus non est capra*’,” Libera 2009 = Anonymus Liberanus, 225.

⁴¹ Libera and Gazziero 2008 = Anonymus Alani 13, 354: “eadem et uniformis est probatio in affirmativa et negativa.”

2. The refutation of the *improbatio* in the *sophisma* OHNEA: two strategies

2.1. *Improbatio* as a one-step argument in the early stage of the OHNEA sophistic discussion

As seen, in the standard formulation, the *improbatio* is a two-step argument. It is highly probable, however, that the *improbatio* was born as a one-step argument, and that the second step was added afterwards, referred to as a further, additional argument, and not as a part of the *improbatio* itself. The first stage alone is found in the *Abstractiones* by Richard the Sophist.⁴² The argument **A1** appears in a very elliptic way, to say the least;⁴³ the notion of a *ut nunc* proposition appears. The obvious falsity of the concluded necessity singular proposition seems to be presupposed, without any need to expose it by inferring from it an even more obviously false proposition such as ‘*Socrates necessarily is*’, as will be done in step 2.

In a second stage, the argument **C** is added but not considered yet as a part of the *improbatio* itself: this configuration is found in the *Syncategoremata* by Iohannes Pagus and by Nicholas of Paris, where no mention is made, however, of the *ut nunc/ simpliciter* distinction.

Nicolas of Paris is very clear about the fact that all Barbara LXL syllogisms are valid, **A1** (*i.e.* the syllogism used in the *improbatio*) included; the truth of the OHNEA proposition as conditionally true (*i.e.* true according to a necessity conditioned by the existence of the subject) is defended by rejecting argument **C**.⁴⁴ Nicholas of Paris’s solution shows a clear awareness that the defence of the validity of argument **A1**, together with the description of the minor as an existentially-conditioned proposition, commands the ascription of an existentially-conditioned necessity to universal propositions too. This does not, however, mean that the truth of the OHNEA proposition demands the existence of men, since the existential clause “dum [subject] exists” has been seen as included in the analysis of the signification of the necessity *syncategorema*. This works for singular propositions in the same manner as for universals ones.⁴⁵

The chronological hypothesis could be confirmed by the fact that many elements of the *probatio* criticized by the Anonymus Erfordensis – a *probatio* which consists in starting from the necessary truth of the assertoric ‘*omnis homo est animal*’ to conclude the truth of the necessity proposition, ‘*omnis homo de necessitate est animal*’ – resembles those adduced by the three above-mentioned texts. For Richard the Sophist, for instance, the *probatio* is valid only if the “mode” (the necessity *syncategorema*) applies to the composition, so to the assertoric

⁴² In William of Sherwood’s *Syncategoremata*, the argument **A1** is present, but not referred to as an *improbatio*, nor even as a counter-argument as is the case in Richard’s *Abstractiones*. It is rather presented as an argument by which the necessity *categorema* is tested. *Syncategoremata*, 75.

⁴³ “Sed contra: Omnis homo de necessitate est animal, Socrates est homo, ergo Socrates de necessitate est animal,” Richard Sophista, *Abstractiones*, 328.

⁴⁴ See Nicholas of Paris, *Syncategoremata*, 305 sqq.

⁴⁵ More on this in the conclusion.

proposition as a whole, and not to the thing signified by the verb (*res verbi*) in relation to each individual man (*'iste homo et ille'*).⁴⁶ The Anonymus Erfordensis refuses this *probatio* on the principle: it is not because a given true assertoric proposition '*p*' is necessarily so (*i.e.* true) that the modal proposition where the modality is added '*Lp*' is true — a position he shares with Robert Kilwardby.⁴⁷ Although the inference is not formally good, the anonymous logician however admits the goodness of the argument in this special case, *i.e.* for man and animal. Such proofs are good not “thanks to the form (*gratia formae*),” but “thanks to the matter only (*gratia materiae tantum*).”⁴⁸ This is because it is the case here (in natural matter), provided that the necessity bears on the composition in necessity propositions, that the conditions for the truth of the necessity essential proposition and for the necessary truth of the essential assertoric proposition are the same, but this doesn't work for all cases — a position also advocated, again, by Robert Kilwardby.⁴⁹

As an alternative, the Anonymus Erfordensis offers another *probatio*, namely the descent to a conjunction of necessity singular propositions (a step refused by Richard, as seen). He accepts the *improbatio* at step 1 and refutes it at step 2.

Despite important differences, such as the absence of the distinction between *ut nunc/simpliciter* propositions and the defence of the truth of OHNEA as existentially conditioned in the same manner as singular essential propositions, Nicholas of Paris shares some elements with the Anonymus Erfordensis. He indeed accepts as valid the *improbatio* (*i.e.* **A1** alone for him), and rejects argument **C**; he describes the subject-terms in necessity universal propositions as having the same supposition as universal assertoric ones (*i.e.* he refuses that the university mode would prevent the proposition from being a universal proposition and would “immobilize” the supposition of the subject term), so that the descent to a conjunction of necessity singular proposition is allowed; eventually, he describes the necessity mode in OHNEA as bearing only on the composition, and not relying on necessary terms, in order for the proposition to be true.⁵⁰ Iohannes Pagus also rejects the notion that the necessity mode would turn the supposition of the subject-term into an immobile supposition; he defends the OHNEA proposition as true according to an existentially-conditioned necessity (in the same manner as in the singular propositions in which it is distributed), and says that the necessity mode bears only on the composition (*ordinatio*), and not on the terms.⁵¹

⁴⁶ Richard Sophista, *Abstractiones*, 329-330. This position is altogether incoherent since he has established in the previous paragraph that the OHNEA proposition had an “indeterminate” supposition and could not, on any account, have a determinate supposition as '*Socrates est homo*' does. See below footnote 66.

⁴⁷ See Thom 2007, 19.

⁴⁸ Libera 2002, 234-235.

⁴⁹ It happens that for the (necessarily true) essential assertoric propositions and the (true) necessity *per se* propositions the truth-makers are the same. See Thom 2003, 99, note 16.

⁵⁰ See Nicholas of Paris, *Synkategoremata*, 1979, 305.

⁵¹ See Iohannes Pagus, *Synkategoremata*, 1979, 238 *sqq.*

2.2. The *improbatio* as a two-step argument

In one of the earliest 13th-century OHNEA *sophisma* subdivided in problems so far edited, the Anonymus Erfordensis (end of the 1230s/beginning of the 1240s), the two-step *improbatio* reads this way:

Improbatur autem sic: ‘omnis homo etc., sed Sor est homo, ergo Sor de necessitate est animal’ [=A1]; et videtur esse locus a toto in quantitate ad suam partem. Uterius. Sequitur ‘Sor necessario est animal, ergo Sor necessario est’ [=C], et videtur esse locus ab inferiori ad superius; esse enim est superius animal, et sic videtur prima est falsa, ‘Omnis homo de necessitate est animal’.⁵²

An elliptic formulation is also found in the *Syncategoremata* ascribed to Henry of Ghent, with a slightly more explicit formulation of the logical structure of the refutation:

Contra: omnis homo de necessitate est animal; Sortes est homo; ergo Socrates de necessitate est animal [=A1]. Et si Sortes de necessitate est animal, Sorte de necessitate est [=C]. Sed haec est falsa, quare et prima ex qua sequitur.⁵³

One can read another, more developed, version of the first step of the argument in a *sophisma* OHNEA previously ascribed to Boethius of Dacia, but whose authenticity has been recently rejected by Sten Ebbesen⁵⁴. The logical nature of the argument is meta-logically expressed in syllogistic terms:

Improbatur sic: ‘Omnis homo de necessitate est animal; Sortes est homo; ergo Sortes de necessitate est animal’ [=A1]. Haec [*i.e.* ‘Socrates de necessitate est animal’] est falsa quia ex ipsa sequitur falsum, scilicet quod Socrates de necessitate est; ergo aliqua praemissarum [*i. e.*: est falsa]. Non minor [*i.e.* ‘Socrates est homo’], ergo maior est falsa, scilicet ‘Omnis homo de necessitate est animal’.⁵⁵

We can see here that the argument A1 must be considered as a valid syllogism for the *improbatio* to work. This argument is read in many 13th-century *sophismata* OHNEA, whether in sophistic literature or elsewhere.

How can one block the *improbatio* if one wants to defend the truth of OHNEA?

We have seen two strategies for blocking the *improbatio* in our texts. Both are rooted in a special semantic status ascribed to proper nouns.

The first strategy consists in blocking the inference at step 1, saying that such syllogistic consequences from universal to singular are not allowed, generally because they are fallacies only apparently following a mixed modal syllogism LXL combination. The consequence does not follow, so the major premise (OHNEA) has thus not been refuted. This strategy denies both existential import for necessity universal propositions and descent to the singulars, or, to put it

⁵² Libera 2002, 219.

⁵³ Henry of Ghent (ascr.), *Syncategoremata Henrico de Gandavo adscripta*, 47.

⁵⁴ Ebbesen 2021, 22 *sqq.*

⁵⁵ Ps.-Boethius of Dacia, *Sophismata*, 75 (previously edited by H. Roos 1962, 190).

more accurately, it is able to deny existential import to universal necessary propositions *because it denies the descent to the singulars* and, maybe more generally, as we shall see, consequences from essential universal propositions to corresponding singular ones (be they necessity propositions or not).

The second strategy consists in blocking the inference at step 2, considering that the argument is valid until then, *i.e.* that **A1** is a perfectly valid argument, a syllogism in LXL, in which all the propositions are true. **A1** is then valid not because one gets rid of the rule according to which you cannot have *ut nunc* proposition in a LXL combination, since the rule is accepted by almost everyone, but because singular essential propositions are seen as *simpliciter* propositions. The solution thus signifies a rejection of an *existential import for singular propositions*, despite the fact that proper nouns are always *possibly emptied* (as in the case of ‘Socrates’) and *even sometimes actually emptied* (as in the case of ‘Caesar’): this is done by exposing them as eliminable in analysis.

The second solution is obviously very interesting, as strange and paradoxical as it might initially appear. The first strategy looks like a dangerous step. It is nonetheless generally preferred in our texts. We can see it adopted by important authors such as Nicholas of Paris, Iohannes Pagus, Anonymus Erfordensis, Anonymus Libranus, Henry of Ghent (as the probable author of the *Syncategoremata*) and Anonymus Alani. The principle thanks to which **A1** can be regarded as not being an instantiation of Barbara LXL is also adopted by Robert Kilwardby in his commentary on the *Prior Analytics*, as well as by authors who adopt his solution, based upon the “appropriation rule.”

3. Blocking the *improbatio* at step 1: refusing consequences with/to singular propositions

The reasons for **A1** not being valid are expressed in an incredible variety of formulations. Various stages in the analysis of the problem, sometimes simultaneously present in the same text, can be delineated. We focus here on the *sophismata* where the *ut nunc/simpliciter* distinction is present, to the exclusion of those where **A1** is discussed with other logical instruments as is the case in the *Syncategoremata* by Iohannes Pagus and Nicholas of Paris previously mentioned.

3.1 The mix up of essential universal propositions and singular essential propositions as a cause of a fallacy and the “*ut nunc/simpliciter* rule” (UN/S rule)

3.1.1 The ut nunc/simpliciter distinction in Prior Analytics I, 15 (XMM⁵⁶ combination)

The *ut nunc/simpliciter* distinction is inspired by some remarks found in Aristotle’s *Prior Analytics*, book I, chapter 15, dedicated to XMM combinations.

A distinction is drawn between two types of assertoric predications. Aristotle says that *ut nunc* predications should not be included:

⁵⁶ M = possible propositions.

We must understand ‘belong to all’ (= *de inesse*) not as restricted according to time, *such as ‘now’ or ‘at such-and-such a time’* (= *ut nunc*), *but in an absolute (unrestricted/aplôs) sense* (= *simpliciter*); for it is by means of premises taken in this latter way that we effect our syllogisms.⁵⁷

Aristotle here draws the distinction in order to block the use of an argument in X(*ut nunc*)MM as an acceptable counter-example to Barbara XMM combination which would expose the combination as useless.

If we accept *ut nunc* assertoric propositions, which we should not, we could end up with an argument (apparently) in XMM with two true premises and a false conclusion. This would render XMM combinations useless:

(*M1) ‘Omne movens est homo [be it the case], possibile est omnem equum moventem esse, possibile est omnem equum homo esse’.

With ‘*animal*’, ‘*movens*’ et ‘*homo*’ (*M2), we would end up also with a false conclusion, since it is not possible, but necessary, that every man is an animal. This example is also rejected as a counter-example to XMM combinations since the X proposition is an *ut nunc* proposition.

(*M2) ‘Omne movens est animal [be it the case], possibile est omnem hominem moventem esse, possibile est omnem hominem animal esse’.

The asterisks indicate that the arguments are not accepted by Aristotle as counterexamples to the Barbara XMM.

Aristotle’s position is unclear. He seems to present the restriction as a general one.⁵⁸ But he himself does not respect it, since he has previously used an example with a *de inesse ut nunc* assertoric proposition as a counterexample in order to expose the XLL combination as useless in chapter 9.⁵⁹ As a consequence, one doesn’t know if the prohibition to introduce *ut nunc* assertoric propositions is formulated in general, for all mixed modal syllogisms, or only for those at hand in chapter 15, where the middle terms can have a larger extension than the major terms.⁶⁰

Medieval Latin logicians seem to have understood the rejection of *de inesse ut nunc* propositions to be applied to more mixed modal syllogisms than just the XMM combination. Robert Kilwardby explicitly relies on the “letter” of Aristotle’s text to apply the idea of a compulsory *simpliciter de inesse* proposition for all L/X mixed modal syllogisms, despite the fact that the notion of an unrestricted assertoric proposition does not appear in the original text

⁵⁷ Aristotle, *Anal pr I*, 15, 34b 7-12 (about XMM combinations). “Oportet autem accipere omni inesse non secundum tempus determinantes, ut nunc aut in hoc tempore, sed simpliciter ; per huiusmodi enim propositiones et syllogismus facimus, quoniam secundum nunc sumpta propositiones non erit syllogismus.” *Analytica Priora, Aristoteles Latinus III/1-4 (recensio Florentina)*, 32. A similar text is read in the *Recensio Carnutensis*, 165.

⁵⁸ See R. Smith’s comments, *Aristotle, Prior Analytics* (Indianapolis 1989), 132-133.

⁵⁹ See below §3.2.3.

⁶⁰ See G. Striker’s comments, *Aristotle, Prior Analytics* (Oxford 2009), 147-148.

in *Prior Analytics* I, 9, 30a22, where the LXL combination is introduced, whatever the Latin versions considered.⁶¹

In mixtione enim illa minor propositio est de inesse simpliciter, sicut dicit Aristoteles in textu. Et sic subiectum est essentialiter sub paedicato.⁶²

3.1.2 The “UN/S rule”

The above-mentioned Aristotelian background explains how the restriction according to which the assertoric proposition should be *de inesse simpliciter* could have come to be used in order to bar some potential counterexamples against LXL combinations in the refutation of the *improbatio*. But it does not disclose the way the “rule” was originally constituted.

The rule derived from the *ut nunc / simpliciter* distinction seems to have been originally formulated in a sophistic / *Sophistici Elenchi* environment, centred on the notion of fallacy, rather than in a purely mixed modal syllogistic context of discussion.

A clue in favour of this hypothesis is the way the rule is discussed together with standard examples of fallacies of the accident, not at all concerned with modal syllogistic, in one of the earliest texts here discussed, the *Dialectica Monacensis* (1220s).⁶³

It should also be added that the rule is not present in the Anonymus Aurelianensis III, the first Latin commentary of the *Prior Analytics* so far identified (end of the 12th century),⁶⁴ where the problem is solved in utterly different terms. It is not present in what is left of the “Florentine gloss” on the *Prior Analytics*;⁶⁵ and it is highly improbable that it was present in the lost parts of the gloss, since it is not read in its main source, Philoponus’ commentary on the *Prior Analytics*, nor in others ancient commentators.

Despite its syllogistic origins, the rule is not initially presented as a mixed modal syllogistic rule, but as a more general rule, the “UN/S rule.” In the initial stages of the discussion, during the early decades of the 13th century, one way of rejecting **A1** was to establish that it was just a fallacy, without any reference to a syllogistic rule. It could then be described as a fallacy of the figure of speech because there is a change in the supposition and/or as a fallacy of equivocation for ‘*est*’: a change is observed from *esse habituale*, or *esse consequentiae*, to *esse ut nunc*. This is the case in the *Abstractiones* of Richard the Sophist.

⁶¹ *i.e.* in the *Recensio Fiorentina* of Boethius’ translation (see *Aristoteles Latinus* III/1-4, 21), the *Recensio Carnutensis* of the same translation (155) or in the *Anonyma Translatio* (206): all of them say that in the X minor ‘Every C is B’, ‘C autem [aliquod] eorum quae sunt B est’. The term ‘*simpliciter*’ doesn’t appear and the texts speaks only of a B « *inherens solum/solummodo*, » *i.e.* not with a necessity mode.

⁶² Robert Kilwardby, *Notule Libri Priorum*, I, 15, *dubium* 2, 316.

⁶³ See below § 3.2.

⁶⁴ *Anonymus Aurelianensis III* in *Aristotelis Analytica Priora*.

⁶⁵ Edited by L. Minio-Palluelo together with the Latin version of Aristotle’s *Prior Analytics*, see *Aristoteles Latinus* III/1-4, 99 chap. 9 and 15 of book I are “jumped over.”

Richard the Sophist considers that **A1** is to be rejected since there is a fallacy of the figure of speech within the argument (the supposition of ‘man’ being indeterminate in the major and determinate in the minor) or a fallacy of equivocation for ‘*est*’, because it signifies *esse habitudinis* in the major and *esse ut nunc* in the minor.

Solet dici quod prima [*i.e.* the OHNEA proposition] est vera et non valet: ‘omnis homo de necessitate est animal, Sorte est homo, Socrates de necessitate est animal’ [=A1]: commutatur enim suppositio huius terminis ‘homo’ in prima propositione universaliter unde habet modum indeterminate supponendi. Et supponit determinate cum dicit ‘Sortes est homo’. Unde est ibi fallacia figurae dictionis.

Et alio modo fallacia aequivocationis, quia in prima propositione est esse habitudinis sive consequentiae et in secunda ut nunc, cum dicitur operatio entis, et sic aequivocatur.⁶⁶

The notion that we would have a fallacy of the composition or a fallacy *de figura dictionis* in the *improbatio* is also present in Nicholas of Paris, but with no reference to the notion of a *ut nunc* predication.⁶⁷

A1 could also be described as a fallacy of the accident because there was a change in the mode of predication from one proposition to another. This is the case in the *Tractatus Florianus* (first half of the 13th century):

In improbatione est fallacie accidentis⁶⁸ eo quod sub esse simpliciter sumitur <esse ut> nunc. In hac enim ‘omnis homo de necessitate est animal’ paedicatur esse simpliciter; in hac autem ‘Sor de necessitate est animal’ praedicatur esse ut nunc. Et ita sumitur <sub> medio pars corruptibilis, scilicet Sortes, sub quo deberet sumi pars incorruptibilis. Et ita fit accidens.⁶⁹

As we shall see, this formulation — *i.e.* the refutation of **A1** based upon the exposition of a hidden fallacy of the accident because of a confusion of *simpliciter* and *ut nunc* propositions — is observed in the majority of 13th-century texts. A stress is thus put on the notion of a non-authorized mix up of as-of-now assertoric predication (*esse ut nunc*) and absolute assertoric propositions (*esse simpliciter*).

The general adoption of this argument could be explained by the fact that one of the alternative explanation of the cause of the fallacy, namely because of a change in the mode of supposition between the necessity major and the assertoric minor, had been harshly criticized in Paris by authoritative logicians such as Johannes Pagus and Nicholas of Paris.⁷⁰ William of Sherwood defended the idea that the supposition of the subject-term would be immobilised in

⁶⁶ Richard Sophista, *Abstractiones*, 2016, 328-329.

⁶⁷ Nicholas of Paris, *Synkategoremata*, 303 (“*non tenet improbatio*”). Here the fallacy comes from the fact that, when the necessity proposition is understood in the composite sense, the supposition would be immobilised. He does not agree with this idea (see p. 305).

⁶⁸ Ed: “*antecedentis*,” corr. “*accidentis*” by Libera 2009 = Anonymus Liberanus, 220, note 31.

⁶⁹ *Tractatus Florianus de solutionibus sophismatum*, 122

⁷⁰ See above footnotes 50 and 51.

the OHNEA proposition when understood in a compositive sense, so that there would be a fallacy of the figure of speech in **A1** (in a divided sense it is not immobilised, but it is false).⁷¹

In addition to the unexplained notion that necessity propositions would display a *simpliciter* predication, the arguments rely on the idea that proper nouns would be “*ut nunc* terms.” This is not because they signify “corruptible individuals” (what would be an “incorruptible individual” anyway?), but because they signify those corruptible individuals “as corruptible,” as opposed to ‘*aliquis homo*’.⁷²

3.1.3 *Ut nunc* terms

In the context of the theory of the properties of terms, the notion that singular terms would be *ut nunc* terms has been explained by the fact that the *significatum* is the same as the *appellatum* and the *suppositum* for singular terms.⁷³ This is read in Peter of Spain’s *Tractatus*:

Terminus singularis idem significat et supponit et appellat, quia significat rem existentem, ut ‘*Petrus*’ vel ‘*Iohannes*’.⁷⁴

A similar idea has been ascribed to Geoffroy of Aspall by an anonymous English commentary on William of Sherwood’s *Introductiones* (1270s):

Alia opinio est magistri G. Aspale et est satis bona. Ponit quod diversimodi ad representandum significatum suum imponitur terminus communis et terminus discretus, quoniam terminus communis imponitur preter omnem differentiam temporis, terminus discretus imponitur ad tempus. Et quia in termino discreto idem est suppositum et significatum, corrupto supposito, corrumpitur et significatum...⁷⁵

A similar thesis is indeed found in Geoffroy of Aspall’s unpublished commentary on Aristotle’s *Metaphysics* (1254/57). The question of where it is to be found (‘*Utrum particularia habeant verum nomen*’) has been edited separately in a 2005 paper. Here is the passage:

De secunda propositione queritur consequenter utrum particularia habeant verum nomen, sicut ipse dicit

[...]

Contra hoc sunt expositiones. Una est hec: particularia non habent nomen proprie <Aliquid enim habet nomen> duabus modis. Aut impositum a forma per significationem ita quod non sit idem significatio cum appellatione, et hoc est *proprie habere nomen et sic habet universale nomen*,

⁷¹ William of Sherwood, *Synkategoremata*, 126-128.

⁷² In the *Tractatus Florianus*, an example of a corruptible part is ‘*Socrates*’, whereas an example of incorruptible part is ‘*aliquis homo*’ or ‘*iste homo*’, *Tractatus Florianus de solutionibus sophismatum*, 122. As we shall see, Robert Kilwardby refuses both ‘*hic homo*’ and ‘*Socrates*’.

⁷³ See Brumberg-Chaumont 2013b, 185 *sqq.*

⁷⁴ Peter of Spain, *Tractatus*, 197.17-19.

⁷⁵ Pinborg and Ebbesen 1984, 139.

aut impositum per appellationem et tale nomen habet particulare ; in ipso enim est idem significatum et appellatum et ita particulare non habet nomen proprie.⁷⁶

Coherently, Peter of Spain judges in his *Synkategoremata* the *improbatio* to be deficient because of a fallacy of the accident. He describes proper nouns like ‘Socrates’ as temporary (*ut nunc*) terms:

Improbatio [=A1] peccat secundum accidens quia sub terminis simpliciter non sunt sumendi termini ut nunc. Et dicuntur termini simpliciter qui habent esse a natura; termini autem ut nunc dicuntur qui aliquando sunt, aliquando non.⁷⁷

As clearly indicated in this text, the rule is presented not as a “regional” rule for mixed modal syllogistic, but as a general rule about types of terms to be subordinated to universal propositions where simpliciter terms are included.

As in the case of the *Tractatus Florianus* and of the *Abstractiones* by Richard the Sophist, the general, non-syllogistic, formulation found in Peter of Spain’s *Synkategoremata* is quite embarrassing. It seems to imply that any syllogism with an essential universal proposition and a corresponding singular proposition as premises, or any argument where the universal is the antecedent and the corresponding singular a consequent, would be a fallacy.

The hesitations of Peter of Spain can be seen as a symptom of this difficulty: on the one hand, in his *Synkategoremata*, Peter of Spain refuses to accept A1 because there is an unauthorised confusion of *simpliciter* terms and *ut nunc* terms; on the other hand, in the *Tractatus*, he describes proper nouns as temporary terms, including the reference to existing things in their signification; and in the very same *Tractatus*, he also says that, in the proposition ‘*omnis homo est animal*’, the term ‘*homo*’ is distributed to all men and the *descensus* is to be done to individuals as designated by proper nouns:

‘*Omnis homo, ergo Socrates*’.⁷⁸

Henrik Braakhuis’ hypothesis according to which, in ‘*omnis homo est animal*’, both subject and predicate are in simple supposition doesn’t seem very plausible.⁷⁹ The other solution, which would consist in saying that only *necessity* propositions, as opposed to necessary assertoric propositions, display a *simpliciter* predication, doesn’t seem available either since the *Synkategoremata* defines *simpliciter* predications by the occurrence of “absolute terms,” like ‘*homo*’ as opposed to “*ut nunc* terms.” This is done without any reference to modalities.

The only solution left would be to suggest that the universal term is distributed to the *supposita* of each of the proper nouns *provided that the latter have one, i.e.* that they have not

⁷⁶ Geoffroy of Aspill, *Quaestiones in Metaphysicam, Liber VII, Quaestio 43*, ed. in Brumberg-Chaumont 2005, 102. The differences between the various formulations found here and in the commentary on the *Introductiones* or in Peter of Spain are explained in the 2005 paper, as well as the general background of the discussion.

⁷⁷ Peter of Spain, *Synkategoremata*, 296-298.

⁷⁸ Peter of Spain, *Tractatus*, 83.15-16.

⁷⁹ See Braakhuis 1981, 147.

lost their reference — and their signification with it. This would be a far-fetched and quite a desperate move, though not entirely without basis in Peter’s text. A different semantic structure seems indeed to apply for Peter of Spain to non-empty proper nouns and to emptied proper nouns (*i.e.* to those that have lost their referent).⁸⁰

3.2 A tentative reformulation: the *ut nunc/simpliciter* mixed modal syllogistic rule (UN/S syl rule)

3.2.1. *The Dialectica Monacensis*

The way the problem is addressed in the chapter on fallacies in the *Dialectica Monacensis*, a text now dated from the 1220s by Sten Ebbesen,⁸¹ shows some connections with the previous formulations, but the rule is more accurately presented as a syllogistic rule. The notion of a fallacious mix up or confusion of *simpliciter* and *ut nunc* propositions is avoided. The introduction of *ut nunc* propositions in syllogisms starting from a necessity proposition seems to be that which causes the argument to become a fallacy of the accident:

Ex hiis patere potest solutio huius sophismatis: ‘omnis homo necessario est animal’, ut testatur Aristoteles in *Libro Priorum*: “oportet in talibus ad hoc ut fiat syllogismus, sumere talem partem sub medio que non sit sub ipso ut nunc aut secundum tempus determinatum, sed simpliciter.” Et pro tali parte fit sic distributio: ‘Omnis homo necessario est animal’. Sor autem cum sit pars ut nunc et secundum accidens, ipsum assumptum facit paralogismum secundum accidens.⁸²

The argument is not straightforward, however. Among paralogisms discussed by the *Dialectica Monacensis* prior to the text just quoted, one can find ‘*omnis homo est species, Socrates est homo, Socrates est species*’ and ‘*omnis aes est naturale, statua est aes, ergo statua est naturalis*’. In all those cases, where a fallacy of the accident is observed, there is a variation in the mode of predication from the major to the minor. This variation seems to be the *causa existentiae* of the fallacy, not the disregard of a modal syllogistic rule in particular. The explanation in terms of variation seems to apply equally to all the paralogisms of this section, **A1** included, since the two above-mentioned examples do not contain modal propositions.

Aristotle is incorrectly “quoted” here. We can identify a probable loose reference to Aristotle’s words in *Prior Analytics* I, 15 about XMM combinations. This shows, as already observed about Robert Kilwardby,⁸³ that it was by then considered obvious that remarks on the XMM combination should apply to the LXL combination, dealt with in *Prior Analytics* I, 9. The pseudo-quotation is quite common in the discussions about **A1** and it takes various forms.

The distinction between “*ut nunc/simpliciter* parts” is also quite recurrent. As we shall see below, the formulation is again very close to the one we find in Robert Kilwardby’s

⁸⁰ See Brumberg-Chaumont 2013b.

⁸¹ See Ebbesen 2013, 71-72.

⁸² *Dialectica Monacensis*, 588.3-9.

⁸³ See above § 3.1.1.

commentary on the *Prior Analytics*, where individuals as signified by proper nouns such as ‘*Socrates*’ are barred as “parts” to which the subject term of the major necessity proposition can be distributed: only expressions signifying a ‘vague individual’ such as by ‘*aliquis homo*’ are accepted.⁸⁴

Despite the allusive ways in which the argument is expressed in the *Dialectica Monacensis*, it is clear that one cannot have a “*ut nunc* term/part” or a “temporary term/part” as a small extreme in a syllogism starting from a necessity major proposition, *i.e.* as a subordinated term to the term, here ‘*homo*’, which is subject in the major and predicate in the minor proposition. The parts must be those to which this term (‘*homo*’), in subject position, is correctly distributed in the major proposition, so that it is truthfully predicated of one of those as a predicate in the minor. The point is to establish that the term in question, ‘*homo*’, does not have as *supposita* accidental and temporary parts such as an individual signified by ‘*Socrates*’. This means, from a syllogistic point of view, that one should stick to strictly Aristotelian Darii LXL combinations, resisting introducing singular propositions, since they are seen as included in the rejection of *ut nunc* propositions expressed by Aristotle for XMM combinations, as applied to LXL combinations by medieval logicians.

3.2.2. The disregard of the “UN/S syl Rule” and the mix up of *ut nunc* and simpliciter predication as the causes of the fallacy in A1

Similar notions are found in the Anonymus Erfordensis, where the notion of an invalid argument is added to that of a fallacious argument. The refutation of **A1** comes in two steps:

Dicunt enim quod ista consequential non tenet ‘omnis homo etc., sed Sor est homo; ergo etc.’, immo dicunt quod ibi est fallacia accidentis [...] Cum enim dicitur ‘omnis homo etc.’ sumitur esse simpliciter, in hac vero ‘Sor est homo’ sumitur esse *ut nunc*, et ita variatur medium [=refutation/1]. Et quod ibi sit fallacia accidentis, hoc iterum patet per Aristotelem libro *Priorum* ubi dicit quod “ex maiori de necessario et minori de inesse *ut nunc* non sequitur conclusio nisi de inesse *ut nunc*” [=refutation/1’], verbi gratia non sequitur ‘omnis homo de necessitate est animal, album est homo, ergo album de necessitate est animal’ [= argument **A2**], et hoc est quia in prima sumitur esse simpliciter, in secunda esse secundum quid, et ita variatur medium. Et ideo dicunt quod est ibi fallacia accidentis. Similiter est in proposito [*i.e.* **A1**], et ideo dicunt quod *improbatio* non tenet.⁸⁵

The refutation of the *improbatio* goes as follows:

The consequence is not valid and it is a fallacy (refutation/1): The major is *de inesse simpliciter* and the minor *de inesse ut nunc* so that the predication is not done in a uniform way in both: it is a fallacy of the accident.

⁸⁴ See below § 3.2.4.

⁸⁵ Libera 2002, 232.

The consequence is not valid, it is a fallacy that does not respect the “UN/S syl rule” (refutation/1’): (A1) is a fallacy of the accident in the same manner as another argument generally adduced in the discussion of the problem of the “two Barbaras,” namely (A2).

(A2): ‘Omnis homo de necessitate est animal, [omne] album est homo, ergo [omne] album de necessitate est animal’ (unauthorised: LX*ut nunc*L).⁸⁶

Both A1 and A2 do not respect a rule supposedly formulated by Aristotle:

Aristotle’s “UN/S Syl rule” (A. Erfordensis): from a necessity major and an assertoric minor *de inesse ut nunc* only a *de inesse ut nunc* conclusion follows [*i.e.* if a necessity conclusion is indeed inferred, it is a fallacy because there is a variation in the predication of the middle term].

This means that (A3) would be authorised, since following is a valid combination:

(A3) ‘omnis homo de necessitate est animal, Socrates est homo, Socrates est animal’ (authorised: LX(*ut nunc*)X(*ut nunc*)).

As crystal-clear and easy as the argument might appear, it is in fact quite twisted.

First, it supposes to include propositions with accidental terms like ‘*album*’ and propositions with proper nouns of first substances like ‘*Socrates*’ in the same category of *ut nunc* propositions, which is far from obvious. We shall see that Robert Kilwardby makes a difference.

Second, if it is the mix-up of a necessity proposition and an assertoric *ut nunc* proposition that causes the fallacy, how come that the mix-up is harmless if a *ut nunc* assertoric is concluded, following the combination LX(*ut nunc*)X(*ut nunc*) [=A3], authorised by Aristotle according to the Anonymus Erfordensis?

As already seen, Aristotle never formulated the “rule” in the chapter about mixed syllogisms with necessary and assertoric propositions in LXL. On the contrary, it is Aristotle’s explicit position in chapter 9 of book I of the *Prior Analytics* that the LXL combination is a useful combination,⁸⁷ *i.e.* without any counter-example, whichever terms you take. Furthermore, he himself used an argument confusing simpliciter and *ut nunc* predications as an authorised instantiation of XLL combination in order to expose the latter as a useless combination in the first figure.

3.2.3. The “two Barbaras” in *Prior Analytics I, 9: XLL (useless) vs. LXL (useful)*

By contrast with a LXL combination, a XLL combination is not a good combination according to Aristotle because it suffers from the existence of counter-examples. One of them is the following:

⁸⁶ Robert Kilwardby gives an example with [*omne album*]: “De necessitate omnis homo est animal; omne album est homo (ita sic), [non tamen] de necessitate omne album est animal,” *Notule Libri Priorum I*, 322 (for the use of brackets in the quotation, see below footnote 88).

⁸⁷ *Prior Analytics I*, 9, 30a15-23.

(B) ‘Omne animal est movens [be it the case], omnis homo de necessitate est animal, omnis homo de necessitate est movens’.⁸⁸

Although the example contains *de inesse ut nunc* propositions, in the major and in the conclusion, those are not labelled as such in this passage. The denomination will appear only in chapter 15, as already seen.

‘*Omne animal est movens*’ is taken as a true proposition here because the argument is formulated in a counter-factual world where it is the case that all animals are moving. For this reason it was considered as an as-of-now proposition by ancient and medieval commentators.

The problem is that one cannot immediately see why *ut nunc de inesse* propositions could be authorised in order to produce counterexamples in this case, and not in others, i.e. why the same type of counter-example as **B** could not be used to contest the validity of the LXL combination.

From the Aristotelian example **B**, examples of the type **A2** were indeed produced, in the tradition of the commentaries on the *Prior Analytics*, in order to question the validity of LXL combinations too, and the coherence of Aristotle’s treatment of LXL, XLL and XMM combinations. Those two combinations, LXL and XLL, are the two “Barbaras” discussed in the tradition.

The problem was indeed to explain why **B** would be a counterexample to XLL, so that the combination is invalid, while **A2** would not be a counterexample to LXL, since it has no counterexample whatsoever according to Aristotle. The idea that **A2** would indeed follow an LXL combination, so that the combination would be described as both valid and suffering from the existence of a counterexample, is quite disastrous: it must be avoided at all costs. The only solution consists in blocking **A2** as a possible counterexample to LXL, in the same manner as Aristotle has blocked ***M1** and ***M2** for the XMM combination: it is not a counterexample since it is a non-authorised instantiation of the LXL combination, where a simpliciter *de inesse* proposition is demanded.

It is in this context that the “UN/S syl Rule” has been used by Latin logicians, while other paths have been followed by Alexander of Aphrodisias, Philoponus, Ps.-Ammonius⁸⁹ and yet another one by Averroes⁹⁰ in order to save the coherence of Aristotle’s mixed modal syllogistic.

⁸⁸ See *Prior Analytics* I, 9, 30a30-33. The syllogism is not actually formulated in Aristotle’s text, which only lists terms. Robert Kilwardby offers the following formulation: “*Omne animal movetur, necesse est omnem hominem esse animal, [tamen non] necesse est omnem hominem moveri,*” *Notule Libri Priorum* I, 312. We have put the negation of the conclusion into brackets in order to emphasise the formulation of the argument that is refused by Robert Kilwardby as a good syllogism, since, if one adopts such a combination, one can get a false conclusion from true premises.

⁸⁹ See Flannery 1995, 53-108 and Thom 2003, 21 *sqq.*

⁹⁰ In the last version of his solution to the problem of the mixed modal syllogism, Averroes used the modality of the terms, i.e. the material modality of assertoric propositions: see Elamrani-Jamal 1995, 71-74. An influence of Averroes’ *Quaesita* on Robert Kilwardby has been unconvincingly adduced by H. Lagerlund (2000, 21, 32-35, esp. 35 note 54); see Thom 2003, 95.

The rule was designed to block **A1**, which has been also employed as a counterexample to LXL in the medieval tradition, where proper nouns were pervasive, in logic and in syllogistic.

As a consequence, we would have:

A1 = ***A1/A2** = ***A2**: not instantiations of (and therefore not counterexamples to) the LXL combination, which should in fact be reformulated as an *LXsimpliciter*L combination.

B : instantiation (and therefore counterexample) to XLL, which stands as it is.

M1**/M2**: not instantiations of (and therefore not counterexamples to) the XMM combination, which should in fact be reformulated as an *Xsimpliciter*MM combination.

[Additionally, we have **A3** as a good instantiation of the combination LXX, a combination not explicitly accepted by Aristotle, but often included all the same in the sets of useful combinations.]

In order to obtain the disqualification of **A1/A2** as counterexamples, our texts say that they are fallacious arguments. To be more exact, for the argument to be efficient, even if the idea is not articulated as such by our authors, **A1/A2** must be *formally deficient* fallacies, *i.e.* not syllogisms at all, *despite apparently following an authorised syllogistic combination* (namely LXL) according to the modes and figures. Not being a syllogism in LXL, they cannot be a counterexample to the LXL combination.

This is indeed the way fallacies of the accident were often considered at the time, *i.e.* as formally deficient, pseudo-syllogistic arguments, as opposed to materially deficient fallacies, where a correct syllogistic combination is followed but one of the premises (or both) is sophistic, *i.e.* false, although apparently true.⁹¹

Now if **A2** is a fallacy of the accident only because of a mix-up of predication (*simpliciter/ut nunc*), one does not see why **B** would not be also a formally deficient fallacy, since it starts from the same mix-up and so it would be disqualified as a counterexample to the XLL combination.

Furthermore, if the presence of only *simpliciter de inesse* predications makes the combination LXL useful, why don't we accept the XLL combination provided that the X proposition is *de inesse simpliciter*, *i.e.* the XLL combination reformulated as *Xsimpliciter*LL?

What about assertoric Barbaras in XXX, where one of the premises would be *de inesse simpliciter*, like 'Every man is an animal', and the other one *de inesse ut nunc*, like 'Everything that moves is a man'? Would this too be a fallacious argument? Syllogistic theory would tend to fall apart as a whole.

3.2.4. The "appropriation rule" by Robert Kilwardby

We now can appreciate that Robert Kilwardby had indeed every reason to be dissatisfied with the "UN/S syl rule" as a way to prevent counterexamples with a *ut nunc de inesse* proposition to be formulated against the usefulness of the LXL combination.

⁹¹ See Brumberg-Chaumont 2017a; 2017b. For other "fallacious Barbaras" and arguments whose validity seems undecidable, see Brumberg-Chaumont 2022.

He acknowledges, in his commentary on the *Prior Analytics*, that Aristotle indeed uses arguments with *ut nunc de inesse* propositions as *authorised* counterexamples to useless combinations. He also admits that one doesn't see why XLL combinations could not be accepted, provided that the X proposition is *de inesse simpliciter*:

Aristoteles instat coniugationes inutilibus accipiendo illam de inesse ut nunc [= i.e. counter-examples to XLL such as **B**]. Ergo similiter videtur quod possit recte fieri instantia coniugationibus utilibus per illam de inesse existente ut nunc [counter-examples to LXL such as **A2**].

Adhuc si coniugatio illa cuius maior de necessario reputatur utilis eo quod minor, cum sit de inesse simpliciter, sequitur conclusio de necessario, eadem ratione et illa utilis ubi minor est de necessario [*i.e.* **XLL** combination]. Maiore enim existente de inesse simpliciter sequitur de necessario sic [*i.e.* *XsimpliciterLL*]:

Omnis homo est animal

Omne risibile de necessitate est homo

Ergo omne risibile de necessitate est animal.⁹²

Consequently, he offers another much more powerful solution, based on the “appropriation rule.”⁹³ By this rule, the *very formulation* of arguments like **A2** (or **A1**) is barred because the presence of a necessity major *demand*s a *simpliciter de inesse* minor in LXL combinations. The rule does not apply to XLL combinations because the necessity proposition, being in the minor, doesn't “govern” the conclusion.⁹⁴

Since he sees singular propositions as *ut nunc* propositions, he rejects the very possibility of even *formulating* minor propositions in LXL combinations with singular terms, and authorises only *simpliciter* particular propositions as subjected to (*simpliciter*) necessity propositions, *i.e.* as minor propositions in a syllogism in Darii LXL (or Ferio LXL). For, only individuals as picked up by ‘*aliquis homo*’ are “necessary parts” or “indifferent” parts of the species, while the same individuals as picked up by ‘*Socrates*’ or ‘*hic homo*’ are “*ut nunc* parts”:⁹⁵

In minore accipienda est minor extremitas “sub” medio, non quod sit sub eo accidentaliter, neque quod sit sub eo ut nunc sed quod sit sub eo indifferens ei ; verbi gratia : necesse est hominem esse animal. Deinde non est accipiendum est sub homine aliquid quod est ut nunc (cuiusmodi est ‘*Socrates*’), neque quod secundum accidens (cuiusmodi est ‘*album*’), sed aliquid ei indifferens (cuiusmodi est ‘*aliquis homo*’). Aliter enim non habet necessitatem haec mixtio.⁹⁶

⁹² *Notule Libri Priorum*, 323-324.

⁹³ See Thom 2007, 160-162.

⁹⁴ See *Notule Libri Priorum*, 324.

⁹⁵ As indirectly designated by ‘*album*’, they are accidentally so.

⁹⁶ *Notule Libri Priorum*, 326. The same argument is found in Albert the Great's *Analytica Priora*, p. 524B-525A, quoted by Libera 2009 = Anonymus Libranus, 203.

This theory allows him to quickly offer an allusive refutation of the *improbatio* at step 1 (A1) in the OHNEA *sophisma*:

Et per hoc patet responsio ad hoc argumentum [= *improbatio*]: ‘omnis homo de necessitate est animal, Socrates est homo, ergo etc’ [=A1], quia cum quattuor modis possit sub <homo>, scilicet album, vel Socrates, vel iste homo, vel aliquis homo, solum sub ultimam acceptionem sequitur conclusio de necessario et solum sic necessaria est haec mixtio.⁹⁷

The “appropriation rule” is followed by Albert the Great in his commentary on the *Prior Analytics*.⁹⁸ It is mentioned by the anonymous commentator on the *Prior Analytics* partially edited by Ian Pinborg.⁹⁹ It is rejected by the ps.-Duns Scot in his commentary on the *Prior Analytics*.¹⁰⁰

It does not appear in the *sophismatic* texts so far studied, where only the basic “UN/S syl rule” is used. The only exception is the Bruges version of the *sophisma* OHNEA by ps.-Boethius of Dacia (problem 3). The appropriation rule is rejected, as well as any kind of *ut nunc/simpliciter* rule that would restrict the possible instantiations of the LXL combination as fallacies. The combination is useful, that is, it works whichever terms you take. Ps.-Boethius of

⁹⁷ *Notule Libri Priorum*, 326.

⁹⁸ See *Analytica Priora*, 573A. As in other cases (see Brumberg-Chaumont 2013a, 372-373), Albert professes a very different position in his paraphrases on the *Topics* and on the *Sophistici Elenchi*. In the *Topica*, he extends the “essential coherence” theory for the truth of essential propositions to singular propositions and makes it possible for a proposition like ‘*Socrates de necessitate est animal*’ to be true. It is true because of a mediate coherence between ‘*Socrates*’ and ‘*animal*’, i.e. mediate by the essential identity between Socrates and man (*Topica, Opera Omnia* II, 297B, quoted by Libera 2009 = Anonymus Liberanus, 203). This is quite near to the thesis advocated by some authors who accept as perfectly valid the *improbatio* at step 1, that is: who accept A1 as a perfectly valid syllogism in LXL, and who block the *improbatio* at step 2 (see below, §4). In the paraphrase on the *Sophistici Elenchi*, when the fallacy of the *figura dictionis* is discussed, singular propositions, whether formed with a proper noun (‘*Socrates est animal*’) or with a specific name with a deictic pronoun (‘*hic homo est animal*’), are considered as lawfully inferred from universally quantified corresponding propositions where the subject term in confuse mobile supposition (‘*Omnis homo est animal*’). Since he obviously assimilates particular and singular propositions in his discussion (because he sees the subject of particular propositions, the *individuum vagum*, as signifying a *hoc aliquid*, in accordance with the examples of names of primary substances taken by Aristotle in the *Categories*) Albert is perfectly aware of the dangers of the contrary opinion for syllogistic as a whole: if the *descensus* to particular/singular propositions from corresponding universal propositions were not accepted because there is a change from the signification of a *quale quid* to that of a *hoc aliquid*, then the third mode of the first figure (DARII) and the first mode of the third figure (DARAPTI) would all be fallacies *de figura dictionis* (see *De Sophistici Elenchi, Opera Omnia* II, 681A-683A). This text is quoted in two parts by Libera 2009 = Anonymus Liberanus, 201, note 35 and 204, note 41.

⁹⁹ The anonymous commentary on the *Prior Analytics* in Bruges Stadbibliothek cod 509 edited by Jan Pinborg (1971, 260 *sqq.*) does mention the restriction exerted by the necessary major, so that the subject term is restricted to what is *simpliciter* and *per se* under the predicate. But this is just a starting point for a discussion about restriction in general, with no discussion of the syllogistic problem here at hand.

¹⁰⁰ See Duns Scot, *Opera Omnia* II, quaestio 28, 151-154.

Dacia, however, does not directly mention or discuss argument **A1** of the *improbatio*, but rather the traditional example taken in the discussion of the two Barbaras, namely **A2**, with ‘*album*’.¹⁰¹

3.2.5. A newly identified English OHNEA *sophisma* (ms. Gonville and Caius 367/589) and the introduction of the “appropriation rule” in the refutation of the *improbatio*.

The only sophismatic text with a reference both to the *improbatio* and the “appropriation rule” we have been able to find is in a OHNEA *sophisma* not recorded in the Ebbesen/Goubier catalogue.¹⁰² It is found, together with other *sophismata*, after a series of questions on the *Prior Analytics*, copied in the manuscript Cambridge, Gonville and Caius 367/589. The manuscript is of Oxonian provenience and it is dated from the end of the 13th or the beginning of the 14th century. It contains an anonymous commentary on Priscian, commentaries by Adam of Bockenfield (1240’s) and by Geoffroy of Aspall (1250s/60s) on natural philosophy, as well as some anonymous commentaries on Aristotle’s logic. The OHNEA is copied from folio 102ra to folio 102va. It ends abruptly with a discussion about the *improbatio*, which itself closes on a brief refutation of the argument: ‘*omnis homo est animal, ergo omnis homo est*’. The *improbatio* is not discussed in its own right, but mentioned quickly in a very careless and elliptical way.

The anonymous English master apparently wants to establish that the first step of the *improbatio* (the argument **A1**) is not an instantiation of the LXL combination; he squarely rejects the possibility that a counter-example like **A2** could be formulated against the LXL combination in the same manner as **B** was formulated by Aristotle against XLL. He also rejects the idea that the XLL combination could be turned into a useful combination provided that the X proposition is *de inesse simpliciter*. The appropriation rule, not the “UN/S syl rule,” is the final argument for that:

Quod *improbatio* teneat [*i.e.* **A1**] videtur quia secundum Aristotelem in *Prioribus*: maiore existente de necessario et minor de inesse sequitur conclusio de necessario [= LXL combination], et ita est ibi, ut patet in *sophisma*, quare etc.

Dicatur quod hoc verum est si minor sit de inesse simpliciter et non ut nunc [= UN/S syl rule], quod non est verum hic [*i.e.* it is not verified in **A1**].

Contra id dicitur quod maiore existente de inesse et minori de necessario non sequitur conclusio de necessario [*i.e.* the XLL combination], <sed> sequeretur tantum si esset de inesse simpliciter, quare intelligit [= Aristotle, when he refuses the XLL combination] quod sit de inesse ut nunc [*i.e.* with the UN/S syl rule, one would have to admit XLL combination as valid provided the X proposition is *de inesse simpliciter*, a position that is refused in the next paragraph].

Videtur quod non est simile de maiore et de minore [*i.e.* the two combinations XLL and LXL can not be dealt with in the same manner], quoniam maior appropriat sibi minorem, non autem

¹⁰¹ *Boethii Daci Aliorumque Sophismata*, 83-85. This part of the *sophisma* was edited as authentic by Roos 1962, 195. Roos gives an extract of a commentary on the *Sophistici Elenchi* he ascribes to Boethius of Dacia, where the opposite thesis is adopted, namely that **A1** is a fallacy of the accident. This text, however, is not by Boethius, but by the first of the two anonymous commentaries from the 1270’s edited by Ebbesen 1977, 198-200.

¹⁰² Ebbesen & Goubier 2010.

minor [= “appropriation rule”]. Unde cum maior sit de necessario, potest sibi appropriare minorem de inesse simpliciter, non autem e converso.¹⁰³

This text is significant because of the loose way in which the appropriation rule is referred to. This clearly indicates that the argument was already standard in the context where the anonymous master was teaching. If indeed an English environment, this would fit with what we otherwise know of the strong and early English reception from which the logical texts by Robert Kilwardby benefited in Oxford from the mid-13th century on. This influence was long-lasting, since the Gonville and Caius 367/589 *sophisma* is probably to be situated rather in the last quarter of the 13th century. One clue in favour of this dating is the fact that, at the beginning of each problem, the anonymous author gives the number of arguments adduced *pro* and *contra* in the same manner as the Anonymus Alani 13.¹⁰⁴

It is the “UN/S syl Rule,” not the “appropriation rule,” which is read in the discussions of the *improbatio* so far studied, all of them of Parisian provenience and posterior to Robert Kilwardby’s commentary on the *Prior Analytics*, except for the Anonymus Erfordensis who seems to have been a contemporary. Since Robert Kilwardby’s commentary was influential also in Paris, the reason for not including the “appropriation rule” in sophismatic discussions of the *improbatio* is difficult to understand. A possible explanation could be that the influence of Robert Kilwardby’s commentary was delayed for some time in Paris, maybe revived after the rewriting of the *Notulae* offered by Albert the Great in his own paraphrase on the *Prior Analytics* probably redacted during the second half of the 1250s.¹⁰⁵ This explanation would not do for later productions, such as the Anonymus Libranus or the Anonymus Alani. A complementary explanation could be that, since the practice of *sophismata* involved BA candidates and bachelors and was attended by Arts students in the “passive” stage of their cursus, it could sometimes be rather conservative, contented, for some sub-sections of the discussion, with stock arguments rehearsed for decades, instead of up-to date new theories, especially when those were of no direct use for solving the *sophisma* at hand, and targeted side issues such as the problem of the two Barbaras.¹⁰⁶

¹⁰³ Anonymus, *Sophisma* OHNEA, ms. Gonville and Caius 367/589, fol. 102va.

¹⁰⁴ Libera & Gazziero 2008 = Anonymus Alani 13, for instance page 332.

¹⁰⁵ The fact that ps.-Boethius of Dacia speaks of *restrictio*, in the same manner as Albert, instead of *appropriatio*, could be a clue in favour of this hypothesis.

¹⁰⁶ We have seen a completely different approach defended by Nicholas of Paris in his discussion of the *improbatio*, namely the notion that all syllogisms following a Barbara LXL combination are valid, **A1**, but also arguments such as **B** included. For him, the argument should be accepted at step 1 (**A1**), because necessity universal propositions, necessity singular propositions and assertoric singular propositions all are conditionally true, *i.e.* existentially conditioned (*‘dum X est’*). The “appropriation rule,” which maybe was not yet formulated by Robert Kilwardby or not yet popularised, is not mentioned; the “UN/S syl rule” is not discussed either. This may be because it was by then considered as utterly at odds with Aristotle’s position regarding the universal usefulness of the Barbara LXL combination. More on Nicholas of Paris in the conclusion.

The evolutions in the formulations of the “UN/S syl rule” nonetheless show an awareness of some of the difficulties that Robert Kilwardby had tried to resolve with the “appropriation rule.”

3.2.6. Tentative reformulations of the “UN/S syl Rule” without mention of a mix-up of *simpliciter* and *ut nunc* propositions.

The “UN/S syl rule” is found in a great variety of formulations, probably reflecting some uneasiness about its ability to preserve the coherence of Aristotle’s mixed modal syllogistic or even to guarantee the very survival of syllogistic at large. There might indeed have been a growing awareness of the danger it represented for logic as a whole, if formulated in terms of a fallacious mix-up of *simpliciter/ut nunc* predications. This could damage any kind of consequences from universal to singular propositions, in the same manner as the previous formulation in terms of the simple “UN/S rule” did.

A tentative revision of the rule might have thus consisted in saying that **A1** is a fallacy of the accident *because it does respect the rule*, where the rule itself is reformulated in a such a way that the definition of necessity propositions as *simpliciter* propositions and the general notion of an unauthorised mix-up of *ut nunc* and *simpliciter* are absent. This leaves open the option that the rule would not apply for other kinds of inferences: whether other mixed modal syllogisms (such as in the XLL combination); assertoric Barbaras where some *ut nunc* propositions, like singular propositions, are inserted; or consequences from essential universal to subordinated singular propositions at large, as those involved in the rules of distribution and verification for common terms in confuse mobile supposition.

This cautious formulation is found in the Anonymus Liberanus:

Ad improbationem¹⁰⁷ respondent per fallaciam accidentis quia ex maiore de necessario et minore de inesse ut nunc non sequitur conclusio de necessario, nisi minor sit de inesse simpliciter, ut habetur primum *Priorum*, capitulo de mixtionibus, unde hi[n]c est fallacia accidentis: ‘omnis homo de necessitate est animal ; omne album homo; ergo omne album est de necessitate est animal’ [=A2]. Cum ergo in proposito minor sit de inesse ut nunc haec, scilicet: ‘Sor est homo’, ideo dicunt quod hic est fallacia accidentis.¹⁰⁸

Rather than establishing that **A1** and **A2** are fallacies falsely following an LXL combination, this text rather suggests both that **A1** and **A2** follow a useless combination, namely “Lxut nunc,” which yields no conclusion at all, not even an X conclusion, and that they are fallacies if presented as yielding an L conclusion.

¹⁰⁷ There is something odd here since the *improbatio* has not been quoted previously in the text. It must refer to the *improbatio* as usually adduced, even if not precisely in our text. The same phenomenon is observed in Kilwardby’s commentary on the *Prior Analytics*, which speaks of the “solution of the argument,” *i.e.* of the *improbatio* of the *sophisma* OHNEA, without having previously talked about it. See the main text quoted in footnote 97.

¹⁰⁸ Libera 2009 = Anonymus Liberanus, 220.

This approach is also read in the Anonymus Tabarroneus. In this text, **A1** is explicitly both a fallacy and a non-syllogistic argument since it follows a *non-useful combination*, i.e. a combination of premises that yields no conclusion whatsoever:

Et respondent ad improbationem per fallaciam accidentis. Dicunt quod cum sic arguitur: ‘omnis homo de necessitate est animal ; Sor est homo; ergo Sor de necessitate est animal’, est ibi inutilis coniugatio, quia ex maiori de necessario et minori de inesse, et de inesse ut nunc non sequitur conclusio. Unde dicunt quod haec ‘Sor est homo’ est de inesse ut nunc. Sed quotienscumque fit syllogismus ex maiori de necessario et minori de inesse, illa quae est de inesse debet esse de inesse simpliciter et non de inesse ut nunc. Nunc autem non est ita, et ideo etc.¹⁰⁹

Here again, the author must probably mean that **A1** follows a non-useful combination, that it is a formally deficient argument, and that it is a fallacy because it only apparently follows a LXL combination.

Those formulations explain the *causa apparentiae* of the fallacy, i.e. because sometimes you cannot distinguish *prima facie* a *ut nunc* and a *simpliciter de inesse* proposition, there being no formal differences; but those formulations do not explain the *causa existentiae* of the fallacy, i.e. the reason you cannot combine an L major and a *ut nunc* X minor.

The Anonymus Alani 13 goes in the same direction, but offers an even more careful formulation in terms of syllogistic rules only. He says that the “UN/S syl rule” makes the argument a non-concluding argument, without even mentioning the notion of a fallacy:

Et ad improbationem respondent quidam dicendo quod cum sic arguitur ‘omnis homo de necessitate est animal ; Sor est homo; ergo Sor de necessitate est animal’ (**A1**) quod hic arguitur secundum mixtam generationem necessarii et de inesse; ibi autem sicut in aliis mixtionibus oportet de inesse esse de inesse simpliciter, quod non est in proposito cum ista ‘Sor est homo’ sit de inesse ut nunc et ideo non concluditur.¹¹⁰

This is a much safer formulation, but, again, it does not explain at all the reason you cannot have a *ut nunc* X minor after a necessity proposition.

An (apparently) much safer path has been explored by obtaining the refutation of the *improbatio* at step 2.

3. Disproof at step 2: non-existentially committed singular propositions and the semantics of “analysed” proper nouns.

In the second strategy, one can buy both the denial of existential import for universal essential propositions, whether modal or not, and the *descensus* to the individuals. This can be done showing that there is no existential import in singular propositions either.

As a matter of fact, there is even less existential import in singular propositions than there is in universal propositions. Here again the semantics of proper nouns plays a strategic role. This strategy does not consist in rejecting the “UN/S Syl rule” to save the goodness of **A1**. On

¹⁰⁹ Quoted in Libera 2009, 198.

¹¹⁰ Libera & Gazziero 2008 = Anonymus Alani 13, 361.

the contrary, all the authors here studied accept the restriction. But they consider that it does not apply to **A1**. For, singular essential propositions are not considered as discarded by this rule since they are judged to be *de inesse simpliciter*. This means that the case of accidental predications, with ‘album’, and the case of singular predications, with ‘Socrates’, are clearly distinguished: the former are *ut nunc*, whereas the latter are *simpliciter* predications.

The argument **A1** holds because both premises are *de inesse simpliciter*: the proper noun is only superficially different from the name of the species, so that the assertoric minor is even more *de inesse simpliciter* than the major. For, it is more perfectly reducible to an identity statement. The truth of singular essential propositions is even more independent of the existence of individual instantiations of the species than the propositions involving a species and a genus.

After a development dedicated to the refutation of the *improbatio* at step 1, the Anonymus Liberanus turns to the second strategy, which consists in refusing the *improbatio* at step 2. The Argument **A1** is perfectly licit. It is the argument **C** (‘Socrates de necessitate est homo, Socrates de necessitate est’) which is rejected as a fallacy:

Sed quia in illa paedicator species — ‘species autem est totum esse individuorum’ sicut dicit Boethius — videtur quo sicut haec est de inesse simpliciter: ‘homo est animal’, similiter ista: ‘Sor est homo’. Item potest dici quod haec ‘omnis homo etc.’ [= **A1**] simpliciter et probatio bona, et improbatio bene tenet usque ibi: ‘Sor de necessitate est animal, ergo Sor de necessitate est’ [= **C**]; peccat enim per fallaciam secundum quid et simpliciter, ut visum est prius.¹¹¹

In the tract on *Syncategoremata* ascribed to Henry of Gand, the consequence of the *improbatio* at step 1 is judged valid and the refutation of the *improbatio* comes at step 2:

Dicendum quod prima [*i.e.* OHNEA] est vera. Ad improbationem [= argument **C**] respondendum dicendo quod peccat per fallaciam secundum quid et simpliciter. Cum enim dicitur : ‘Sortes de necessitate est’, ibi copulatur esse actuale ; sed cum dicitur ‘Sortes de necessitate est animal’, ibi copulatur esse habituale sive esse essenziale, quod est secundum quid respectu esse actualis.¹¹²

The author accepts the inference to individuals, contrary to Peter of Spain, because a singular essential proposition “copulates *esse essentiae*” too.

If few *sophismata* explain why singular propositions are *ut nunc* in the first strategy, as seen, most of the tenants of the second strategy do explain why singular essential propositions are in fact *simpliciter de inesse* propositions, and why the peculiar semantics of proper nouns, when analysed, is the reason why singular proposition are just so. The rationale is a metaphysical one, deeply embedded in Aristotle’s conception of essence and individuality. The proper noun of an individual, ‘Socrates’, and the name of the species to which the individual belongs, the common noun ‘homo’, were imposed according to the same form [*homo*], namely

¹¹¹ Libera 2009 = Anonymus Liberanus, 221.

¹¹² Henry of Ghent (ascr.), *Syncategoremata Henrico de Gandavo adscripta*, 48. The solution to the OHNEA *sophisma* according to distinctions related to the necessity syncategoreme is given, though not explained, at p. 52.

the specific form, there being neither form nor definition proper to the individual that would correspond to his proper logical name.

The Anonymus Alani 13 has a very clear-cut position on that account. He is openly critical towards those who want to disprove the *improbatio* at step 1. He articulates in a very distinctive way the metaphysical grounding for the specificity of the semantics of proper nouns. He rejects, as a possible description of the latter, the idea that an accidental form, *i.e.* the Porphyrian bundle of accidents by which individuals belonging to the same species are differentiated, would be the form according to which the name ‘*Socrates*’ has been imposed. This would identify proper nouns with accidental nouns such as ‘*albus*’, a position indeed present in the discussion by some authors studied in the previous section of the paper.¹¹³ He underlines, by contrast, how the specific difference (rational) is only in potentiality (*potestate*) in the genus (animal),¹¹⁴ so that the genus being predicated of the species is less necessary than the species being predicated of the individuals. According to Boethius, on the contrary, there is total metaphysical identity between the species and the individual, which is not differentiated from the species by a substantial difference. There is only a semantic difference in the mode of signifying (*modus alius*):

Sed cum ista ‘Sor est Sor’ sit eiusdem necessitatis cum ista ‘homo est homo’ et easdem habent probationes, nullo modo poterit ista ‘Sor est homo’ esse de inesse ut nunc, cum sequatur directe ‘Sor est Sor, ergo Sor est homo’; eo quod ad negationem hominis sequitur negatio Sortis, sequitur enim ‘nullus homo est ; ergo Sor non est’ cum ex opposito consequentis sequatur oppositus antecedentis ; quia si ‘Si Sor est, Sor est homo’, et similiter ‘aliquis homo est’, quae est contradictoria primae.

Et iterum individuum non addit formam aliquam supra speciem vel differentiam nec habet aliam formam a forma speciei et hoc est quod scribitur quod ‘species est totum esse individuorum’; genus autem non est totum esse speciei quia genus addit differentiam et esse supra genus, quia differentia non est in genere nisi potestate solum. Nomen autem imponitur a forma, ergo cum individuum non habet aliam formam a forma speciei, ut dictum est, ab eadem forma et ad eandem <designandam> imponitur nomen speciei et individui ; idem ergo significant hoc nomen

¹¹³ This would make of ‘*Socrates*’ an accidental name in the same manner as ‘*hoc album*’, a position that would ruin the possibility of an essential singular proposition where the species is predicated of its subordinated individual, as in ‘*Socrates est homo*.’ This consequence is not articulated in our text, but it is probably presupposed. The thesis is to be avoided at all costs. On this topic, see: Brumberg-Chaumont 2013c, 63-90 (for the evolution of the problem from late Antiquity to the early Middle Ages); Brumberg-Chaumont 2007 and Brumberg-Chaumont 2011 (for several 12th-century solutions); Brumberg-Chaumont 2005 (for the way the problem was handled during the 13th century); and Brumberg-Chaumont 2016 (for John Buridan’s solution to the problem of the semantics of singular substantial names of individual substances).

¹¹⁴ The specific difference, like ‘rational’, cannot be actually in the genus ‘animal’, since in the genus would also inhere the opposite difference, namely ‘irrational’, so that the genus would be actually the substrate of two opposite qualities, which is impossible. The opposite differences cannot be absent from the genus either, because that would make the division of the genus in its species a purely extraneous, accidental division. The standard solution consists in saying that the two opposites, dividing essential differences, do simultaneously *inhere in genus*, but only in potentiality. This solution cannot do for the differentiation of the species into various individuals. See, for the discussions at the beginning of the 12th century, Brumberg-Chaumont 2008.

‘Sor’ et hoc nomen ‘homo’ modo solum alio, qui modus non est accidentalis quicquid dicat Porphyrius [= the theory of the bundle of properties] ; ergo praedicare hominem de Sorte est praedicare idem de se, et qui negat talem praedicationem idem affirmat et negat, sicut visum fuit prius. Haec ergo ‘Sor est homo’ non solum est necessaria immo magis necessaria quam ista ‘homo est animal’, et aequae necessaria ut ista ‘homo est homo’, unde visum est michi quod prima est vera [= OHNEA], et argumentum [= **A1**] quod creditur improbatio optimus est syllogismus verissimam conclusionem ex verissimis praemissis inferens necessario. Nec hic [= **A1**] est aliquod sophisma, cum non sit in veritate, sed est una probatio bene probata, sine omni improbatione vera vel apparenti, nisi ex hoc solum quod creditur quod conclusio istius syllogismi sit falsa, quae in veritate verissima est.¹¹⁵

Similar ideas appear in the discussion of the sub-*sophisma* “*Caesar est homo*” *Caesare mortuo* in the Anonymus Liberanus, except that the notion that individuals do not have a name or a definition, as a consequence of their having no form of their own, is clearly articulated:

Haec conceditur a multis: ‘homo est animal’; cum igitur maior sit identitas in individui ad speciem <quam speciei ad genus>, cum species sit totum esse individui, genus autem non dicit totam esse speciei, sed partem, sequitur quod multo fortius haec sit vera : ‘Caesar est homo’.

Item. Individui non est nomen nec diffinitio, quia non habet aliam formam vel essentiam a speciei ; non sic est de genere et speciei, quare, si haec concedit ‘homo est animal’ [*what has been done in the previous sophisma*], nullo homine existente, multo magis haec debet concedi : ‘Caesar est homo’.¹¹⁶

The truth of the proposition is not challenged by an emptied term because the significate of ‘Caesar’ is the same, whether Caesar exists or not.

Once again, similar ideas are found in the direct proof of the OHNEA proposition offered by the Anonymus Tabarroneus, conducted through the proof of the OHEA proposition with the case *nullo homine existente*. Here the different “modes” of signifying the very same form by the name of the species, the common noun, and by that of the individual are spelled out: proper nouns signify the essence as “designated” (*signata*), whereas the name of the species signifies the common noun the same as “not-designated” (*non signata*). A difference in mode does not mean that an element has been added to the significate (like ‘Socrates’ = ‘man + accidental individuating differences’), since the name of the individual man, as the substantial name of the individual substance it is, does not add anything to the significate of the name of the species:

Nullo homine existente aequali veritate erit haec vera ‘Sor est homo’ et ‘Homo est homo’ quia nomen individui et nomen speciei ab eadem forma imponuntur ; nec differunt aliquo modo nisi sicut signatum et non signatum, et nomen individui nihil addit super nomen speciei ... et ideo dixit Boethius quod “species est totum esse individui ;” sicut ergo haec ‘homo est homo’ est vera, ita quod nulla verior est illa, quia idem de se

¹¹⁵ Libera & Gazziero 2008 = Anonymus Alani 13, 361-362.

¹¹⁶ Libera 2009 = Anonymus Liberanus, 230.

praedicatur, ita et haec ‘Sor est homo’ quia idem de se praedicatur ; et ideo opportune dixit Boethius cum dicit quod “nulla verior est illa in qua idem de se praedicatur.”¹¹⁷

The second strategy thus shows that necessity and necessary essential propositions, whether universal, particular or singular, do have an ontological commitment which is not an existential import. They rest on the relationship between essences, as endowed with a special type of being, *esse essentiae* or *esse habituale*, as their truth-makers. The identification of singular essential propositions as *simpliciter* propositions (whether necessity or assertoric propositions) and the description of their necessary truth as even stronger than the universal ones rely on a logical analysis. Singular propositions are reduced to identity statements, where the singularity of the mode of signifying proper nouns is considered as eliminable in the articulation of their truth-conditions and in the verification process. This solution is based on a strong semantical theory, where individuals do have grammatical proper nouns, but do not have logically (*i.e.* metaphysically grounded) proper names.

Conclusion: ineffable individuals and non-temporary species

Both strategies for disproving the *improbatio*, as different as they may be, imply that substantial individuals do not properly have proper names, *i.e.* substantial individual names of individual substances. This is either because proper nouns, being temporary (*ut nunc*) names, are not to be combined with universal, *simpliciter* names, the common noun of species and genus (strategy 1), or because proper nouns are perfectly acceptable names as far as they are not proper, *i.e.* as far as they are reducible to the name of the species, the common noun, the individual mode of signifying playing no role in the establishment of the truth conditions of singular propositions (strategy 2).

The notion that individuals do not have proper names (a name of their own), essences, and definitions, supposedly based on Aristotle’s *Metaphysics* VII, 10,¹¹⁸ was quite widespread during the 13th century. In addition to the *Quaestiones* on *Metaphysics* by Geoffroy of Aspill, and the allusion to his opinion in an anonymous English commentary on the *Introductiones* by William of Sherwood, already mentioned, we find the idea in Richard Rufus of Cornwall’s *Memoriale* on *Metaphysics*,¹¹⁹ in Richard of Clive’s questions on *Metaphysics*,¹²⁰ in Robert

¹¹⁷ Libera 2009 = Anonymus Liberanus, 221 (note 33).

¹¹⁸ See Brumberg-Chaumont 2005, notes 21, 22, 23.

¹¹⁹ “Quaeritur consequenter utrum individuum habeat nomen [...] individuum nomen proprie non habet. Nec est contra [hoc] quod iste vocatur Sortes vel Plato, quia talia sunt nomina vocis et non rei ; non enim considerant naturam impositionis per naturam rei sed a casu,” *Memoriale in Metaphysicam Aristotelis*, Cod. Erfurt, Quarto 290, folio 49rb, by courtesy of Rega Wood and N. Lewis. See Brumberg-Chaumont 2005, note 61.

¹²⁰ “Utrum particularia habeant nomina,” Richard of Clive, *Quaestiones Metaphysicae*, Worcester Cath. Q.13, fol. 149vb. Text quickly studied in Brumberg-Chaumont 2005, note 18. This manuscript is the same as the one where the *Dubitationes* on the *Introductiones* by William of Sherwood were copied, and it can be situated around 1275 (See Andrews & Noone 1994, 23-41).

Kilwardby's *Notulae super Porphyrium*, in Albert the Great's *De intellectu and intelligibilis*,¹²¹ in Henri of Ghent's *Lectura*,¹²² and in Siger of Brabant's commentary on the *De anima III*¹²³. It is also hinted at in Siger's *Quaestiones logicales*,¹²⁴ in a remarkable text to which we shall return below. It is touched upon in the commentary on *Priscianus Maior* ascribed to the ps.-Robert Kilwardby.¹²⁵ It is also mentioned in Roger Bacon's commentary on *Metaphysics* and in the *De signis*, where it is squarely rejected.¹²⁶

In his *Notulae super Porphyrium*, Robert Kilwardby says that individuals do have a name of their own, proper nouns (*proprium nomen*), but they do not properly have a name (*proprie nomen*), i.e. a true logical name that would be established on metaphysical grounds. This is because no name can signify individuals both as individuals and as substances:

Materia est causa indiuiduacionis, facit enim formam esse hic et nunc, et sic ipsam indiuiduat. Si loquamur igitur de indiuiduacione secundum quod aggregacio forme cum materia facit indiuiduum et hoc aliquid et primam substantiam, sic non constat ex proprietatibus, ymmo est substantia ex substantiis.

Isto tamen modo loquendo non absoluitur a proprietatibus secundum actum subsistendi set consequuntur VII accidentia, secundum Boecium, patria, parentela, forma, figura, locus, tempus et propria nominacio; nec sufficeret unum accidencium, eo quod accidens in quocunque genere fuerit, est commune multis substantiis: et ideo necesse fuit accidencium collectio, et sic habet indiuiduum nomen, scilicet nomen proprium, a quo nominacionem habet et non esse.

Non enim habet nomen quod nominet suam substantiam indiuidualiter; tale enim nomen esset commune nomen, cum omnis huiusmodi nominacio sit a forma, et quelibet forma sit communis. Ex hoc eciam est quod indiuiduum non predicatur de alico; quia enim est particulare, addit materiam supra uniuersale, et materia de nullo predicatur, nec est nominata, secundum

121 "Cum igitur indiuiduum sit indiuiduum per materiam, non habebit nomen proprium proprie loquendo, nisi forte secundum quod est substantia per formam quae proprie et principaliter et maxime substat. De omnibus autem his in primo Logicae satis determinatum est," Albert the Great, *De Intellectu et intelligibili, Opera Omnia IX*, 494. See *Super Porphyrium de V Universalibus*, 10.10-20, for the notion of proper nouns imposed according to a cluster of accidents.

122 "...Reali impositione nominis non imponitur nomen nisi speciei, sicut non definitur nisi species. Propter quod dicit PHILOSOPHUS VII^o *Metaphysicae* : nomina imposita sunt communia omnibus rebus. Particularia non habent nomen proprium, unde quod nos nomina diversus damus individui sub eodem, ut <Callias> (ed : Thalliae), Sorti et Platoni, cassa est appellatio et vana, quia solo nomine sive voce sine respectu habito ad rerum proprietates, unde solo placito talibus nomina imponuntur," Henry of Ghent, *Lectura Ordinaria super Sacram Scripturam*, 206.

123 "Particulare enim aliam formam ab universali non habet. Unde dicit ARISTOTELES quod particulare non habet proprium nomen, nec propriam formam, nec propriam cognitionem," Siger of Brabant, *Quaestiones In tertium de Anima*, 67.

124 Siger de Brabant, *Écrits de logique*, 58.

125 Fredborg, Green-Pedersen, Nielsen and Pinborg 1975, 68-70; See J. Brumberg-Chaumont 2005, note 45, where the extract is discussed.

126 Roger Bacon, *Quaestiones supra libros prime philosophie Aristotelis*, 235-236; *De Signis* 89-90; see Brumberg-Chaumont 2005.

Aristotilem: ideo etiam particulare nec nominatur nec predicatur.¹²⁷

Therefore, proper nouns of ordinary language are often described as individual, but then accidental nouns (*i.e.* imposed according to a unique bundle of accidents). Proper nouns are also sometimes described as arbitrary, purely “vocal” names (*nomen vocis, nomen voce*), not metaphysically grounded names (*nomen rei, impositio realis*). Proper nouns are not real names of the individual substances since individual substances cannot be named as such, *i.e.* both as substances and as individuals. There are no individual substantial names, and individual substances do not have names of their own. Individual substances can well be subjected to essential predication where the name of the species or the genus is the predicate, but they cannot be subjected *as* individuals, *i.e.* as signified by proper nouns such as ‘*Socrates*’. For this reason proper nouns must be expelled or analysed away.

Robert Kilwardby’s commentary on the *Isagoge*, composed between 1237 and 1245, cannot be obviously considered as the first text where this idea occurs, since the idea is also present in Richard Rufus of Cornwall’s *Memoriale* on the *Metaphysics*, supposed to have been composed in Paris before 1238 (without certainty). But the position held by the influential Master of arts in Paris, and, from 1245 onward, Dominican master in Oxford, might have been instrumental in the adoption of this idea as a common place to be discussed in many occasions. His commentary does potentially contain the two opposite directions that can be taken starting from the idea that individuals do not have real logical proper names, namely either that proper nouns of ordinary language are not real names and are endowed with an accidental/temporary signification, or that individuals have as a real name, though not a proper one, the name of their species. Both directions are followed in the two strategies against the *improbatio*.

The possibility of a consequence from a universal essential proposition to a corresponding singular proposition and the insertion of a singular proposition in a syllogistic context where the major is an essential proposition imply that the singular proposition (‘*Socrates est homo*’) should be an essential proposition. This means that the proper noun should be considered as referring not only to what is in fact a substance (as ‘this philosopher’ or ‘this ugly Athenian’ can also do) but also to the substance as a substance. This is precisely what cannot be performed according to the two opposed strategies for refuting the *improbatio*. It cannot be performed by proper nouns as they stand according to the first strategy: since not imposed according to a substantial form *simpliciter*, they are *ut nunc* terms and they turn any proposition in which they enter as a subject into a proposition that cannot be coupled with a universal essential proposition — or, if it is indeed coupled, it causes a fallacy. It cannot be done either within the paradoxical defence of the *improbatio* at stage 1 in the second strategy: since singular propositions are allowed as long as their subject does not count as individual names, *i.e.* provided that all the proper nouns of the individuals of a given species are ascribed the same signification (*i.e.* that of the species) so that their truth conditions are the same as those of identity statements.

In a later stage of the discussion, the validity of arguments such as **A1**— or even the validity of every instantiation of LXL combinations (arguments such as **B** included) — seems

¹²⁷ Robert Kilwardby, *Notulae super Porphyrium*, by courtesy of A. Conti.

to have been more and more admitted. A series of texts does reject Robert Kilwardby's "appropriation rule," or any kind of "UN/S syl Rule." This is sometimes done to the point of admitting every Barbara syllogisms as perfectly acceptable, even the standard sophistic assertoric Barbaras rejected by most of the previous generations of logicians, as observed in ps.-Boethius of Dacia's solution to the OHNEA.¹²⁸ The foundational, metaphysical lines followed in previously-mentioned texts, where the individuality of individuals was to be excluded in order to save the truth of necessity universal propositions (strategy 1), or to defend the validity of consequences from universal to singular propositions (strategy 2), is abandoned. We rather observe, as a result of recognizing such consequences as utterly vital to logic and science, a growing tendency, from the beginning of the 14th century, to describe universal essential propositions, even necessity propositions, as endowed with existential import, in the same manner as non-eliminable singular propositions.

This approach is to be sharply distinguished from the position held by Nicholas of Paris, who also, as seen, advocated the universal validity of LXL combinations. Necessity propositions do not have for him existential import, but are existentially conditioned, which is quite different. Since the condition of existence for the subject '*X*' of the proposition is included in the interpretation of the scope of the necessity mode ('*dum X est*'), the necessity essential proposition '*omnis X de necessitate est Y, dum X est*' is true, whether *X* exists or not. This can function as much for universal as for singular propositions.

A yet different position is held by Siger of Brabant in his question on the truth of the OHEA proposition *nullo homine existente*. Here the truth conditions for universal and singular essential propositions are clearly distinguished, but not to the extent of denying existential import for universal essential propositions or ascribing them an ontological import only, based on the incorruptible being of essences. It is not the case that '*omnis homo est animal*' is false if there are no men left on earth, but it is the case that the complete expression submitted in the *quaestio*, '*omnis homo est animal, nullo homine existente*', being a couple of contradictory propositions, cannot be endowed with a truth-value, in application of the principle of contradiction.¹²⁹ Siger argues that one cannot defend the truth of an essential proposition about men while contending that "human nature" (*natura humana*) has a determinate temporary existence and that its definition (*ratio*) does not preclude its non-being ("*non contra rationem eius non esse*"), contrary to individuals, whose "definition" does not include absolute being (*esse simpliciter*), since they are corruptible and have a temporally determinate being.¹³⁰ This means that the

¹²⁸ "Nec est intelligendum, quod ibi [i.e. in A1] incidat fallacia accidentis, sicut aliquando plures crediderunt, quia videbatur eis, quod 'homo' et 'album' essent diversa respectu huius paedicati, quod est esse de necessitate animal [...] Et ita communiter dicebatur quod esset ibi fallacia accidentis ut hic: omnis aqua est naturale. Balneum est aqua. Ergo Balneum est naturale. Sed hoc nihil est." Ps.-Boethius of Dacia, *Sophisma 'Omnis homo de necessitate est animal'*, p. 195. On the way the problem has been (problematically) handled by Robert Kilwardby, see Brumberg-Chaumont, 2017a.

¹²⁹ Siger de Brabant, *Écrits de logique*, 57.

¹³⁰ Siger de Brabant, *Écrits de logique*, 58.

consequence from ‘*homo est animal*’ to ‘*homo est*’ should be considered as perfectly valid,¹³¹ without one being compelled to admit ‘*Socrates est homo, ergo Socrates est*’. In square opposition to the solutions discussed in the previous paragraph, Siger of Brabant is clear about the fact that singular propositions are not reducible to identity statements, whether ‘*Socrates est Socrates*’¹³² or ‘*homo est homo*’ (by substituting ‘*homo*’ for ‘*Socrates*’ because they signify the same). Proper nouns like ‘*Socrates*’ are temporary names that signify “human nature according to a determinate amount of time” (*naturam humanam determinati temporis*), that is: ‘*Socrates*’ signifies Socrates only while he exists. This is because individuals do not have a true definition (*vera definitio*) of their own, so that they do not even enter the realm of scientific cognition.¹³³ According to Siger, one can be content neither with an *esse essentiae* that would be the truth-maker of the proposition independently from its *esse actuale*,¹³⁴ as presupposed by the authors studied in the previous paragraph, nor just with concepts as truth-makers.¹³⁵ One can not escape the problem either by saying that the terms of the proposition would be equivocal to existence and non-existence, so that their signification would change *nullo homine existente*,¹³⁶ as contended by Roger Bacon.¹³⁷ Consequently, it basically seems that Siger is saying that one cannot save the truth of existentially-committed essential propositions without positing the non-temporary (eternal?) existence of species and genus, that is, without positing that species and genus are always instantiated in some individuals.

If the discussion in Siger’s question does not directly fall on the OHNEA proposition,¹³⁸ it clearly establishes that the terms of the OHEA assertoric proposition, *i.e.* names of species and genus, are necessary terms, *i.e.* whose referent is endowed with a necessary existence, as implied by their very definition — a thesis that goes far beyond the affirmation of the incorruptibility of concepts or essences as the subsisting terms of the necessary relationship expressed in predication, whether men exist or not. So conceived, these necessary referents and their relationship would be the stable truth-makers of the corresponding necessity proposition, even understood in a divided sense (*i.e.* ‘every man is necessarily an animal’). Their very definition would bar any consequence from a universal to a singular essential proposition,

¹³¹ “Qui ponit hominem non esse universaliter implicat oppositum,” Siger de Brabant, *Écrits de logique*, 56; “implicat duo opposita [...] ergo ... contradictoria” (57).

¹³² Siger de Brabant, *Écrits de logique*, 58. This is based on the truth of the past-tensed proposition: ‘*Socrates fuit homo*’, or of the proposition ‘*Socrates est homo preteritum*’.

¹³³ Siger de Brabant, *Écrits de logique*, 58.

¹³⁴ Siger de Brabant, *Écrits de logique*, 54.

¹³⁵ Siger de Brabant, *Écrits de logique*, 55.

¹³⁶ Siger de Brabant, *Écrits de logique*, 56.

¹³⁷ See Libera 1997, 114 for the implicit reference to Roger Bacon in this text.

¹³⁸ The OHNEA *sophisma* by Siger of Brabant as transmitted to us only deals with one question, namely the signification of common terms, and not of the truth or the proof of the OHNEA proposition; see Siger de Brabant, *Écrits de logique*, 43-52.

because of existential imports of different nature, *i.e.* necessary existential import (always realized) on one hand, and contingent existential import (sometimes realised, sometimes not), on the other hand. This extreme position, never advocated by any of the *sophismata* belonging to the OHNEA and OHEA family, could very well be, as much as the position notoriously defended by Roger Bacon about existential import and equivocation to existence and non-existence,¹³⁹ the thesis targeted by Robert Kilwardby when he put an interdict on the proposition: ‘*veritas cum necessitate tantum est cum constantia subiecti*’.

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¹³⁹ Libera 2002, 202 *sqq.*

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