

JOHN DUMBLETON ON INSOLUBLES: AN EDITION OF AN EPITOME OF HIS SOLUTION TO INSOLUBLES

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Abstract: This paper provides a philosophical analysis and a new edition of an anonymous *Epitome (Compendium)* of John Dumbleton's solution to the semantic paradoxes (*insolubilia*). The first part of this paper briefly presents Dumbleton's cassationist solution to the semantic paradoxes, which the English philosopher proposes in his *Summa Logicae*, written in the 1330s–40s. The second part investigates the solution to various types of insolubles proposed by the anonymous author of the *Epitome*. The third part provides a new critical edition of the Latin text – a first edition was edited by Bottin in 1978 – and an English translation.

Keywords: Semantic paradoxes; Cassationism; John Dumbleton; 14th-century philosophy; Oxford logic.

1. Introduction

The manuscript 397 Scaff. XVIII of the Biblioteca Antoniana in Padua ends with an anonymous *Epitome (Compendium)* of John Dumbleton's solution to the semantic paradoxes (*insolubilia*). Bottin edited this *Epitome of Dumbleton's Insolubles* more than forty years ago, when knowledge of the *insolubilia*-literature was still quite limited.¹ Since then, much research has been done and many primary sources have been studied and edited, including Dumbleton's *Summa Logice*, which is the source for the *Epitome*. In preparing the edition of the *Insolubles* from Dumbleton's *Summa Logice* recently, we realized that a

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1 BOTTIN 1978. The description of the manuscript and its content can be found in ABATE, LUISETTO 1975, 332–333.

new edition of the short *Epitome* was needed, in which on the one hand, some corruptions in Bottin's version could be corrected, and which, on the other hand, could serve to elucidate the *Epitome's* content and provide some context by outlining Dumbleton's own solution. Accordingly, in the first part of this paper, we briefly present Dumbleton's cassationist solution to the semantic paradoxes. In the second part, we analyse the solution to various types of insolubles proposed by the anonymous author of the *Epitome*. In the third part, we provide a critical edition of the Latin text and an English translation.

1. John Dumbleton's semantics and paradoxical propositions

Little is known about the life of John Dumbleton. From the end of the 1330s Dumbleton was active in Oxford, where he was part of the group of Oxford Calculators; he seems to have spent a triennium in Paris (1344–7) for studying theology, then returned to Oxford and probably succumbed to the Black Death after 1348. In Oxford Dumbleton wrote his only known work, the *Summa Logice et Philosophie Naturalis* (hereafter abbreviated as *SLPN*), which is preserved in 21 manuscripts and is mostly unpublished. The *SLPN* is a massive work covering logic (Part 1) and natural philosophy (Parts 2–9) and seems to be incomplete. Indeed in several passages Dumbleton refers to a tenth Part concerning universals which is not found in any of the 21 manuscripts and plausibly was never written.² The *Summa Logice* is the first Part of the *SLPN*, is contained in 19 of the 21 manuscripts preserving the *SLPN* and is subdivided into three main parts dealing with various semantical, logical and epistemological topics. For our purposes only the first part is relevant, where

² On Dumbleton and the *Summa Logice et Philosophie Naturalis* see WEISHEIPL 1969(1) and 1969(2); SYLLA 1991; SYLLA 2011.

Dumbleton offers his account of linguistic meaning and his solution to the semantic paradoxes.³

For Dumbleton, categorematic spoken and written terms have a conventional signification acquired through a first act of bestowing a name on a thing (*impositio*) after which a relation between a term's intention (*intentio termini*) and a thing's intention (*intentio rei*) is established in the subject's mind. Signification always involves active participation of a subject and in his account of linguistic meaning, Dumbleton describes a term's signification as a mental process triggered in the reader's or hearer's mind by a term. Spoken and written terms have their proper intentions, namely specific physical features such as shape for written marks or frequency for sounds, which the subject perceives while receiving an external stimulus. When the subject perceives a term's intention, she retrieves from her mind/memory the thing's intention previously associated with that specific term's intention through the *impositio*: "for a term to signify something in a simple way is to actualize, i.e., call to mind that thing's intention by means of the term's proper intention, <and> that thing is said to be signified by that term in normal usage."⁴ Thus the meaning of terms are intentions, *viz* mental representations, of things (*intentiones rerum*). Unlike terms, intentions naturally signify their significates, be they simple objects or complex objects like propositions, and similarly to terms, intentions signify only when the subject entertains them – "while there is actual apprehension through them."⁵

Dumbleton's notion of signification as involving subjective activity also applies to propositions. A well-formed spoken or written string of words is a

3 An analysis of Dumbleton's semantics and solution to the paradoxes is found in READ FORTHCOMING.

4 DUMBLETON IN PREPARATION, § 2.1.1.

5 DUMBLETON IN PREPARATION, § 13.1–13.2.

proposition properly speaking only if there is a person reading, uttering or hearing it, while a well-formed mental complex is a proposition only insofar as there is some mind forming and entertaining it: “A proposition only exists externally and in the mind while there is actual composition through the ⟨rational⟩ soul.”⁶ Since the signification of a proposition depends on the signification of its parts, if at least one of its parts is meaningless, the whole proposition fails to express a complete meaning and to be truth-apt and so is not a proposition properly speaking. This can happen in the case of sentences with at least one context-dependent term, e.g. demonstratives, whose meaning is left undetermined in the context, or it can happen with sentences containing expressions signifying complex things, like ‘truth/true’ or ‘proposition’. And therein lies the problem with semantic paradoxes, or insolubles, like the Liar.

Dumbleton’s diagnosis and solution to insoluble propositions is expressed using the language of obligations, which were regimented discussions commonly held by an opponent and a respondent in 14th-century logic classrooms. In short, in an obligational discussion an opponent proposes to a respondent a background context or scenario (*casus*) and a first proposition (*positum*), which is usually false in the given scenario. If the respondent admits the *positio*, the discussion starts and the opponent proposes further propositions which the respondent must grant, doubt or deny on the basis of the obligational rules without falling into contradiction.⁷ For Dumbleton, insolubles are propositions containing expressions signifying a propositional complex which become problematic within specific contexts involving direct or indirect self-reference: “An insoluble is a proposition which is inferred to be

6 DUMBLETON IN PREPARATION, § 13.3.

7 On obligations see DUTILH NOVAES, UCKELMAN 2016.

true and false when an apparently possible scenario is admitted.”⁸

In the *Summa Logice* Dumbleton considers six scenarios (*casus*) generating insolubles. The first is the scenario of a version of the Liar paradox in which there is only one proposition, like ‘A falsehood exists’ – but that same scenario, says Dumbleton, also generates paradoxes like ‘A truth exists’, ‘A proposition exists’ or ‘No falsehood exists’. In Dumbleton’s semantics, the term ‘falsehood’ always signifies a proposition other than that of which it is part; to get the complete meaning of, and thus to understand ‘A falsehood exists’ the term ‘falsehood’ must be replaced by the proposition it stands for. However, in the proposed scenario this is the only proposition and so cannot refer to a second proposition, hence it fails to convey a full meaning and is not truth-apt and, consequently, cannot be considered a proposition properly speaking. It is clear that a scenario like that is impossible, therefore should not be admitted⁹. Dumbleton adopts the same approach with the fourth and fifth scenarios he considers. In the fourth scenario, there is only one Socrates who only says proposition A: ‘Socrates is a liar’ – or alternatively ‘Socrates is an oath-breaker’, ‘I am a liar’, ‘I say nothing’. Terms like ‘oath-breaker’ or ‘liar’ signify a propositional complex which should exist before Socrates utters A – or a proposition similar to it; since “what is naturally posterior does not actually exist without what is prior, so Socrates cannot comprehend himself to be a liar unless he has in mind a proposition different from that.”¹⁰ But A is the only existing proposition, therefore the scenario is impossible and should be rejected. Similarly impossible is the fifth scenario, where the only existing proposition is the one believed by Socrates, namely ‘Socrates is deceived’, which requires the prior existence of a proposition about which So-

8 DUMBLETON IN PREPARATION, § 18.0.

9 DUMBLETON IN PREPARATION, § 18.1–18.1.2.3.

10 DUMBLETON IN PREPARATION, § ad 21.1.

crates was deceived.¹¹

His solution to insolubles of the third and sixth scenarios relies on the subordination of extramental language to mental language. In the third scenario, there is the classical self-referring Liar proposition 'This proposition is false'; Dumbleton says that if this is an extramental proposition, then the scenario should be doubted as incomprehensible "because it is not specified what precisely should be comprehended through the term 'this'."¹² But if it is mental, then the scenario should be rejected because Socrates can form the thought 'This proposition is false' only if he already has its subject in mind; but if he had it, then he would have 'This proposition is false' in his mind before he formed the thought 'This proposition is false', which is impossible.¹³ In the sixth scenario, Socrates only says A: 'Socrates says a falsehood'; Dumbleton accepts the scenario since it does not rule out the possibility that 'falsehood' refers to a mental proposition. Thus if A refers to a true mental proposition, A is false, and conversely A is true if it refers to a false mental proposition.

The second scenario considered by Dumbleton is the less problematic, provided it is correctly understood. It includes three propositions: the two true propositions A: 'God exists' and B: 'A man exists', and a mental proposition C: 'Every truth is one of these' – or alternatively 'These are all the truths' – referring to A and B. For Dumbleton the scenario should be admitted insofar as it is not intrinsically impossible and allows the respondent to establish the truth-value of C. Indeed since self-reference is banned and C's signification is restricted to A and B, then C is true in that scenario, as can be seen by making its meaning explicit by replacing 'truth' with its significates, namely A

11 DUMBLETON IN PREPARATION, § 21.2–21.3.

12 DUMBLETON IN PREPARATION, § ad 18.3.

13 DUMBLETON IN PREPARATION, § 18.5.

and B, thus obtaining 'Each of "God exists" and "A man exists" is one of these'.¹⁴

For Dumbleton the problem with semantic paradoxes is that they i) are, directly or indirectly, self-referential, where the type of 'reference' meant here is signification; ii) contain terms signifying complex things. Dumbleton's solution, which is a form of *cassationism*,¹⁵ consists in showing that, at least in his semantics, the scenarios generating insolubles are impossible and that within such scenarios insoluble propositions fail to express a complete meaning, are not truth-apt and cannot be considered as propositions properly speaking.

2. The *Epitome* of Dumbleton's solution to insolubles

Dumbleton's solution seems to have enjoyed some circulation both in and outside Oxford, as testified by the fact that it is listed among famous opinions in some 14th-century treatises on insolubles. Further evidence of its dissemination is to be found at the end of the manuscript 397 Scaff. XVIII of the Biblioteca Antoniana in Padua. At folios 118v-119v there is an *Epitome* (*Compendium*) of Dumbleton's view on semantic paradoxes that the explicit labels 'Epitome of Dumbleton's insolubles according to the Oxford usage (*secundum usum Oxonie*)'. The specification 'Oxford usage' suggests that this short *Epitome* was used as (perhaps part of) a textbook in Oxford, plausibly in the second half of the 14th century. As remarked by Bottin (1978), the content and arrangement of the *Epitome* reveal its didactic purpose; indeed the text starts abruptly listing six groups of insoluble propositions or scenarios (see *infra* §§ 1-1.6), then offers concise examples for each group (§§ 2-2.6) and fi-

14 DUMBLETON IN PREPARATION, § 18.2.2-ad 18.2.5

15 On Cassationism see SPADE 1987.

nally the diagnosis and solution to each insoluble scenario, regarding two of which some objections are raised and solved (§§ 3–ad3.6). No mention is made of Dumbleton’s semantics which, as seen, underpins his diagnosis and cassationist solution to semantic paradoxes. Actually, what we find in the *Epitome* is not only a shortened and simplified version of Dumbleton’s original analysis of the six scenarios, but rather a revision of it. The most patent and evident difference is the different order in which Dumbleton and the *Epitome* analyse the various scenarios, as the following table shows:

Dumbleton	Epitome
<p><i>1st scenario</i></p> <p>There is only one proposition, namely: A truth exists (or: A falsehood exists, No falsehood exists, A proposition exists).</p> <p>Solution</p> <p>The scenario is rejected as impossible for “necessarily some proposition is required to be the subject” of the insoluble, which however is the only existing proposition.</p>	<p><i>1st scenario</i></p> <p>There is only one proposition, namely: A truth exists (or: A falsehood exists, No falsehood exists, A proposition exists).</p> <p>Solution</p> <p>The scenario is rejected as impossible since the subject or predicate of the insoluble proposition supposits for a proposition, but the insoluble is the only proposition.</p>
<p><i>2nd scenario</i></p> <p>There are three propositions, namely A= God exists, B= Some man exists, C= Every truth is one of these (or: These are all the truths), referring to A and B.</p> <p>Solution</p> <p>The scenario is accepted and C is true “since the subject of C is A or B, or both (conjunctively or disjunctively); and so C is true, signifying only like this: ‘Each of “God exists”</p>	<p><i>4th scenario</i></p> <p>There are three propositions, namely A= God exists, B= A man is an animal, C= Every truth is one of these (or: These are all the truths), referring to A and B.</p> <p>Solution</p> <p>The scenario is accepted and C is true.</p>

<p>and "A man exists" is one of these'."</p>	
<p><i>3rd scenario</i></p> <p>There is only one proposition, namely A= This is false (or: This is true), with 'This' referring to A.</p> <p>Solutions</p> <p>i) A is extramental: the scenario is doubted insofar as it is incomprehensible since the referent is not specified</p> <p>ii) A is mental: the scenario is rejected as impossible because "Socrates would have A in his mind before A existed."</p>	<p><i>2nd scenario</i></p> <p>There is only one proposition, namely A= This is false (or: This is not true), and 'This' refers to A.</p> <p>Solution</p> <p>The scenario is rejected as impossible since A would exist before it existed.</p>
	<p><i>3rd scenario</i></p> <p>There are three propositions, namely A= God exists, B= Each of these is true (referring to A and C), C= Not all of these are true (referring to A and B).</p> <p>Solution</p> <p>The scenario is rejected as impossible since "it follows that a proposition [viz B and C] would exist before it existed."</p>
<p><i>4th scenario</i></p> <p>Socrates utters only one proposition, namely: Socrates is a liar (or: Socrates is an oath-breaker)</p> <p>Solution</p> <p>The scenario is rejected as impossible since a mental proposition should correspond to the predicate 'liar' and "Socrates cannot comprehend himself to be a liar unless he</p>	<p><i>5th scenario</i> (not directly discussed in the <i>Epitome</i>)</p> <p>Socrates only utters the proposition: Socrates is a liar</p> <p>Solution</p> <p>The scenario is admitted and the proposition is false because the predicate 'liar' supposes for a proposition, but the only proposition is 'Socrates is a liar', which cannot refer to itself.</p>

has in mind a proposition different from that.”	
<p>5th scenario</p> <p>Socrates believes only one proposition, namely: Socrates is deceived.</p> <p>Solution</p> <p>The scenario is rejected as impossible since “Socrates only comprehends that he is deceived if he actually has a proposition other than this one <in mind>.”</p>	<p>6th scenario</p> <p>Socrates believes only one proposition, namely: Socrates is deceived.</p> <p>Solution</p> <p>The scenario is rejected as impossible.</p>
<p>6th scenario</p> <p>Socrates only utters A= Socrates says a falsehood (or: Socrates says a truth)</p> <p>Solution</p> <p>The scenario is admitted “insofar as to the term ‘falsehood’ there corresponds a mental proposition such that, if it is false and uttered by Socrates, A is true, and if not, A is false.”</p>	<p>5th scenario</p> <p>Socrates only utters A= Socrates says a falsehood</p> <p>Solution</p> <p>The scenario is admitted and A is false because the predicate ‘falsehood’ supposits for a proposition, but A is the only proposition and self-reference is banned, so A “signifies that Socrates says a proposition which he does not say.”</p>

This table also shows more substantial differences between Dumbleton’s genuine solution and the *Epitome*. Firstly, the *Epitome* considers a scenario absent in Dumbleton, namely the 3rd scenario (see the fourth entry in the table) in which there is a flip-flop back and forth between two insolubles each of which signifies the other.

A second major difference is found in Dumbleton’s 3rd scenario and in the *Epitome*’s 2nd scenario (see entry three in the table), which generates the classical Liar paradox. Here, the only existing proposition is the self-referen-

tial A: 'This is false'. Since the scenario does not specify whether A is a spoken, written or mental proposition, Dumbleton proposes two different solutions, one for the extramental level and the other for the mental level. If A is extramental, then the scenario should be doubted as incomprehensible, while if A is mental, the scenario is impossible and so should be rejected. While Dumbleton spends many words on this insoluble, the *Epitome* offers a much simpler treatment of it in § 3.2.2, where it is briefly said why the scenario should be rejected as impossible, avoiding any reference to the mental-extramental distinction.

A third and more substantial difference between Dumbleton and the *Epitome* is the treatment of the scenario in which Socrates only utters proposition A: 'Socrates says a falsehood', which corresponds to Dumbleton's 6th and the *Epitome's* 5th scenarios (see the last entry in the table). Dumbleton spends only a few words on this scenario, saying that it should be admitted since A is a spoken proposition to which there corresponds a mental proposition, call it B, on which A's truth-value depends: if B is true and uttered by Socrates, then A is false; conversely if B is false and uttered by Socrates, then A is true. The author of the *Epitome* seems to have found this *casus* worthy of discussion. Unlike Dumbleton, the *Epitome's* solution is not grounded on the extramental-mental distinction and consists in admitting the scenario and saying that A is false.

The substantial difference between the *Epitome's* and Dumbleton's treatment of insolubles arising from this scenario can be fully appreciated looking at the 4th scenario considered by Dumbleton (see the fifth entry in the table). Here the only existing Socrates utters only proposition C: 'Socrates is a liar'; for Dumbleton a mental proposition should correspond to the predicate 'liar' since "Socrates cannot comprehend himself to be a liar unless he has in mind

a proposition different from that"; therefore the scenario is impossible and should be rejected. The *Epitome* does not directly analyse insoluble C, which it lists in § 2.5 among the insolubles generated in the 5th scenario along with A 'Socrates says a falsehood'; to all insolubles arising in that scenario, e.g. A and C, the *Epitome* gives the same reply, namely the one we saw earlier in the case of A: the scenario is admitted and the insoluble is false because its signification is false, for it signifies that Socrates says a proposition which he does not say (§ 3.5.2). Or, in other words, the insoluble is false because it lacks a referent. This solution radically departs from Dumbleton and comes closer to the approach adopted by the so-called restrictivists, whose most prominent 14th-century exponents were Walter Burley, William of Ockham, Walter Segrave and Robert Holkot. The (moderate) restrictivists banned self-reference, saying that a part cannot supposit for the whole of which it is part in the presence of a privative term like 'falsehood'; consequently they claimed that in a scenario such as the 5th in the *Epitome* insolubles like A are false for they cannot refer to themselves and, being the only existing propositions, they lack a referent and are therefore false.¹⁶ This is exactly what the *Epitome* says while discussing A in the 5th scenario, at § ad 3.5.2. Since A is an insoluble proposition, one can infer from it that it is both true and false; for us what is relevant is the argument that concludes that A is true, which is found at § 3.5.2: "If it is granted that Socrates says a falsehood and A signifies precisely like that, therefore A signifies precisely as it is and consequently A is a truth. And if so, since Socrates says nothing except A, it follows that Socrates says a truth, therefore if Socrates says a falsehood, Socrates says a truth." Having stated that A is false, the anonymous author wants to show how to block the inference of § 3.5.2 moving from A's being false to A's being true, and the terminology and strategy he uses come very close to that of the restrictivists:

¹⁶ On restrictivism see SPADE, READ 2021, § 2.4.

To the argument [*sc.* § 3.5.2], when one argues: ‘Socrates says a falsehood and A signifies precisely that Socrates says a falsehood, therefore A is a truth,’ I deny the inference. And one may respond in this way to every insoluble of the fifth group by admitting the whole ⟨argument⟩ until we reach the argument just denied or one like it, which should be denied. The reason why this inference is not valid is this, that in proposition A the predicate is a term suppositing for a (propositional) complex and no such term can supposit for a proposition of which it is the subject or predicate, hence it is required that it supposits for some other proposition. If the predicate ‘falsehood’ in that proposition ‘Socrates says a falsehood’ supposits for a proposition other than ‘Socrates says a falsehood’, the proposition ‘Socrates says a falsehood’ is false, because it signifies that Socrates says a proposition which he does not say.¹⁷

Thus, the *Epitome* is not a mere simplified précis of Dumbleton’s theory of insolubles, as the explicit states, but it is an interesting didactical synopsis that offers an eclectic solution, mainly based on Dumbleton, to six different kinds of semantic paradoxes, possibly the six most discussed types of paradoxes when the *Epitome* was composed.

3. The Latin text and English translation of the *Epitome*

The Latin text has been prepared on the basis of the Padua manuscript. Where the text transmitted by the manuscript posed grammatical, doctrinal or logical problems, we amended it ourselves or following Bottin. The critical apparatus records all the variants of the manuscript and of Bottin’s edition. We have adopted the medieval manuscript spellings, including e.g., ‘e’ for ‘ae’, ‘Sortes’ for ‘Socrates’, but have adopted minimal modern punctuation as the meaning of the text requires. The section headings and the division into paragraphs are ours.

In translating the text, we have tried to stay as close as possible to the Latin text and to be as consistent as possible. In some cases, we have inserted

¹⁷ See *infra*, § ad 3.5.2.

words in ⟨angle brackets⟩ in order to make the translation more explicit and clearer; in a few cases, where the Latin text was not completely clear, we have opted for a free translation that reflects our understanding of the text.

Conspectus Signorum

In textu

⟨...⟩ verba ab editoribus addita includunt

[] uncis angulatis indicantur verba ab editoribus deleta

Conspectus Abbreviationum in apparatu critico

corr. = correximus

inv. = invertit, -erunt

ms. = codex

om. = omisit, omiserunt

*Anonymous, Compendium solutionis insolubilium magistri Johannis de
Dulminton secundum usum Oxonie.*

Ms = Padua, Biblioteca Antoniana 397 Scaff. XVIII, ff. 118v–119v.

- 1.0 (f. 118v) Insolubilia sive insolubilium casus per sex ordines intendo distinguere in presenti et de quocumque insolubili casu proposito pro maiori¹⁸ parte promcius reddet suus ordo responsionem.
- 1.1 Primus ordo est quando supponitur aliqualem propositionem solam esse cuius subiectum vel predicatum supponit pro complexo.
- 1.2 Secundus ordo supponit aliquam propositionem per suum subiectum vel predicatum demonstrari.
- 1.3 Tertius ordo est quando supponitur aliquam propositionem esse cuius <subiectum vel>¹⁹ predicatum pro aliqua vel aliquibus propositionibus supponit quam prius esse oportebit naturaliter quam ipsius subiectum vel predicatum pro tali vel talibus suppositis <supponat>²⁰; nec etiam poterit illa nec ille pro quibus supponit talis propositionis²¹ subiectum vel predicatum esse naturaliter prius <quam>²² fuerit illa propositio cuius subiectum vel predicatum pro tali vel talibus supponit, ita quod breviter in omni casu tertii ordinis sequitur illam²³ esse antequam ipsam²⁴ esset.

18 maiori (corr. cum Bottin)] minori ms.

19 subiectum vel (corr.)] om. ms. Bottin

20 supponat (corr. cum Bottin)] om. ms.

21 propositionis (corr.)] propositio ms. Bottin

22 quam (corr. cum Bottin)] om. ms.

23 illam (corr.)] illud ms. Bottin

24 ipsam (corr.)] ipsum ms. Bottin

1.3.1 Verbi gratia, sit b ista propositio:

Deus est,

et sit a illa:

Quelibet illarum est vera,

demonstrando²⁵ b et c propositiones, et sit c illa propositio:

Non quelibet illarum est vera,

demonstrando²⁶ a et b propositiones. Tunc subiectum et predicatum in a supponunt²⁷ pro b et c propositionibus et ideo ad hoc quod a sit oportet quod prius fuerint²⁸ b et c propositiones pro quibus supponit. Sed c non potest²⁹ esse nisi prius fuerint a et b propositiones, cum³⁰ subiectum et predicatum supponunt pro a et b, et ita sequitur quod a esset antequam esset, et eodem modo sequitur de omni insolubili tertii ordinis.

1.4 Quartus ordo convenit cum tertio in toto, hoc excepto, quod non requiritur³¹ insolubile quarti ordinis prius <esse>³² quam esset propositio pro qua subiectum vel predicatum [supponit]³³ illius insolubilis³⁴ supponit.

1.5 Quintus ordo est quando supponitur aliquem hominem dicere, proferre, audire vel videre solum unam propositionem cuius subiectum vel predicatum supponit pro complexo, ut posito quod Sortes dicat illam propositionem et nullam aliam [tunc]³⁵:

Sortes dicit falsum,

25 demonstrando (*corr.*)] demonstrato *ms*, demonstrate *Bottin*

26 demonstrando (*corr.*)] demonstrato *ms*, demonstrate *Bottin*

27 supponunt (*corr.*)] supponit *ms*.

28 fuerint (*corr.*)] fuit *ms*, sint *Bottin*

29 sed c non potest] non possunt *ms*, *om.* *Bottin*

30 cum] tamen *Bottin*

31 requiritur] sequitur *Bottin*

32 esse (*corr.*)] *om.* *ms.* *Bottin*

33 predicatum (*corr. cum Bottin*)] predicatum supponit *ms*.

34 insolubilis (*corr. cum Bottin*)] insolubile *ms*.

35 aliam (*corr.*)] aliam tunc *ms.* *Bottin*

vel videat illam et nullam aliam:

Sortes videt falsum.

- 1.6 Sextus ordo <est>³⁶ quando supponitur aliquem credere solum unam propositionem cuius subiectum vel predicatum supponit pro complexo, ut posito quod Sortes credat illam propositionem et nullam aliam:

Sortes decipitur.

- 2.0 Istorum autem sex³⁷ ordinum non debet aliquis casus admitti nisi solum casus de quarto et de quinto ordine.

- 2.1 Primus ordo: verum est; falsum est; nullum verum est; nullum falsum est; propositio est; necessarium est; possibile est; impossibile est; omnis propositio universalis est falsa; nulla propositio universalis est falsa; tantum exclusiva falsa est; nulla est exceptiva falsa nisi ista, demonstrando se ipsam.

- 2.2 Secundus ordo: non est ita sicut illa significat; hec est falsa et hec significat aliter quam est; hec non est vera: per nullum tempus fuit; hoc verum contradictorium illius est verum; deus est et tantum prima pars istius copulative est vera; deus est et quelibet copulativa est falsa; homo est asinus et nulla copulativa est vera.

- 2.3 Tertius ordo: quelibet istarum est vera, demonstrato a, c; et non quelibet istarum est vera, demonstrato a, b; et quodlibet a est simile b; Sortes decipitur vel contradictorium illius disiunctive est verum; nullus deus est vel <illa>³⁸ disiunctiva est vera.

- 2.4 Quartus ordo: quodlibet verum est aliquod istorum; ista sunt omnia vera; deus est et homo est asinus; tantum unum istorum est verum;

36 est (corr. cum Bottin)] om. ms.

37 sex (corr. cum Bottin)] sextus ms.

38 illa (corr.)] om. ms. Bottin

deus est et tantum ista est vera; homo est et tantum ista est propositio.

2.5 Quintus ordo: Sortes dicit falsum; Sortes non dicit verum; Sortes est mendax; Sortes est periurus; Sortes profert falsum.

2.6 Sextus ordo: Sortes decipitur; Sortes non decipitur; aliquis homo decipitur; aliquis homo decipitur et Sortes est ille.

3.0 Ad omnia insolubilia primi ordinis eadem et consimilis est responsio et omnium illorum et consimilium est eadem probatio.

3.1 Verbi gratia, ponatur quod a sit illa propositio:

Falsum est,

sic significando precise et quod nulla sit nisi illa. Isto posito, vel a est verum vel falsum; si dicatur quod est verum, igitur ita est totaliter sicut illa significat et illa precise significat quod falsum est, igitur falsum est. Et cum nulla propositio sit nisi a, sequitur quod a est falsum, igitur si a est verum, sequitur quod a est falsum. Si dicatur quod a est falsum, tunc sic: a est falsum, igitur non est ita sicut illa significat et illa sic precise (f. 119r) significat, igitur <a est verum, igitur>³⁹ si a est falsum⁴⁰, sequitur quod a est verum⁴¹; et consimili modo arguitur de omni insolubili primi ordinis.

3.2 Pro solutione dicitur negando casum sive sit insolubile primi ordinis sive secundi⁴², sive tertii, diversa tamen causa est assignanda⁴³ pro impossibilitate casus in una quam in alia.

3.2.1 Causa quare casus de insolubili primi ordinis <est>⁴⁴ impossibilis est

39 a est verum, igitur (corr.)] *om. ms. Bottin*

40 falsum (corr.)] *verum ms. Bottin*

41 verum (corr.)] *falsum ms. Bottin*

42 secundi] *secundi ordinis Bottin*

43 assignanda] *assignando Bottin*

44 est (corr. cum Bottin)] *om. ms.*

quia propositio illa non potest esse nisi alia sit, cum ista convenire debeat subiecto vel predicato illius insolubilis, cum⁴⁵ subiectum vel predicatum propositionis est terminus supponens⁴⁶ pro complexo, sicut prius est argutum.

3.2.2 Causa quare <casus>⁴⁷ de insolubili secundi ordinis est impossibilis est hec, quia proponitur quod ipsamet propositio per eius subiectum vel predicatum demonstraretur et hoc est impossibile, quia si illa demonstraretur ut est propositio, [quia]⁴⁸ tunc sequitur⁴⁹ hoc impossibile, quod ista propositio esset⁵⁰ antequam esset. Et hoc modo negando casum responderetur ad omnia insolubilia secundi ordinis.

3.3 Exemplum tertii ordinis: sit a ista:

Deus est,

et b ista:

Quelibet istarum est vera,

demonstrando illam:

Deus est

<et c>⁵¹, et sit c ista:

Non quelibet istarum est vera,

demonstrando a et b, sic significando precise. Isto posito, vel b est verum vel falsum. Si verum, igitur ita est sicut totaliter⁵² ista significat et ista totaliter significat quod quelibet istarum est vera, demonstrando a, c, igitur c est verum, igitur ita est totaliter sicut illa significat; et illa si-

45 cum] tamen *Bottin*

46 supponens] suppositionis *Bottin*

47 casus (*corr. cum Bottin*)] *om. ms.*

48 propositio (*corr. cum Bottin*)] propositio quia *ms.*

49 sequitur] ponitur *Bottin*

50 esset (*corr. cum Bottin*)] esse *ms.*

51 et c (*corr.*)] *om. ms. Bottin*

52 sicut totaliter] *inv. Bottin*

gnificat quod non quelibet istarum est vera, demonstrando a et b, igitur altera istarum est falsa; non a, igitur b et sic sequitur quod si b est verum, b est falsum.

Si dicatur quod b est falsum, igitur non quelibet istarum est vera, demonstrando a, b; et c sic precise significat, igitur c est verum. Tunc sic; c est verum et a est verum, igitur quelibet istarum est vera, demonstrando a, c; et b sic precise significat, igitur b est verum; igitur si b est falsum⁵³, b est verum⁵⁴. Et consimiliter probantur omnia insolubilia tertii ordinis.

ad 3.3 Ad illud respondeo et dico negando casum; et datur hec regula: quandoque ponitur casus de insolubili tertii ordinis negatur casus propter istam causam, quia sequitur quod illa propositio esset antequam esset, sicut patet de b et c in casu posito, quia ex quo in b est compositio pro a, c, oportet quod prius naturaliter sint a, c quam b sit, et antequam c propositio sit oportet quod b propositio sit, quia in c fit compositio pro b, et sic sequitur quod tam a tam c quam b essent antequam essent, quod est impossibile.

Et idem universaliter concluditur in omni casu de insolubili tertii ordinis.

3.4 Exemplum quarti ordinis: sit a illa propositio

Deus est,

et b ista:

Homo est animal⁵⁵,

et c illa universalis:

Quodlibet verum est aliquod istorum,

53 falsum (*corr.*)] verum *ms. Bottin*

54 verum (*corr.*)] falsum *ms. Bottin*

55 animal (*corr.*)] asinus *ms. Bottin*

demonstrando a, b sic significando precise. Et ponatur quod non sint plures propositiones quam iste tres. Isto posito, vel c est verum vel falsum.

3.4.1 Si verum, igitur ita est totaliter sicut illa significat et illa significat quod quodlibet verum est aliquod istorum, demonstrando a, b, igitur sic est quod quodlibet verum est aliquod istorum. Tunc sic: quodlibet verum est aliquod istorum, c est verum, igitur c est aliquod istorum. Consequens est contra casum.

3.4.2 Si dicatur quod c est falsum, tunc sic: a verum est et est aliquod istorum, et b verum est <et est>⁵⁶ aliquod istorum, et non est verum quod non est a vel b, igitur quodlibet verum est aliquod istorum, c est verum, igitur c est aliquod istorum. Consequens est⁵⁷ contra casum.

3.4.2.1 Item arguitur sic: quodlibet verum est aliquod istorum et c sic precise significat, igitur c est verum. Consequens contra datum.

Et ita arguitur de omni insolubili quarti ordinis.

ad 3.4 Ad illud respondeo, et admitto casum et concedo quod c⁵⁸ est verum. Et tunc ad argumentum: 'quodlibet verum est aliquod istorum, et c est verum, igitur c est aliquod istorum', ad illud argumentum et consimile duplex potest fieri responsio. Similiter⁵⁹ de quolibet casu insolubili quarti ordinis.

ad 3.4.1 Prima responsio est negare illam consequentiam; et si sic: sequitur quia⁶⁰ est sillogismus in darii, negatur et causa est quia non pro eodem supponit ille terminus 'verum', qui est medius terminus in minori et in

56 et est (*corr. cum Bottin*)] *om. ms.*

57 est] *om. Bottin*

58 c (*corr.*)] *b ms. Bottin*

59 similiter] *similis Bottin*

60 quia (*corr.*)] *quod ms. Bottin*

maiori, quod requiritur. In maiori enim⁶¹ <non>⁶² supponit ille terminus 'verum' pro c, et significat sic quod talis universalis est vera:

Quodlibet verum est aliquod istorum,

demonstrando a et b. Et ideo sicut argumentum non valet:

Quelibet talis, 'Deus est', et quelibet talis, 'Homo est animal', <que>⁶³ significant precise sicut est, est aliquod istorum, sed ista universalis est vera 'Quodlibet verum est aliquod istorum'⁶⁴, demonstrando a et b, igitur <ista>⁶⁵ universalis est aliquod istorum, demonstrando a et b,

nec valet hoc argumentum cum quo convertitur.

3.4.1 Alia est responsio et est illa: distinguendo ex eo quod in singulari significat quod quodlibet verum est aliquod istorum, demonstrando a, b, sic ille terminus 'verum' solum supponit pro a et b, et sic quod non est antecedens; vel ille terminus 'verum' significat a, b, c, et <sic> neganda est minor, quod quodlibet verum est aliquod istorum, demonstrando a, b, quia c verum non est aliquod istorum, demonstrando a, b.

Et consimili modo respondetur ad omnia insolubilia quarti ordinis.

3.5 Exemplum quinti ordinis: pono quod Sortes dicat illam propositionem et nullam aliam:

Sortes dicit falsum,

sic significando precise, que sit a. Isto posito, vel dicit Sortes verum vel falsum.

3.5.1 Si verum et nullam aliam dicit nisi a, igitur a est verum. Tunc sic: a est

61 enim] nam *Bottin*

62 non (*corr.*)] *om. ms. Bottin*

63 que (*corr. cum Bottin*)] *om. ms.*

64 sed ista universalis est vera quodlibet verum est aliquod istorum] *om. Bottin*

65 ista (*corr.*)] *om. ms. Bottin*

verum, igitur totaliter est sicut ipsa significat, et ista significat quod Sortes dicit falsum, igitur Sortes dicit falsum, igitur si Sortes dicit verum, Sortes dicit falsum.

3.5.2 Si conceditur quod Sortes dicit falsum et a sic precise significat, igitur a precise significat <sicut>⁶⁶ est et per consequens a est verum. Et si sic, cum Sortes nichil aliud dicat nisi a, sequitur quod Sortes dicit verum; igitur si Sortes dicit falsum, Sortes dicit verum.

ad 3.5 Ad illud respondeo admittendo casum et concedendo⁶⁷ quod Sortes dicit falsum.

ad 3.5.2 Et tunc ad argumentum quando arguitur:

Sortes dicit falsum et a sic precise significat quod Sortes dicit falsum, igitur a est verum, nego consequentiam. Et ita respondetur ad omne insolubile⁶⁸ quinti ordinis admittendo totum usque quo deveniat ad illud argumentum iam negatum vel consimile ei, quod⁶⁹ (f. 119v) debet negari. Causa quare talis consequentia non valet est ista, quia in a propositione predicatum⁷⁰ est terminus supponens⁷¹ pro complexo et nullus talis terminus potest supponere pro illa cuius est subiectum vel predicatum, ideo oportet quod supponat pro alia⁷² quacumque propositione. <Si pro>⁷³ alia ab illa:

Sortes dicit falsum⁷⁴

supponit illud predicatum 'falsum' in illa propositione:

66 sicut (*corr. cum Bottin*)] *om. ms.*

67 concedendo (*corr. cum Bottin*)] *concedo ms*

68 omne insolubile] *omnia insolubilia Bottin*

69 consimile ei quod (*corr.*)] *consimilem ii ms., consimile illi Bottin*

70 predicatum (*corr.*)] *subiectum ms. Bottin*

71 supponens] *suppositionis Bottin*

72 alia] *om. Bottin*

73 Si pro (*corr.*)] *om. ms. Bottin*

74 falsum] *falsum si Bottin*

Sortes dicit falsum,
falsa est illa propositio:

Sortes dicit falsum,
quia significat Sortem dicere propositionem quam non dicit. Signetur⁷⁵
igitur tunc illa propositio pro qua supponit iste terminus 'falsum', vel
sibi simile, ut illa propositio:

Homo est asinus,
tunc manifestius apparebit defectus argumenti negati, ut si arguitur:

Sortes dicit talem propositionem falsam 'Sortes dicit talem propo-
sitionem "Homo est asinus"', significantem aliter quam est, que
significat precise quod Sortes dicit talem propositionem 'Homo
est asinus', significantem aliter quam est, igitur talis propositio si-
gnificat precise sicut est,
manifestius est quod consequentia non valet quia antecedens est verum
et consequens falsum, posito quod Sortes dicat solum:

Sortes dicit talem propositionem: Homo est asinus,
significando aliter quam significando sic precise, sed primum⁷⁶ argu-
mentum convertitur cum isto, ideo primum argumentum non valet.

3.5.2.1 Aliud est argumentum simile quoddam modo huic argumento, cui dif-
ficilius, ut apparet, respondetur; et hoc est argumentum:

sic <est>⁷⁷ quod Sortes dicit falsum, et a sic precise significat⁷⁸,
igitur <a>⁷⁹ significat precise sicut est.

ad 3.5.2.1 Ad argumentum illud et consimile respondetur concedendo consequen-

75 signetur] significat *Bottin*

76 primum (*corr.*)] ipsum *ms. Bottin*

77 est (*corr.*)] *om. ms. Bottin*

78 precise significat] *inv. Bottin*

79 a (*corr.*)] *om. ms. Bottin*

tiam et dubitando antecedens; et tunc debet queri⁸⁰ utrum idem⁸¹ modus demonstretur⁸² per ly 'sic' in maiori et in minori. Et si dicatur quod sic, adhuc queritur utrum in maiori demonstretur⁸³ modus, demonstrando a, significat precise vel non⁸⁴. Si dicatur quod sic, tunc conceditur consequentia et negatur antecedens, scilicet maiorem, scilicet quod 'sic est quod Sortes dicit falsum', quia ex quo a est falsum primo modo significans, et nullus primus modus⁸⁵ est, ideo non <est> sic, demonstrando modum⁸⁶ quod a significat.

Sed <si>⁸⁷ non demonstratur idem in maiori et minori, tunc non valet consequentia. Si enim⁸⁸ sic arguitur: 'Sortes dicit falsum, et omni modo quo a significat Sortem dicere falsum, Sortes dicit falsum, igitur a significat precise sicut est', [et]⁸⁹ ista consequentia est bona, sed minor est falsa, quia Sortes non dicit falsum, quia significat precise Sortem dicere falsum, sicut patet ex predictis.

Consimilem enim⁹⁰ consequentiam oporteret facere in omni insolubili quinti ordinis ad concludendum ipsum esse verum.

3.6 Exemplum sexti ordinis: ponatur quod Sortes credat illam propositionem et nullam aliam:

Sortes decipitur,

significando precise. Isto posito, per idem argumentum probatur illam

80 queri (*corr. cum Bottin*)] *questio ms.*

81 idem (*corr.*)] *iste ms. Bottin*

82 demonstretur] *debetur ms. Bottin*

83 demonstretur] *debetur ms. Bottin*

84 precise vel non (*corr.*)] *pro tali non ms., pluraliter(?) numero Bottin*

85 nullus - modus] *nullo primo modo ms. Bottin*

86 modum (*dub. ms*)] *maiolem Bottin*

87 si (*corr.*)] *om. ms. Bottin*

88 enim] *nam Bottin*

89 est (*corr.*)] *est et ms. Bottin*

90 enim] *nam Bottin*

esse veram et falsam.

ad 3.6 Ad illam respondetur negando casum pro particula ista, quod Sortes credat istam et nullam aliam. Et causa est ista, quia Sortes non potest credere se esse deceptum nisi [aliquis]⁹¹ sciat aliquod esse verum pro nunc quod prius credidit esse falsum, vel quod nunc sciat⁹² aliquid esse falsum quod prius credidit esse verum.

Hoc idem apparet per communem modum⁹³ loquendi, quia si aliquis dixerit se esse deceptum et queritur ab eo:

Quare es tu deceptus?,

respondetur sic:

Ego credidi sic vel sic,

referendo⁹⁴ actum suum ad prius creditum. Et nullus dicit se decipi propter actum credendi quem habet, sed propter actum credendi⁹⁵ quem habuit. Et isto modo fiet responsio ad omnia insolubilia sexti ordinis.

Expliciunt insolubilia magistri Johannis de Dulminton sub compendio accepta secundum usum Oxonie.

91 nisi (*corr. cum Bottin*)] nisi aliquis *ms.*

92 sciat (*corr.*)] stat *ms. Bottin*

93 idem apparet per communem modum (*corr.*)] apparet per idem modum *ms. Bottin*

94 referendo (*corr.*)] referendi *ms. Bottin*

95 credendi (*corr.*)] demonstrandi *ms. Bottin*

Anonymous, An Epitome of John Dumbleton's Solution to Insolubles according to the Oxford usage

- 1.0 I intend in the present ⟨work⟩ to divide insolubles or scenarios (*casus*) of insolubles into six groups (*ordines*). Its group more readily provides for the major part the response to any insoluble scenario proposed.
- 1.1 The first group is when it is assumed that there is only one proposition of some sort, whose subject or predicate supposits for a (propositional) complex (*complexum*).⁹⁶
- 1.2 The second group assumes that some proposition is referred to by its own subject or predicate.
- 1.3 The third group is when it is assumed that some proposition exists whose subject or predicate supposits for some proposition or propositions which will be required to exist naturally-before its subject or predicate supposits for those propositions; nor indeed could that proposition or those propositions for which the subject or predicate of the proposition supposits exist naturally-before that proposition, whose subject or predicate supposits for this proposition or those propositions, existed, so that briefly in every scenario of the third group it follows that the proposition exists before it exists.
- 1.3.1 E.g., let B be the proposition
 God exists,
and let A be
 Each of these is true,

⁹⁶ See, e.g., NUCHELMANS 1973, 300: “*complexum*: combination of words, esp. statement-making utterance”; also §§ 11.1.2–3 and ch. 12 *passim*.

referring to propositions B and C, where C is the proposition

Not all of these are true,

referring to propositions A and B. Then the subject and predicate in A supposit for propositions B and C and so for A to exist it is required that propositions B and C, for which A supposits, existed before. But C can only exist if propositions A and B existed before, since ⟨its⟩ subject and predicate supposit for A and B, and so it follows that A would exist before it existed. And the same follows for every insoluble of the third group.

1.4 The fourth group wholly agrees with the third group except that it is not required that an insoluble of the fourth group exists before a proposition exists for which the subject or predicate of that insoluble supposit.

1.5 The fifth group is when it is assumed that someone says, utters, hears or sees only one proposition whose subject or predicate supposits for a (propositional) complex, as in assuming that Socrates says this proposition and no other proposition:

Socrates says a falsehood,

or sees this and no other:

Socrates sees a falsehood.

1.6 The sixth group is when it is assumed that someone believes only one proposition whose subject or predicate supposits for a (propositional) complex, as in assuming that Socrates believes this proposition and no other:

Socrates is deceived.

2.0 Now among these six groups no scenario should be admitted unless it

is a scenario of the fourth or fifth group.

- 2.1 The first group: 'A truth exists'; 'A falsehood exists'; 'No truth exists'; 'No falsehood exists'; 'A proposition exists'; 'A necessity exists'; 'A possibility exists'; 'An impossibility exists'; 'Every universal proposition is false'; 'No universal proposition is false'; 'Only an exclusive is false'; 'No exceptive is false but this', referring to itself.⁹⁷
- 2.2 The second group: 'It is not as this proposition signifies'; 'This proposition is false and it signifies other than it is'; 'This proposition is not true "Through no time it was"'; 'The true contradictory of this is true'; 'God exists and only the first conjunct of this conjunction is true'; 'God exists and every conjunction is false'; 'A man is an ass and no conjunction is true'.
- 2.3 The third group: 'Each of these is true', referring to A and C; and 'Not all of these are true', referring to A and B;⁹⁸ and 'Each A is similar to B, 'Socrates is deceived or the contradictory of this disjunction is true'; 'God does not exist or this disjunction is true'.
- 2.4 The fourth group: 'Each truth is one of these'; 'These are all the truths'; 'God exists and a man is an ass'; 'Only one of these is true'; 'God exists and only this proposition is true'; 'A man exists and only this is a proposition'.
- 2.5 The fifth group: 'Socrates says a falsehood'; 'Socrates does not say a truth'; 'Socrates is a liar'; 'Socrates breaks his oath'; 'Socrates speaks a falsehood'.
- 2.6 The sixth group: 'Socrates is deceived'; 'Socrates is not deceived';

⁹⁷ This example seems to fit better under the second group. Perhaps it was included in the first group as a result of a scribal error.

⁹⁸ The letters A, B and C appear to correspond to the example in § 3.2.3 below.

'Someone is deceived'; 'Someone is deceived and Socrates is he'.

3.0 To all the insolubles of the first group there is one and the same response, and for all of them and similar ones the proof is the same.

3.1 E.g., assume that A is the proposition:

A falsehood exists,

signifying only like that, and that there is no other proposition than it. Assuming this, A is either true or false; if it is said that it is true, then it is wholly as it signifies and it only signifies that a falsehood exists, so a falsehood exists. And since there is no other proposition than A, it follows that A is false, so if A is true, it follows that A is false. If it is said that A is false, then ⟨one argues⟩ in this way: A is false, therefore it is not as it signifies and it signifies only like that, therefore ⟨A is true, and so⟩ if A is false it follows that A is true. And one can argue in a similar way for every insoluble of the first group.

3.2 For the solution one should reply by rejecting the scenario whether it is an insoluble of the first group or the second group or the third, but a different reason should be assigned for the impossibility of the scenario in the one than in the other.

3.2.1 The reason why a scenario of an insoluble of the first group is impossible is that the ⟨insoluble⟩ proposition can only exist if there is another proposition, since this proposition must conform to the subject or predicate of the insoluble, since the subject or predicate of the ⟨insoluble⟩ proposition is a term suppositing for a (propositional) complex, as was argued earlier.⁹⁹

3.2.2 The reason why the scenario of an insoluble of the second group is im-

⁹⁹ That is how the first group is defined.

possible is that it is proposed that this very proposition is referred to by its subject or predicate, and this is impossible. For if it is referred to insofar as it is a proposition, then the impossibility follows that this proposition existed before it existed. And one should respond in this way by rejecting the scenario in all insolubles of the second group.

3.3 An example of the third group: let A be:

God exists,

and B:

Each of these is true,

referring to ⟨both⟩:

God exists

and C, and let C be:

Not all of these are true,

referring to A and B, signifying only like that. Assuming this, either B is true or false. If true, then it is wholly as it signifies and it wholly signifies that each of these is true, referring to A and C, therefore C is true, therefore it is wholly as ⟨C⟩ signifies, and it signifies that not all of them are true, referring to A and B, therefore one of them is false; not A, therefore B, and thus it follows that if B is true, B is false.

If it is said that B is false, then not all of these are true, referring to A and B, and C only signifies like that, so C is true. Then ⟨one argues⟩ in this way: C is true and A is true, therefore each of these is true, referring to A and C; and B only signifies like that, so B is true, therefore if B is false, B is true and all insolubles of the third group are proved similarly.

ad 3.3 To this I respond by rejecting the scenario and I give this rule: whenever a scenario of an insoluble of the third group is proposed, the scenario should be rejected for this reason, that it follows that the proposition

would exist before it existed, as is clear regarding B and C in the scenario posited. Because from the fact that in B there is a composition about A and C, it is required that A and C exist naturally-before B exists, and before proposition C exists, it is necessary that proposition B exists, because in C there is composition about B, and thus it follows that A and C and B existed before they existed, which is impossible.

And the same is universally concluded in every scenario of an insoluble in the third group.

3.4 An example of the fourth group: let A be the proposition:

God exists,

and B the proposition:

A man is an animal,

and C the universal proposition:

Every truth is one of these,

referring to A and B, signifying only like that. And assume that there are no more propositions than these three. Assuming this, either C is a truth or a falsehood.

3.4.1 If $\langle C \text{ is} \rangle$ a truth, then it is wholly as it signifies, and it signifies that every truth is one of these, referring to A and B, hence it is such that every truth is one of these. Then $\langle \text{one argues} \rangle$ in this way: every truth is one of these, C is a truth, therefore C is one of these. The conclusion is contrary to the scenario.

3.4.2 If it is said that C is a falsehood, then $\langle \text{one argues} \rangle$ in this way: A is a truth and it is one of these, and B is a truth and it is one of these, and there is no truth that is not A or B, so every truth is one of these, C is a truth, therefore C is one of these. The conclusion is contrary to the scen-

ario.

3.4.2.1 Again, one argues in this way: every truth is one of these and C signifies only like that, therefore C is true. The conclusion is contrary to what was given.

And one argues in this way for every insoluble of the fourth group.

ad 3.4 To that I respond by admitting the scenario and by granting that C is a truth. And then to the argument: 'every truth is one of these, and C is a truth, therefore C is one of these', to that argument and similar ones, a response can be made in two ways, <and> likewise for any insoluble scenario of the fourth group.

ad 3.4.1 The first response is to deny the inference;¹⁰⁰ and if <one argues> in this way I deny that it is a syllogism in Darii and the reason is that the term 'truth', which is the middle term in the minor and in the major premise, does not supposit for the same thing, which is required <for validity>. For in the major premise the term 'truth' does not supposit for C and signifies in such a way that this universal is true

Every truth is one of these,

referring to A and B. Hence, just as <this> argument:

100 This seems to be the response of Walter Segrave: see SEGRAVE IN PREPARATION, § ad 6.1.1: "Then to the first <paralogism> I reply that assuming this scenario, this is true: 'Every truth is one of these', and I deny the <validity of> the inference <in Darii> 'Every truth is one of these, this is a truth, therefore this is one of them', for the middle term varies because in the minor <premise> it supposits for this truth: 'Every truth is one of these', but in the major <it does> not. And so the conclusion does not follow <from the premises>. For the meaning of the major is: 'Every truth other than <the major premise> (or what is convertible with it and so on for others for which <the subject> does not supposit), is one of these, and <the subject> does not supposit for <the major premise>'." (Ad primum igitur dico, illo casu posito, quod hec est vera: Quodlibet verum est aliquod istorum, et nego consequentiam: Quodlibet verum est aliquod istorum, hoc est verum, ergo hoc est aliquod istorum. Medium enim variatur; in minori namque supponit pro hoc vero: Quodlibet verum est aliquod istorum, sed in maiori non. Et ita non sequitur conclusio. Unde sensus maioris est: Quodlibet verum aliud ab hoc, vel convertibile cum eo et ita de aliis pro quibus non supponit, est aliquod istorum, et non supponit pro hoc.)

Each occurrence of ‘God exists’ and each occurrence of ‘A man is an animal’ – which signify only as it is – is one of these, but the universal ‘Every truth is one of these’ is true – referring to A and B – therefore the universal is one of these, referring to A and B, is not valid, neither is the argument ⟨in 3.4.1⟩ valid with which it converts.¹⁰¹

aliter ad 3.4.1 The other response is this: by distinguishing ⟨two cases⟩ for the singular premise (i.e. ‘C is a truth’): (i) where C signifies truly that every truth is A or B (so ‘truth’ supposits only for A and B), and then the minor is not sufficient for (i.e. antecedent to) the conclusion; (ii) where C signifies falsely that every truth is A, B or C (so ‘truth’ supposits for A, B and C), and then the minor is false and so is denied.

And one should respond in a similar way to every insoluble of the fourth group.

3.5 An example of the fifth group: assume that Socrates says this proposition and no other

Socrates says a falsehood,
signifying only like that, call it A. Assuming this, either Socrates says a truth or a falsehood.

3.5.1 If ⟨Socrates says⟩ a truth and he says nothing else but A, then A is a truth. Then ⟨one argues⟩ in this way: A is a truth, therefore it is wholly as it signifies and it signifies that Socrates says a falsehood, therefore Socrates says a falsehood, therefore if Socrates says a truth, Socrates

¹⁰¹ The first response is to say that the argument is invalid, having true premises and false conclusion, since there is a fallacy of accident, that is, of variation of supposition in the major and minor premises; the second response is to accept that the argument is valid, but that one premise is false; either the major (else there is a fallacy of four terms), or the minor.

says a falsehood.

3.5.2 If it is granted that Socrates says a falsehood and A signifies precisely like that, therefore A signifies precisely as it is and consequently A is a truth. And if so, since Socrates says nothing except A, it follows that Socrates says a truth, therefore if Socrates says a falsehood, Socrates says a truth.

ad 3.5 I respond to that ⟨example⟩ by admitting the scenario and I grant that Socrates says a falsehood.

ad 3.5.2 And then to the argument, when one argues: ‘Socrates says a falsehood and A signifies precisely that Socrates says a falsehood, therefore A is a truth’, I deny the inference. And one may respond in this way to every insoluble of the fifth group by admitting the whole ⟨argument⟩ until we reach the argument just denied or one like it, which should be denied. The reason why this inference is not valid is this, that in proposition A the predicate is a term suppositing for a (propositional) complex and no such term can supposit for a proposition of which it is the subject or predicate, hence it is required that it supposits for some other proposition. If the predicate ‘falsehood’ in that proposition ‘Socrates says a falsehood’ supposits for a proposition other than

Socrates says a falsehood,

the proposition

Socrates says a falsehood

is false, because it signifies that Socrates says a proposition which he does not say. Then let the proposition for which the term ‘falsehood’ supposits or something similar to it be specified, e.g. the proposition

A man is an ass,

then the defect in the argument denied will appear more manifest. E.g.,

if one argues

Socrates says this false proposition:

Socrates says this proposition: 'A man is an ass'

(signifying other than it is), which signifies precisely that Socrates says the proposition: 'A man is an ass' (signifying other than it is), therefore, that proposition signifies precisely as it is,

it is more manifest that the inference is not valid because the premises are true and the conclusion false, assuming that Socrates says only:

Socrates says the proposition: 'A man is an ass'

(signifying other than by signifying precisely in that way). But the first argument is equivalent to this one, therefore the original argument (in § 3.5.2) is not valid.

3.5.2.1 There is another argument similar in some ways to this argument, to which one responds with more difficulty, it seems, and this is the argument:

It is in such a way (*sic*) that Socrates says a falsehood and A signifies precisely in such a way (*sic*), therefore A signifies precisely in such a way (*sicut*) as it is ⟨in reality⟩.

ad 3.5.2.1 I respond to that argument and similar ones by granting the inference and doubting the premise; and then it should be asked ⟨1⟩ whether the same way ⟨of signifying⟩ is referred to by ⟨the adverbial phrase⟩ 'in such a way (*sic*)' in the major premise and in the minor. And if one says that it is, then I ask ⟨2⟩ whether in the major premise the way of ⟨of signifying⟩ referred to ⟨by 'in such a way'⟩, referring to A, is signifying precisely or not. If it is said ⟨in response⟩ to ⟨2⟩ that it is, then the inference is granted and the premise is denied, i.e., the major premise, namely, that 'it is in such a way that Socrates says a falsehood', because,

from the fact that A is false signifying in the first way and there is no first way, for that reason it is not in such a way (*sic*), referring to the way in which A signifies.¹⁰²

But if ⟨it is said to ⟨1⟩ that⟩ the same ⟨way of signifying⟩ is not referred to in the major premise and the minor, then the inference is not valid. For, if one argues in this way:

Socrates says a falsehood and in every way in which A signifies that Socrates says a falsehood, Socrates does say a falsehood, therefore A signifies only (*precise*) as it is ⟨in reality⟩, this inference is good, but the minor is false because Socrates does not say a falsehood insofar as A signifies only (*precise*) that Socrates says a falsehood, as is clear from what has been said.

In fact, a similar inference should be drawn in ⟨the case of⟩ every insoluble of the fifth group to deduce that it is true.

3.6 An example of the sixth group: assume that Socrates believes this proposition and no other:

Socrates is deceived, signifying only in that way. Assuming this, the same argument proves that it is true and false.

ad 3.6 To that I respond by rejecting the scenario for this part, that Socrates believes this and no other. And the reason is this, that Socrates cannot believe himself to be deceived unless he knows something to be true now that he earlier believed to be false or that now he knows something to be false that earlier he believed to be true.

¹⁰² The Latin is puzzling syntactically and so its meaning is somewhat unclear. Perhaps the author does not consider the other leg of the dilemma ('or not') since that option falls under the second option in the first question. We are grateful to an anonymous reviewer for this clarification.

The same thing appears through the usual way of speaking because if someone said that he was deceived, and he is asked:

Why are you deceived?,

he responds in this way:

I believed so and so,

referring his act to an earlier belief. No one says he is deceived through an act of believing that he has, but through an act of believing that he had. And this should be the response made to every insoluble of the sixth group.¹⁰³

Here end the insolubles of master John of Dumbleton in an epitome made according to the Oxford usage.

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103 § 3.6 repeats almost verbatim a similar passage in ch. 21 of Dumbleton's *Summa Logicae*.

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