

JANDUN ON ELEMENTS. A CRITICAL SURVEY WITH TEXT EDITION

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Abstract: This article presents the critical edition of John of Jandun's question on the mixture of elements, drawn from his *Quaestiones super Metaphysicam*. The text has been established through a careful assessment of the manuscript tradition, which reveals the existence of two distinct redactions. Jandun's discussion of the elements is particularly significant for two main reasons. First, it situates him within the Parisian debate on the nature and interaction of elements, a discussion initiated by Pierre Auriol in the Faculty of Theology and soon taken up within the Faculty of Arts. Second, and as a consequence, this question provides important evidence for dating the composition of Jandun's *Quaestiones super Metaphysicam*. By clarifying both the textual tradition and the intellectual context, this edition contributes to a better understanding of Jandun's role in early 14th-century scholastic hylomorphic debates.

Keywords: John of Jandun; theory of the elements; hylomorphism; *realitas*.

1. Introduction

For a long time, an exegetical controversy surrounded John of Jandun's doctrine of the elements. The origin of this controversy lies in ms. Firenze, Biblioteca Nazionale Centrale, Conv. Soppr. J.III.6, containing a *Quaestio de remanentia elementorum in mixto*, which Martin Grabmann attributed to Jandun in 1930.¹ This attribution was false, as Stuart MacClintock clearly showed in 1956, but Grabmann was not responsible for such an attributive mess. Rather, the responsible was the 14th-century copyist, who wrote an attribution to Jandun ("Johannis de Gen.") in the final margins of the previous question *Utrum species intelligibilis...* (f. 140ra), but this glossa has been interpreted as if referring to the following question on the elements; in addition, at the end of the question on the elements, the true attribution (*Quaestio magistri Tadei de Parma disputata*) collapsed into the *incipit* of the following question *De sensu agente*, which is by Jandun.² For decades, however, MacClintock's remarks went unnoticed, and the Florentine *quaestio* remained attributed to the *corpus* of Jandun's writings, even fuelling the hypothesis that

1 GRABMANN 1930, 244.

2 MACCLINTOCK 1956, 113–114.

it was part of a lost commentary on *De generatione et corruptione*.³ In 2016 Gianfranco Fioravanti resolved once and for all the attribution of the text in favour of Taddeo da Parma.⁴ The resolution of this attributive issue was beneficial to studies on Taddeo, but it opened up the debate on Jandun's opinion: what did the Parisian master think about the nature and the dynamics of the elements and, above all, about the presence of elemental substantial forms in mixed bodies – that is, the key question of natural philosophy in the early 14th century?⁵ To address this question, one needs to look at another text, namely question 3 of Jandun's commentary on the fifth book of *Metaphysica* (hereinafter referred to as *QSM*), entitled *Utrum elementa remaneant in mixto* (hereinafter referred to as *Q.V3*). This contribution aims to offer a conceptual and philological analysis of this *Q.V3*. The article will be divided into four parts: (1) a discussion of the importance of *Q.V3* for the dating of the *QSM*; (2) an ecdotic evaluation will be made, comparing the manuscript witnesses with the controversial 16th-century printed edition published by Marcantonio Zimara; (3) a theoretical analysis of the main points of the *quaestio* will be offered; (4) a commented edition of the text will be provided.

2. Date of composition and targets of the *Q.V3*

The *Q.V3* is the first text from Jandun's *QSM* to be edited in a critical edition.⁶ This contribution offers a critical text, established according to a complete collation of the portion of manuscript witnesses relative to this *quaestio*. However, a complete collation of all the *QSM* was not carried out, except for sample portions which allowed for verification of the same stemmatic relations found in *V.6*. Despite being a small text-sample (just three columns out of 200 in codex L), the *Q.V3* is of great historical importance, as it provides essential information

3 WEIJERS 2003, 103; LOHR 2013, 300–301.

4 FIORAVANTI 2016.

5 Concerning the relevance of the theory of the elements in the medieval physical debate see MAIER 1943, 11: “Das Problem wird darum immer vordringlicher, andererseits wird aber auch die grundsätzlich bedingte Unlösbarkeit immer stärker empfunden. So kommt es, dass kaum eine andere naturphilosophische Frage im 14. Jahrhundert so viel Interesse gefunden hat und so viel diskutiert worden ist wie diese.”

6 Two other texts of these *QSM* have been published by DI VONA 1979 and QUILLET 1979–1980, but they do not compare the different witnesses, and above all they attribute these pieces of texts to Marsilio da Padova.

regarding the dating of Jandun's commentary. Since 1943, thanks to Anneliese Maier's pioneering work on the theory of elements in the scholastic tradition, we know that Jandun had Pierre Auriol as a polemical target, though mentioning him as a generic *opinio nova*.⁷ Since Auriol dealt with mixed elements and bodies for the first time in 1312, in a treatise entitled *De tribus principiis naturae* written in Bologna, this date was soon indicated as the *terminus post quem* for the composition of the QSM.⁸ In this respect, there is no doubt that the arguments criticised by Jandun are precisely those of Auriol. This is proven by the presence of the concept of *realitas elementorum*, which was the most peculiar lemma of Auriol's doctrine on elements, as well as the main reason for the strong opposition of Auriol's critics – including Jandun.⁹ What is still to be clarified, however, is when Jandun had read Auriol's thesis for the first time. Auriol, in fact, discussed the problem of the *realitas elementorum* on two different occasions: in the afore-mentioned treatise *De tribus principiis naturae* (Bologna 1312), and in a commentary on the *Sentences* discussed in Paris between 1317 and 1318.¹⁰ If we observe the passage in which Jandun expounds Auriol's thesis, and we compare it with Auriol's texts, we notice a very important aspect: Jandun's exposition corresponds to a group of passages and arguments taken from the commentary on the *Sentences* of 1317/18 (Table 1).

Table 1: Jandun's exposition compared with Auriol's Sentence-commentary (1317/18)

Johannis de Janduno QSM V.3 ¹¹	Petri Aureoli <i>Super Sent.</i> II, d. 15 ¹²
[4] Notandum quod est una opinio nova, que dicit duas conclusiones. Prima est quod <u>forme elementorum non remanent in mixto</u> secundum aliquod esse: nec secundum esse intensum,	Nunc secundo pono propositiones duas. Prima est quod <u>essentie elementorum secundum nullum gradum formalem retinentem rationem et nomen forme manent in mixto</u> , ita parum in

7 MAIER 1943, 72.

8 LAMBERTINI, TABARRONI 1984, 55; LAMBERTINI 2014, 390.

9 Cf. *infra*, section 4.2.

10 DUBA 2017(1), 128.

11 Jandun's text provided in the following tabs belongs to the recensio A, edited in this contribution.

12 I am quoting the Auriol's edition printed in Rome in 1605, but I revised the text on the basis of Padova, Biblioteca Antoniana, 133 scaff. vii. A similar approach to Auriol's texts has been adopted by DUBA 2017(1).

nec remissum, nec secundum esse re- fractum. Secunda conclusio est quod <u>cuiuslibet forme elementaris remanet</u> <u>aliqua realitas in mixto.</u>	gradu minimo, sicut et in maximo. Secunda propositio est quod elemen- torum essentie non corrumpuntur totaliter, sed <u>manent aliquo modo se-</u> <u>cundum realitates aliquas</u> pertinentes ad formas ipsas elementorum, in qui- bus tamen non salvatur nomen ac dif- finitio ipsius forme.
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The arguments supporting Auriol's *opinio nova* are now reshaped with great freedom by Jandun, hence a close textual correspondence will not always be found. Despite this, it seems possible to find a certain theoretical correspon-
dence (Table 2, Table 3). Table 2 shows Jandun's *abbreviatio* of Auriol's first ar-
gument.

Table 2: Jandun's exposition of Auriol's first argument

Johannis de Janduno <i>QSM</i> V.3	Petri Aureoli <i>Super Sent.</i> II, d. 15
[5] Prima conclusio probatur quia, si forme elementorum remanent in mix- to secundum aliquod esse, vel hoc esset secundum esse perfectum, vel secundum esse remissum; sed forme elementorum neutro modo remanent in mixto; ergo nullo modo.	Primam propositionem probo sic. Po- sita forma aliqua in quocumque gra- du, et minimo, ponitur effectus eius formalis, et proprietates consequentes formam illam, saltem proportionaliter secundum illum gradum.
[5.1] Item, de ratione forme est distin- guere et terminare ex VII et VIII huius. Ergo si forme elementorum remane- rent in mixto, tunc essent distincte ab invicem in partibus mixti.	Item virtutes quatuor elementares erunt in mixto in aliquo gradu, et bre- viter redibunt omnia inconvenientia, que Commentator adducit contra Avi- cennam, ubi supra [...].

Auriol's first argument concerns the way in which the forms of elements remain
in the mixture – that is, whether with a full and perfect formal being (*ad men-
tem Avicennae*) or with a weakened and diminished being (*ad mentem Averrois*).
According to Auriol, neither alternative is admissible, because any formal level,
whether perfect or weakened, implies all the specific properties and concom-
itants which are proper to such form. Jandun translates the concept of *gradus
formae* with the expression *secundum aliquod esse*, but both expressions refer to
the degree of being with which the elemental forms remain in the mixture (i.e.

whether perfect or weakened). Then Jandun summarises Auriol's conclusion, that the elements cannot remain neither with perfect forms, nor with imperfect forms, nor with weakened forms. Auriol's second argument is a corollary of the previous one: if a part, albeit weakened, of the forms (i.e. of the formal being) remains in the elements, then all the properties concomitant with the elements must also remain there. This, according to Auriol, leads to Avicenna's aporia, that the elements are arranged in different places of the mixture, as if they were a juxtaposition of parts (an aporia that Averroes himself had pointed out in his commentary on *De coelo* III, c. 67, and which many medieval commentators later repeated). Once again, Jandun summarises the conclusion by reshaping it. Jandun does not mention the name of Avicenna – as Auriol did – but he mentions the main aporia of Avicenna's thesis.

Table 3: Jandun's exposition of Auriol's second argument

Johannis de Janduno <i>QSM</i> V.3	Petri Aureoli <i>Super Sent.</i> II, d. 15
[6] Secunda conclusio probatur quia, si nihil remaneret in mixto de elemento, tunc non esset magis mixtum quam elementum.	Secunda propositio, videlicet quod elementa in mixto non totaliter corrumpantur, sed maneant secundum realitatem aliquam pertinentem ad rationem formae, ita quod in forma lapidis est aliqua realitas, quae fuit formae ignis, et aliqua quae fuit formae terrae, et sic de aliis.
[6.1] Item, quod est corruptibile et corrumpitur materialiter, oportet alterum super alterum dominari totaliter.	Item, dato quod sit ordo formarum, illa resolutio fit per agens aliquod vincens et praedominans, quaero quid sit ille agens.

Table 3 shows Jandun's *abbreviatio* of Auriol's second argument. The first item does not correspond to Auriol's exposition. At most, there is a similarity of topics, since both capture an aspect of the process of mixing: the elements are intermediate between pure matter and the level of compound bodies (e.g. the form of stone, cited by Auriol). By contrast, the second *item* is exposed by Jandun almost faithfully, for position and contents. Jandun summarises that the resolution of the parts is operated by a dominant element.

Tables 2–3 allow us to draw some conclusions about Jandun reading Auriol. Jandun’s exposition of the *opinio nova* seems to correspond to the arguments put forward by Pierre Auriol in his commentary on the *Sentences* of 1317/18. On the contrary, it is not possible to find such a close correspondence between Jandun’s text and the *De tribus principiis* of 1312. In the third part of this treatise, Auriol dealt with the presence of elements in mixtures (*capitulum* III: *De formis corporum mixtorum*), but he used a set of arguments that was completely different from what Jandun summarises in Q.V3. Auriol listed four general conclusions about elements and mixtures (Table 4).

Table 4: Jandun’s synthesis compared with Auriol’s arguments in *De tribus principiis* (1312)

Jandun’s exposition	Auriol’s arguments in <i>De tribus principiis</i>
Prima conclusio probatur quia, si forme elementorum remanent in mixto secundum aliquod esse, vel hoc esset secundum esse perfectum, vel secundum esse remissum; sed forme elementorum neutro modo remanent in mixto; ergo nullo modo.	Quod enim aliquid de realitatibus quattuor elementarium formarum vere et realiter sit in mixto, apparet primo ex resolutione. Unumquodque enim resolvitur in illa, ex quibus componitur; sed mixtum quodlibet ex qualibet parte sui, si resolvatur, resolvetur in quattuor elementa, ut per experientiam patet (f. 42ra).
Item, de ratione forme est distinguere et terminare ex VII et VIII huius. Ergo si forme elementorum remanerent in mixto, tunc essent distincte ab invicem in partibus mixti.	Secundo idem apparet ex nutritione et conservatione. Et haec est ratio Philosophi II <i>De generatione</i> . Ait enim, quod omnia mixta corpora, quaecumque circa mare locum sunt ex omnibus composita sunt simplicibus. Terra quidem inest omnibus, quia unumquodque est maxime et multum in proprio loco. Aqua autem, quia oportet terminari, quod compositum est sola enim simplicium bene terminabilis aqua (f. 42ra).
Secunda conclusio probatur quia, si nihil remaneret in mixto de elemento, tunc non esset magis mixtum quam elementum.	Tertio idem apparet ex diffinitione mixtionis, quae ponitur in I <i>De generatione</i> . Dicitur enim mixtio miscibilium alteratorum unio. Ex qua propositione

	propositum dupliciter probatur. Primo ex ista particula, qua dicitur alteratorum. Mixtio enim non est miscibilium corruptio sed alteratio, secundum Aristotelem et Commentatorem ibidem. Sed si nihil realitatis elementorum maneret in mixto, esset miscibilium corruptio totalis, igitur aliquid manet. Secundo ex hac particula qua dicitur 'unio'; unio enim non potest esse sine mixtis, sed in mixto est unio et mixtio; ergo necesse est, quod ibi sit realitas aliqua unibilium et mixtorum (f. 42rb).
Item, quod est corruptibile et corrumpitur materialiter, oportet alterum super alterum dominari totaliter.	Quarto idem apparet ex communiter concesso et ex communi locutione: Omnes enim concedunt ista esse mixta et unita ex elementis et elementa esse proprie elementa. Nunc autem, si formae mixtorum solum continent elementa in virtute, non erunt proprie mixtae nec illa proprie elementa. Caelum enim et sol non dicuntur proprie elementa nec mixta ex formis generabilium et corruptibilium, etsi eas contineant in virtute, nec formae dicuntur elementa ipsorum (f. 42rb).

Table 4 compares Pierre Auriol's arguments in *De tribus principiis* with Jandun's exposition of Auriol's doctrine. The comparison clearly shows that the arguments summarised by Jandun do not correspond at all to those presented by Auriol in his treatise. This allows us to conclude that, with a high degree of probability, Jandun was not reading Auriol's *De tribus principiis*, but rather a *reportatio* of Auriol's commentary on the *Sentence*, discussed between 1317 and 1318.

The correspondence between Jandun's *abbreviatio* and the arguments listed in Auriol's commentary on the second book of the *Sentences* generates a series of consequences for the *QSM*, especially in relation to two problems: (i) the dating of the text; and (ii) the attribution of the codex F to Jandun or to Marsilio da Padova. As for the first point (i), it seems likely that Jandun composed the

QSM after 1318, i.e. after Auriol's lectures on the *Sentences*.¹³ This is a significant restriction of the period of potential composition of the work, which had previously been estimated at ten years, now reduced to five: from 1318 to 1323.¹⁴

As for the second point (ii), there was a controversy over the attribution of the codex Firenze, Biblioteca Mediceo-Laurenziana, Faesul. 161 (henceforth F), as this codex contains the text of QSM under the name of Marsilio da Padova. The dating after 1318 and the reference to Auriol's arguments allow us to establish that Marsilio da Padova was not the author of the QSM, as suggested by the attribution of the codex. Indeed, Marsilio was not in Paris while Auriol was commenting: he was in Italy or on a mission until late 1319.¹⁵ During this period, Marsilio did not teach any university courses, and it seems unlikely that he knew or discussed Auriol's position on such a specific issue.

Later, when Marsilio returned to Paris in 1319, he started writing the *Defensor pacis*, and there is no record of him teaching courses on *Metaphysica*. Iacopo Costa formulated two hypotheses in this regard: (i) the authorship of the QSM in codex F might be the result of an intellectual osmosis between the two philosophers; (ii) Marsilio may have been not the *auctor* but the *reportator* of the text contained in the Florentine codex.¹⁶ I will not attempt to prove whether one hypothesis or the other is plausible. What I consider certain – as Lambertini and Costa have already pointed out – is that the questions on *Metaphysica* in codex F are by John of Jandun, and that they should rightly be included in the *recensio*.¹⁷

3. Philological considerations

In a recent article Iacopo Costa studied the manuscript tradition of the entire QSM and described his conclusions, which seem to be identical with what I discovered regarding Q.V3.¹⁸ In this contribution, therefore, I will limit myself to summarising this *status quaestionis* – now increasingly defined – providing the salient information.

13 DUBA, SCHABEL 2017, esp. 159–165.

14 LAMBERTINI 2014, 390.

15 GODTHARDT 2012, 18–19.

16 COSTA 2025, 104–105.

17 LAMBERTINI 2014, 388; COSTA 2025, 104.

18 COSTA 2025.

The tradition of the QSM consists of three manuscripts and a 16th-century printed edition edited by Marcantonio Zimara. Andrea Tabarroni and Roberto Lambertini have already shown in detail how much Zimara edition expands the number of published questions (from 75 qq. in the most extensive codex, to 219 qq. in Zimara's volume), collecting material of uncertain and dubious origin.¹⁹ Here I provide a list with the available manuscript witnesses (with indication of the *folia* relating only to Q.V3):

A: Padova, Biblioteca Antoniana, 366 (ff. 41vb–42vb).

F: Firenze, Biblioteca Mediceo-Laurenziana, Faesul. 161 (ff. 28rb–29ra).

L: Leipzig, Universitätsbibliothek, 1363 (ff. 45rb–46rb).

A comparison of existing catalogues and codicological descriptions allows us to establish that L is the oldest witness, dating back to the mid-14th century, probably from Paris, which means close to Jandun's lectures.²⁰ F can be dated at the mid-14th century.²¹ The youngest witness appears to be A, dating back to the 15th century and written in a pre-humanistic cursive script.²²

The collation of A-L-F allows us to hypothesise a double *recensio* of Q.V3, probably the result of two different *reportationes* of the same lesson, which captured the arguments in slightly different forms and syntax. On the one hand, there is witness L – which I have called *recensio* Λ.²³ On the other hand, there are witnesses A and F – which I have called *recensio* Π. The collation of Q.V3 has shown that A and F independently copy a common sub-archetype, which is unknown today.²⁴ In all those cases where A and F presented different correct *lectiones* (neither of which is supported by L's testimony), I generally preferred A, but in some cases I selected the *lectiones* of F if they seemed to be more correct with respect to the syntax and the stylistic coherence of the text.

In this contribution, I have decided to offer both *recensiones*, arranged in columns, as they convey two different historical documents of Jandun's teaching in Paris. Iacopo Costa's article comforted me in this assessment, as it not only

19 LAMBERTINI, TABARRONI 1984, 53.

20 VITALI, KUKSEWICZ 1984, 5–6; LAMBERTINI, TABARRONI 1984, 47.

21 DEL PUNTA, LUNA 1989, 37.

22 LAMBERTINI, TABARRONI 1984, 46; DEL PUNTA, LUNA 1989, 37–49.

23 Following COSTA 2025, 68.

24 COSTA 2025, 78–79.

confirmed the hypothesis of the double *recensio*, but also invited scholars to treat them separately and not to interpolate one with the other.²⁵ Due to the autonomy of the two *recensiones*, in the section on Jandun's *dubia* (§ 11–14), I have decided to maintain the differences in the order of the arguments, as they reflect two different *status* of the text.

3.1 Orthographic criteria of this edition

This contribution publishes the texts of both *recensiones*, arranged in double columns. In order to identify the corresponding paragraphs in the two *recensiones*, I have divided them by paragraph-numbers, indicated in square brackets. To facilitate understanding of the text, I have also divided the main sections, and indicated them in square brackets. The edition preserves the manuscript's graphic conventions, including the absence of diphthongs, unvoiced or geminate consonants, and dissimilated and assimilated consonants.

The footnotes indicate the implicit and explicit sources of the text. The endnotes indicate the variants of the edition. The following philological abbreviations appear in the footnotes: *add.* = addidit; *coni.* = conieci; *del.* = delevit; *hom.* = *homoioteleuton*; *in marg.* = *in margine*; *iter.* = *iteravit*; *om.* = *omisit*; *praem.* = *prae-misit*.

4. Theoretical analysis of Q.V3

4.1 A systematic account

The importance of the theory of the elements in the Scholastic debate is due to the role it played within the natural investigation: indeed, every consideration of complex phenomena and bodies in Aristotle's natural philosophy starts from (or at least relies on) the consideration of elements, their forms and their qualities.

A proof of the relevance of the theory of the elements is given by the broad audience of scholars who discussed it in early 14th century classes. Of course, we find Artists (like John of Jandun, Bartholomew of Bruges, Walter Burley...) who

²⁵ COSTA 2025, 106.

had to comment on Aristotle's texts and Averroes's commentaries: first, on *De generatione et corruptione* I, tt.cc. 84–90, concerning the mixtures in general; then on *De coelo* III, t.c. 67 concerning the forms of the elements; on *Meteora* IV.1, concerning the elemental qualities; lastly, on *De partibus animalium* II, concerning the role of the elements for the composition of bodily organs and humours. Also intellectuals at the Faculty of Medicine shared a great interest in the theory of the elements, as they were asked to comment on Avicenna's *Prima Fen I Canonis* or Galen's *Prima Tegni Artis Parvae*.²⁶

For this reason, several major Masters of Medicine (like Haly Abbas, Dino del Garbo, Ugo Benzi, Gentile da Foligno...) discussed Avicenna's medical system starting with the description of the elements and their combination. Finally, intellectuals at the Faculty of Theology were no less interested in this theory and, rather, they participated actively in the 14th century debate (e.g. Duns Scotus, Pierre Auriol, Landulphus Caracciolus, Franciscus de Marchia...).²⁷ Discussions on the ontological status of elements and mixtures from a theological perspective can be found in almost any 14th-century commentary on the *Sentences* (generally, book 2, d. 15), regarding the constitution of Christ's body or the creation of fish and birds in the book of *Genesis*.

The first remarkable aspect of Jandun's question on the elements regards its position in the commentary. As I said above about the Artists, the standard place to discuss Aristotle's theory of the elements should be either *De coelo* III, *De generatione et corruptione* I, or *Meteora* IV. By contrast, there is no place in the *Metaphysica* where, properly speaking, Aristotle talks about the physical elements. The only useful mention can be found in *Metaphysica* V.3 (1014 a–b), where the definition of *stoichéion* is given. However, this does not concern the physical elements. In this passage of *Metaphysica* V.3 Aristotle discusses (i) a very general definition of element, concerning its indivisibility; and (ii) the elements of a syllogistic demonstration. By contrast, no mention can be found regarding the presence of elements in the mixtures, their forms or qualities, or any physical consideration. So, the question is: why did Jandun alone discuss a purely physical issue within a commentary on *Metaphysica*?

²⁶ BURZELLI 2024(1), 9; SIRAISSI 1981, 63–78; CHANDELIER 2017.

²⁷ On this point see DUBA 2017(1), 123–129.

This question can hardly be answered; however, some remarks can be made to focus on the problem. First, the theory of the four elements has both physical and metaphysical implications. Elements are the simplest physical substances existing in nature, which means that they are the first substances to be provided with a material body. At the same time, they consist of purely metaphysical principles, namely a substantial form and pure prime matter. For this reason, elements lay at the conjunction between metaphysics and physics. As Averroes points out in his commentary on *Metaphysica* XII.4, c. 11, elements represent the first configuration of prime matter into bodies; in turn, elements represent a ‘second matter’ for the complex substances.²⁸ Yet, it isn’t fully clear why Jandun did not discuss about the elements in relation to *Metaphysica* VII–VIII, or to *Metaphysica* XII, i.e. the parts explicitly devoted to substances.

In this respect, I have reasons to believe that Jandun placed the discussion on the physical elements in this metaphysical context because of Pierre Auriol. As a matter of fact, Auriol was the first to use the Aristotelian definition of ‘element’ from *Metaphysica* V.3 as an argument for his own position in the commentary on the *Sentences*.²⁹ It is likely that, given Auriol’s reference and the metaphysical implications of this concept of *realitas* on the Aristotelian hy-lomorphism, Jandun decided to attack Auriol by placing the question on the elements exactly in concomitance with Aristotle’s definition of element. Finally, including this question in a commentary on *Metaphysica* might also reveal a standard approach of John of Jandun, who often seems to mix physical issues and arguments with metaphysical ones.³⁰

28 ARISTOTELES, AVERROES 1562-1574, vol. VIII, *In Metaphysicam* XII, c. 11, VIII, 297 E-F: “Et dicit hoc, quia opinatur quod prima materia est unum secundum subiectum et multa secundum habilitate[s]. Primo enim habet habilitates ad recipiendum primas contrarietates, scilicet formas omnium quatuor elementorum. Secundo vero habet potentias consimilium partium mediantibus formis quatuor. Et iste potentie diversantur secundum diversitatem missionis quatuor elementorum, ita quod ex hoc diversantur forme generabilium.”

29 PETRUS AUREOLUS 1605, 206a (emended): “Quantum ad primam quaestionem arguo primo quod elementa manent in mixto secundum gradum aliquem suae formae, saltem in esse remisso, quia Aristoteles V *Metaphysicorum*, dicit, diffiniens elementum, quod est illud ex quo res est et manet in re; sed hoc non esset verum nisi elementum secundum suam formam maneret in mixto in aliquo gradu.”

30 In this regard, it is interesting to note that in the QSM there are often physical questions or questions discussed from an eminently physicalist perspective. In addition to the case of Q.V3 on the elements, I would also point out q.I.2 (*Utrum metaphysica sit prior aliis scientiis*) which appears structurally based on Averroes’s commentary on *Metaphysica* XII.

4.2 A theoretical overview

A well-established interpretation, circulating already in the 15th century, saw Jandun not only as one of the main interpreters of Averroes in the Western Latin culture, but sometimes even ‘the prince of the Averroists’.³¹ The question on the element cannot but confirm this interpretation, because Jandun radicalises some specific issues and characteristics of Averroes’s commentary. The Q.V3 can be subdivided into seven sections:

Question: *whether the elements remain or not in the mixture.*

- a) Exposition of the *contra* arguments (§ 2);
- b) Exposition of the arguments (§ 3);
- c) Exposition of Auriol’s *opinio nova* (§ 4–6);
- d) Criticisms against Auriol’s opinion (§ 7);
- e) Exposition of Jandun’s thesis (§ 8–9);
- f) *Dubia* and their solutions (§ 10–14);
- g) Solution of the arguments *ad non* (§ 15–17).

Section a (§ 2). The exposition of the *contra* arguments depends entirely on Aristotelian and Averroist arguments. They sound quite general, and they simply fix some parameters of the Aristotelian hylomorphism that will be verified along the *quaestio*. As a proof of this aspect, each of these arguments can be encountered also in other masters (first, Aquinas and Auriol), who totally disagreed with Jandun on the theory of the elements.³²

The three arguments, which are listed in the exposition of the *non*, share a specific aspect in common, namely their criticism of Avicenna. Each of them, in fact, attacks the pivotal point of Avicenna’s opinion – or at least what Averroes had said about him – on a very specific point: if the elements remained in the

³¹ BRENET 2003.

³² See for instance THOMAS AQUINAS 1976: “Est autem impossibile sic se habere. Impossibile est enim materiam secundum idem diuersas formas elementorum suscipere; si igitur in corpore mixto forme substantiales elementorum saluentur, oportebit diuersis partibus materie eas inesse. [...] Multa autem corpora impossibile est esse simul; non igitur in qualibet parte corporis mixti erunt quatuor elementa: et sic non erit uera mixtio, sed secundum sensum, sicut accidit in aggregatione corporum insensibilium propter paruitatem.” For Peter Auriol, see *infra*, n. 2–3.

mixture, then the mixture would lose its unity, thus being a mere aggregate of elements. Each of the three arguments insists on this conclusion, by remarking that the mixture would be no more unitary (§ 2); it would be one by accident (§ 2.1); it would be an aggregation of parts inhering the mixture in actuality (§ 2.2).

Section b (§ 3). The second part of the question consists of two arguments, based respectively on Averroes and Aristotle. The first argument refers to the Averroist thesis according to which elements remain formally in mixed bodies. This argument has two purposes. First, it serves to avert the consequence that prime matter takes on the forms of composite bodies without any mediation. By contrast, Jandun believes that the forms of the elements are the intermediate link between metaphysical principles and complex physical bodies, in that they arise from prime matter, and they constitute the ‘secondary matter’ of complex bodies.³³ Second, this argument once again strikes at Avicenna’s thesis, which attributed the unification of the mixture solely to the uniform qualitative temperament. By contrast, Jandun – *via* Averroes – believes that the substantial unification of the mixed body must proceed from a substantial principle (such as the form of the elements) and not from an accidental one (i.e. qualities).

The second argument comes from Aristotle (*De generatione et corruptione* I.10, 327 b 30–31, c. 84), but goes well beyond Aristotle’s mind. In that circumstance, Aristotle pointed out that the elements are present in mixtures in a manner that is not actual, but potential (σώζεται γὰρ ἡ δύναμις αὐτῶν). The Greek term δύναμις was rendered in Latin as *virtus*,³⁴ without clearly specifying what Aristotle was referring to: whether a metaphysical potentiality, or an operative capacity, or simply an accidental quality. In any case, Jandun rejects the idea that elements can remain through a quality or capacity, because such presence would be accidental and not substantial.

Section c (§ 4–6). The third part of the *quaestio* focuses on Auriol’s opinion and the arguments that support it. I will not discuss the arguments in detail, as I have already described them above in relation to the dating of the text (*supra*, Tables 1–3). However, it seems useful to underline again the pivotal point of these lines, namely Auriol’s concept of *realitas elementorum*. Accord-

³³ See *infra*, § 6.

³⁴ ARISTOTELES 1986, 48.

ing to Auriol, elements do not remain in mixed bodies either in their complete forms (*ad mentem Avicennae*), or in weakened forms (*ad mentem Averrois*), or only with their qualities (*ad mentem Thomae*). Rather, the elemental forms undergo a ‘break’ (*fractio*), which somehow interrupts their substantial unity. According to Auriol, this broken piece of the form, i.e. the *realitas*, should allow the elements to recompose themselves into a new substance, i.e. the mixture. Elsewhere, I have pointed out that Pierre Auriol’s *realitas elementorum* is a very particular concept, which has no comparison in the scholastic literature on this subject.³⁵ This peculiarity is due to the fact that it is difficult to place this concept in any of the hylomorphic categories provided by Aristotle, nor can it be described as a Scotist *formalitas*. This was first noticed by some Franciscan *sententiarii* who replaced Auriol in Paris (Landulphus Caracciolus, Franciscus de Marchia), and began to criticise Auriol in relation – but not only – to his theory of elements.³⁶

Section d (§ 7). The fourth section of Q.V3 is the most relevant from a metaphysical point of view. Here, Jandun examines Auriol’s concept of *realitas*, and compares it with the conceptual framework of Aristotle’s division of being *qua* being (*Queratur de realitate ista, utrum sit substantia vel accidens*). The problem is that, as Jandun clearly points out in the first argument, Auriol’s *realitas* cannot be traced back to any classical concept. In other words, *realitas* is neither substance nor accident. It is not an accident because an accident does not express or preserve anything essential with respect to a substance – which the *realitas* should do. At the same time, however, *realitas* cannot be substance either, since in that case it would have to be either matter, form or compound.

The *realitas* of the elements cannot be identified with indeterminate prime matter, nor can it be a compound, otherwise the *realitas* of an element would be a further substance. Finally, it must be excluded that *realitas* is a form, since Auriol explicitly rejected that elements leave their substantial forms intact or weakened. In summary, Jandun observes that the concept of *realitas* eludes any conceptualisation and cannot be clarified through any standard Aristotelian concept.

³⁵ BURZELLI 2024(2).

³⁶ DUBA 2007, DUBA 2017(2), SCHABEL 2009.

The second argument *ad absurdum* focuses on the relationship between *realitas* and the form of elements. If, in fact, *realitas* were part of the elemental form, it would have to be an essential, quantitative or subjective part. All three hypotheses must be rejected. The *realitas* is not an essential part, since the form of the element is already essential and does not contain essential sub-parts; nor is it a quantitative part, since the form of the element has no dimensions or quantity; nor a subjective part, since it would be responsible for the entire predication of form, whereas Auriol explicitly states that the *realitas* retains a fraction of the entire form.

Section e (§ 8–9). In this section, Jandun offers his own description of the process of aggregation of elements in mixtures. This section relies on Averroes's commentary on *De coelo*, from which Jandun elaborates his own main thesis: the substantial forms of the elements undergo a metaphysical weakening that allows them to coexist in mixtures without affecting their unity.

Just as Auriol had presented his thoughts in the form of two conclusions, Jandun does the same with two *responsiones* to the initial question. In the first *responsio*, Jandun states that the elements do not remain in mixed bodies according to their perfect and complete being – referring to the set of qualitative properties that are proper to the being of the element. The elemental qualities undergo a process of mixing and interaction between one element and another, and this determines the necessary alteration of the initial qualities: as Aristotle indicated (*De generatione et corruptione* I.10), mixture is the union of mixable parts *after* they have been altered (*miscibilium alteratorum unio*) – *scil.* in relation to their qualities.

The second *responsio* represents a perfect application – and at the same time a *defensio* – of Averroes's argument: the forms of the elements remain in the mixtures with a weakened being. Jandun categorically states that mixture cannot occur through qualities, since it is a substantial process that requires substantial components (i.e. substantial forms), not accidental ones (such as qualities). The first *item* reinforces this thesis, stating that whatever quality or virtue remains in the mixture, it requires in any case the presence of a substance to which it can be inherent, in accordance with Aristotle's well-known definition of accident in *Categoriae* V and *Metaphysica* VII.1. The second and third *item* introduce two

authoritative arguments by Averroes and Albert the Great, aimed at supporting the interpretation of elemental forms as weakened and intermediate.

Section f (§ 10–14). The sixth section of Q.V3 is dedicated to presenting and resolving a series of theoretical doubts arising from the solution proposed by Jandun in the previous section. First, however, the Parisian master discusses a passage from Grosseteste's commentary on the *Anal.post.* This passage was probably well known in the Parisian debate of those years, although I have only found reference to it in Ockham, a few years later.³⁷ According to Grosseteste, the generation of substance depends on the partibility of the material subject. Jandun categorically rejects this hypothesis, as he believes that only the division of forms can generate new substance.

Four doubts follow, concerning the Averroist theoretical model grounded by Jandun. The first doubt (§ 11) concerns the intensification of elemental forms, which seems to be in clear contradiction with Aristotle's axiom: "*substantia non suscipit magis et minus*" (*Categoriae* 4a6–9; *Metaphysica* VIII.3, 1044a10–12). Jandun responds to this observation by saying that elements share a specific dynamic, which is different from other composite substances. Since elements are the simplest and smallest substances, it is possible that they undergo processes of substantial intensification or weakening, which Aristotle denied for any complex substance. This argument is introduced *ex auctoritate* through Averroes's commentary and is not further expounded or metaphysically founded.

The second doubt (§ 12) develops on a physical level the consequences of the intensification of substantial forms: if the forms of the elements could truly intensify or weaken, generation would no longer be an instantaneous moment but a gradual process. In his response, Jandun dwells on the meaning of the concept of *motus*, which can imply either the identity or the variation of the ultimate subject. In the case of substantial generation, Jandun observes that the ultimate subject must change and cannot remain identical in number to the initial components. For this reason, though accepting the gradual nature of the process, Jandun believes that the doubt does not really affect his theoretical proposal.

³⁷ Cf. *infra*, n. 46.

The third doubt (§ 13) also concerns the intensification of forms: if the substantial form were to actualise gradually, this process could be divided into instants; each instant would actualise the ultimate subject of the instant preceding; consequently, each actualisation would be accidental with respect to the actualisation of the instant following. Jandun rejects the premise that each instant gradually actualises the previous instant. According to Jandun, the only moment in which we can properly speak of an actualised subject is the last moment, in which the form is fully and completely actualised (*per formam finalem et ultimam*). Since it is legitimate to speak of complete actualisation only at the end, all the previous instants in the gradual process cannot be considered accidental. Rather, one might investigate more if this gradual process leading to the final perfection should be understood as a form of *inchoatio formae* – though Jandun says nothing in this respect.

The fourth doubt (§ 14) is more linguistic than metaphysical: it does not seem possible to compare one substance with another except at an accidental, non-substantial level (e.g. ‘more or less fiery’). Jandun, however, observes that this is merely a linguistic convention with no metaphysical implications.

Section g (§ 15–17). The last section of Q.V3 is dedicated to resolving the arguments of the *non* (set out in § 2). Jandun is persuaded that his openly Averroist solution allows him to resolve all the theoretical problems posed by those who denied that the elements remain in the mixtures. Against the first argument, Jandun observes that the presence of weakened elemental forms guarantees that the elements are really in the mixtures without affecting the substantial unity of the mixtures themselves. Against the second argument, Jandun denies that the mixture is accidentally constituted from the elements, since the true substantial form of the mixture will only be achieved at the end of the mixing process. Finally, against the third argument, Jandun observes that elements do not bring any simultaneous bodily dimension to the mixtures: since the elements in the mixture are weakened, imperfect entities, they are devoid of corporeality and dimensions.

5. Conclusions

The study of the Q.V3 on the elements has an impact on our knowledge of the thought and works of John of Jandun. As I have attempted to demonstrate at the beginning of this article, thanks to the invectives against Pierre Auriol, the Q.V3 becomes an important document for determining more precisely the date of composition of the *QSM*, or at least for narrowing down its composition to the five-year period 1318–1323.

In the second part of this article, I have attempted to show that Q.V3 also has intrinsic theoretical value, since here Jandun challenges Pierre Auriol on the fundamental bases of Aristotelian hylomorphism. Jandun's critical observations on the *realitas elementorum* and his determinations on the weakening of the substantial forms of the elements are fundamental pages for understanding the development and profound articulation of Aristotle's thought in university faculties at the beginning of the 14th century.

It remains to point out one last reason for the importance of Q.V3, and this time it goes beyond Jandun himself. This text sheds light on a crucial problem in our understanding of medieval scholastic thought, namely our historical categorisation. Along this study, several opinions related to the doctrine of the elements have emerged: e.g. Jandun's own opinion, his opponent Pierre Auriol's one, but also Taddeo da Parma's one etc. These positions are clearly different and contrasting from a theoretical point of view. Yet, surprisingly, Anneliese Maier unified these thinkers under a broad and ambiguous category of 'Averroist line': according to her, these three intellectuals, like many others, shared the parameters and assumptions of Averroes's commentary on *De coelo* to develop a solution to the problem of mixture.³⁸

Theoretical analysis and textual criticism have established that these authors (Jandun, Auriol, Parma) held different and irreconcilable views, which were deliberately formulated to contrast with one another. The commendable work of Anneliese Maier, dating back to 1943, inevitably requires a thorough revision, not only in terms of the corpus of texts and their respective attributions, but also in terms of the interpretative framework it offers. Only in this way will

38 MAIER 1943, 41.

our knowledge of the medieval debate on the elements come to grasp more precisely the conceptual parameters and theoretical aspects that animated late medieval debates – that is, the real stakes in this intellectual quarrel.

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Textus: *Similiter autem et corporum* etc.¹

[1] Consequenter queritur utrum forme elementorum remaneant in mixto.

⟨*quod non*⟩

recensio Λ (Leipzig)

[2] Primo quod non, quia tunc mixtum non esset unum per se²; sed hoc est falsum; ergo primum. Falsitas consequentis patet: mixtum est per se unum secundum omnes. Consequentia patet, quia quolibet forma substantialis dat esse, et si remanerent forme elementorum in mixto, tunc essent quatuor forme substantiales, quarum quolibet daret esse; et sic essent quatuor vel quinque esse que non sunt unum per se, sed sunt distincta, ut ignis est distinctus ab aqua, et sic de aliis.

[2.1] Item si hoc esset verum, tunc forma mixti esset accidental³, sed hoc est falsum. Forma enim mixti non est

recensio Π (Firenze – Padova)

[2] Videtur quod non, quia tunc mixtum non esset unum per seⁱ, quod est falsum, ut valetⁱⁱ per omnes. Consequentia declaratur, quia quolibet forma substantialis dat esse. Si ergoⁱⁱⁱ forme elementorum sint in^{iv} mixto et forma illius propria, tunc dabunt quinque^v esse substantia. Talia autem non sunt unum per se.

[2.1] Preterea, forma mixti esset accidens, quod relinquitur pro impossibili. Consequentia patet, quia advenit

1 ARISTOTELES 1831, *Metaphysica* V.3, 1014a.

2 ARISTOTELES 1831, *Metaphysica* VII.13, 1039a4–5. Cf. PETRUS AUREOLUS 1605, 203a: “Tunc cum illae qualitates simplices miscentur et contrariantur, agendo ad invicem, quaero aut una unitur totaliter corrumpendo omnes alias; aut neutra unitur, nec corrumpitur, sed manet in suo gradu; aut utraque manet secundum aliquid, et utraque corrumpitur et reducatur ad medium, et tunc ego habeo propositum. Non potest dari primus modus, quia tunc non veniret ad medium, sed totaliter corrumpentur; nec potest dari secundum, quia tunc non resultaret unum, sed esset acervus; ergo oportet quod detur tertium.”

3 Cf. PETRUS AUREOLUS 1605, 203a: “Aut utrumque corrumpitur secundum substantiam et manet secundum accidentia, et si sic, tunc illud non esset mixtum substantiale, sed accidentale.”

accidentalis, quia tunc non daret esse materie actuate per formas quatuor substantiale. Et consequentia probatur elementorum.

quia illa forma est accidentalis que advenit enti in actu. Si ergo forme substantiales elementorum remaneant in mixto, tunc forma mixti adveniret enti in actu ut materie actuate per formas elementorum.

[2.2] Item si forme elementorum remanerent in mixto, tunc plura corpora simul essent in eodem loco⁴; sed hoc est falsum; ergo et primum. Falsitas consequentis patet IV *Physicorum*⁵. Consequentia patet, quia quolibet forma elementi habet suam corporeitatem et non est sine corporeitate⁶. Modo quolibet pars mixti habet quatuor formas elementorum et per consequens corporeitas et quatuor dimensiones, et sunt in eodem loco.

[2.2] Preterea^{vi}, tunc plura corpora essent simul, quod patet esse falsum IV *Physicorum*. Consequentia patet^{vii}, quia quolibet forma elementi^{viii} habet propriam corporeitatem. Sed in quolibet parte mixti sunt omnia quatuor elementa. Ergo^{ix} remanent ibi forme elementorum, et per consequens corporeitates et dimensiones.

«quod sic»

[3] Oppositum patet auctoritate Commentatoris in III *Celi*⁷, ubi vult quod forme substantiales elementorum re-

[3] Oppositum patet auctoritate Commentatoris III *Celi*^x, quia^{xi} mixtio est non solum^{xii} secundum qualitates, si-

4 Cf. AVERROES 2003, 605: "si subiectum generationis ignis ex aere fuerit aer, et subiectum existet in re generata, iam enim est pars, contingit ut ignis generatus ab aere fit aer et ignis insimul, et ut locus quem occupat totus aer, aut pars eius in hora in qua aer occupat ipsum, sit idem cum loco quem occupat ignis in illa hora"; THOMAS AQUINAS 1976: "Multa autem corpora impossibile est esse simul; non igitur in qualibet parte corporis mixti erunt quatuor elementa: et sic non erit uera mixtio [...]."

5 ARISTOTELES 1990, 152 (*Physica* IV.5, 212b23–16): "Neque enim simul augmentari necesse est locum, neque puncti esse locum, neque duo corpora in eodem loco, neque spatium aliquod esse corporeum." Cf. HAMESSE 1974, 180: 69 (*De anima* II.7, 418 b 17): "Impossibile est duo corpora esse in eodem loco."

6 Cf. THOMAS AQUINAS 1959, *Super De Trinitate*, pars 2 q. 4 a. 3 co. 1: "Unde experimento patet talium corporum duo in eodem loco esse non posse. Quidam autem dicunt quod non prohibentur duo horum corporum ab hoc, quod sint simul, propter corporeitatem vel propter aliquid quod sit de ratione corporis, in quantum est corpus; sic enim sequeretur omnino duo corpora prohiberi ab hoc quod est esse simul."

7 AVERROES 2003, 634–635: "[...] et ideo necesse est, cum ex eis generatur una forma, ut corrumpantur forme eorum secundum medietatem, quoniam si corrumparentur secundum

manent in mixto. Nam mixtio non solum est secundum qualitates, ut Avicenna voluit⁸, sed etiam secundum formas substantiales elementorum. Unde dicit: si forme substantiales non remaneant in mixto, tunc materia prima eque primo reciperet formas mixtorum sicut formas elementorum⁹. Hoc autem relinquitur pro inconvenienti. Consequentia patet, quia materia prima reciperet formas mixtorum non mediantibus formis elementorum, sed reciperet formas mixtorum eque primo ut formas elementorum.¹⁰

[3.1] Item, hoc patet auctoritate Aristotelis I *De generatione*, ubi dicit quod elementa in mixto non corrumpuntur nec alterum nec ambo¹¹. Modo si forme elementorum corrumpuntur, tunc non remanent in mixto elementa. Dices forte quod elementa manent virtute¹². Dicitur quod non valet, quia virtus non est nisi accidens; non respicit corruptio, quia corruptio tantum respicit substantiam¹³. Ergo si non corrumpuntur, oportet quod maneant quoad substantiam.

cut Avicenna voluit^{xiii}, sed etiam secundum formas elementorum, ita quod forme substantiales elementorum remanent in mixto. Unde dicit quod si forme^{xiv} elementorum non remanerent in mixto^{xv}, materia prima eque primo reciperet formas mixtorum sicut elementorum, quod relinquitur pro inconvenienti. Consequentia patet, quia^{xvi} materia prima reciperet^{xvii} formas mixtorum non mediantibus formis elementorum, sed reciperet eas eque primo immediate, ut formas elementorum^{xviii}.

[3.1] Preterea, hoc patet auctoritate Aristotelis I *De generatione*, ubi dicit quod elementa in mixto non corrumpuntur. Quomodo dicet ea remanere? Forte dices quod remanent^{xix} virtualiter. Non valet, quia talis virtus est accidens, et generatio et corruptio non respiciunt accidens, sed substantiam rei. Ergo si non corrumpuntur, oportet quod remaneant quantum ad substantiam^{xx}, quia remanentia accidentium non sufficit quantum^{xxi} ad non corruptionem.

totum, tunc prima materia reciperet primo et essentialiter omnes formas, et non reciperet formas compositorum mediantibus istis corporibus."

8 This is the description of Avicenna's doctrine according to AVERROES 2003, 635: "Et cum hoc latuit Avicennam et concessit quod formae substantiales non dividuntur in magis et minus, dixit quod haec elementa non miscentur nisi secundum qualitates eorum, non secundum substantias."

9 Cf. AVERROES 2003, 634: "si corrumpuntur secundum totum, tunc prima materia reciperet primo et essentialiter omnes formas, et non reciperet formas compositorum mediantibus istis corporibus."

10 *Ibidem*.

11 ARISTOTELES 1986, 48, *De generatione et corruptione* I.10, 327b30–31.

12 Cf. ARISTOTELES 1986, 48, *De generatione et corruptione* I.10, 327b31–32: "Salvatur enim virtus eorum."

13 The consequence depends on ARISTOTELES 1990, 97, *Physica* III.1, 200b32–34: "Mutatur enim semper id quod mutatur aut secundum substantiam aut secundum qualitatem aut secundum quantitatem aut secundum locum." Likewise, see THOMAS AQUINAS 1884, *In*

[4] Notandum quod est una opinio nova, que dicit duas conclusiones. Prima est quod forme elementorum non remanent in mixto secundum aliquod esse: nec secundum esse intensum, nec remissum, nec secundum esse refractum. Secunda conclusio est quod cuiuslibet forme elementaris remanet aliqua realitas in mixto¹⁴.

[5] Prima conclusio probatur quia, si forme elementorum remane^{re}nt in mixto secundum aliquod esse, vel hoc esset secundum esse perfectum, vel secundum esse remissum; sed forme elementorum neutro modo remanent in mixto; ergo nullo modo¹⁵. Maior patet per sufficientem divisionem. Minor declaratur. Non secundum esse perfectum remanent in mixto, quia ridiculum esset quod forma ignis et aqua remanerent in mixto secundum esse perfectum et in ultima perfectione, quia tunc aqua flueret, ignis combureret. Similiter non manent secundum esse remissum, quia forma substantialis non suscipit magis et minus, quia forma substantialis est substantia.

[4] Notandum quod de hoc est una opinio nova^{xxii}, que ponit duas conclusiones. Prima est^{xxiii} quod forme elementorum non remanent in mixto secundum aliquod esse, nec intensum, nec^{xxiv} remissum sive refractum. Secunda conclusio est quod aliqua realitas remanet in mixto cuiuslibet^{xxv} forme elementi.

[5] Ratio prime conclusionis, quia^{xxvi}, si forme^{xxvii} remanerent secundum aliquod esse, vel hoc esset secundum esse perfectum, vel imperfectum sive remissum per sufficientem divisionem. Nullus diceret quod remanent secundum esse perfectum^{xxviii}, quia tunc aqua flueret et ignis combureret. Nec remissum, quia substantia non suscipit magis et minus ex *Predicamentis*, et forma elementi est substantia ex VIII huius^{xxix} et omnes concedunt^{xxx} «hoc».

Physic., lib. 3 l. 1 n. 8: “nam generatio est motus in substantia ad formam, corruptio vero ad privationem.”

14 These conclusions depend on PETRUS AUREOLUS 1605, 206b: “Nunc secundo pono propositiones duas. Prima est quod essentia elementorum secundum nullum gradum formalem retinentem rationem et nomen formae manent in mixto, ita parum in gradu minimo, sicut et in maximo. Secunda propositio est quod elementorum essentiae non corrumpuntur totaliter, sed manent aliquo modo secundum realitates aliquas pertinentes ad formas ipsas elementorum, in quibus tamen non salvatur nomen ac diffinitio ipsius formae.” I found no similar argument in Auriol’s *De tribus principiis* (Città del Vaticano, Biblioteca Apostolica Vaticana, Vat. Lat. 3063). There Auriol mentions six propositions, none of which corresponds to what Jandun quotes.

15 This argument reshapes the argument of PETRUS AUREOLUS 1605, 206b: “Primam propositionem probo sic. Posita forma aliqua in quocumque gradu, et minimo, ponitur effectus eius formalis, et proprietates consequentes formam illam, saltem proportionaliter secundum illum gradum.”

Substantia autem non suscipit magis et minus, ex *Predicamentis*¹⁶.

[5.1] Item, de ratione forme est distinguere et terminare ex VII et VIII huius¹⁷. Ergo si forme elementorum remanerent in mixto, tunc essent distincte ab invicem in partibus mixti¹⁸. Hoc autem est falsum, quia quolibet pars mixti est mixta.

[6] Secunda conclusio probatur, quia, si nihil remaneret in mixto de elemento, tunc non esset magis mixtum quam elementum in substantia^{xxxiv}¹⁹. Consequens^{xxxv} est falsum, ergo et antecedens. Falsitas consequentis patet, quia mixtum est magis compositum quam elementum in substantia quia mixtio non est accidentium sed substantiarum²⁰. Consequentia patet: postquam elementa corrumpuntur in substantia, et nihil remaneret nisi mixtum per adventum forme in materia, non esset magis mixtum, nisi esset aliqua forma que maneret cui adveniret forma mixti.

[5.1] Preterea, de ratione forme est terminare. Si ergo forme elementorum essent in mixto, tunc essent distincte^{xxx}^{xxxi} ab invicem in partibus mixti, quod est falsum^{xxxii}, quia tunc quolibet pars mixti non esset mixta, cuius^{xxxiii} oppositum ab omnibus conceditur.

[6] Ratio secunde conclusionis quia, si nihil remaneret in mixto, tunc mixtum non esset magis mixtum quam elementum in substantia, quod implicat contradictionem. Consequentia^{xxxvi} patet quia, si omnino nihil remaneret nisi materia prima, tunc forma mixti adveniret materie prime immediate.

16 ARISTOTELES 1831, *Categoriae* V, 4a6–9; *Metaphysica* VIII.3, 1044a10–12. See also HAMESSE 1974, 132: 205.

17 According to ARISTOTELES 1831, *Metaphysica* VII.1, and *Metaphysica* VIII.1.

18 This argument reshapes the argument of PETRUS AUREOLUS 1605, 207a: “Item virtutes quatuor elementares erunt in mixto in aliquo gradu, et breviter redibunt omnia inconvenientia, quae Commentator adducit contra Avicennam, ubi supra; et per consequens patet quod non est intellectus Avicennae quod remanent elementa in aliquo gradu retinente rationem formae, quia sua argumenta manifeste cgebant eum hoc negare specialiter ratio illa de acervo.”

19 This argument reshapes the argument of PETRUS AUREOLUS 1605, 207a: “Secundam propositionem, videlicet quod elementa in mixto non totaliter corrumpantur, sed maneant secundum realitatem aliquam pertinentem ad rationem formae, ita quod in forma lapidis est aliqua realitas, quae fuit formae ignis, et aliqua quae fuit formae terrae, et sic de aliis.”

20 Cf. Rogerius Bacon, *In Aristotelis De generatione et corruptione*, in Roma, Collegio Sant’Isidoro, 1/10, 107vb: “Motus tantum est tribus praedicamentis, ubi, qualitatis, et quantitatis; sed mixtio tantum fit per substantiam, quia accidens misceri non potest nisi per substantiam; ergo mixtio erit mutatio, et non motus.”

[6.1] Item, quod est corruptibile et corrumpitur materialiter oportet alterum super alterum dominari totaliter²¹; sed in generatione mixti unum elementum non dominatur supra alterum²²; ergo etc. Maior patet, quia corruptio totalis non est nisi a dominante totaliter. Minor patet, quia elementa equaliter se habent in generatione mixti, quia in generatione mixti neque alterum generatur^{xxxvii}, sed aliud commune his elementis²³. Unde dicunt formam mixti non esse aliud nisi congregatum ex istis realitatibus, continens illas realitates formarum remanentes in mixto²⁴, quia resolutio non est nisi quod realiter est in toto²⁵, ut domus resolvitur in lapides et ligna²⁶, quia realiter sunt in domo. Unde si solum materia esset in mixto, tunc mixta non resolverentur in elementa.

[6.1] Preterea, quando unum corrumpitur ab altero, oportet corrumpens totaliter dominari supra^{xxxviii} corruptum, quia corruptio totalis non est nisi a dominante totaliter; sed in generatione mixti unum elementum non dominatur totaliter supra alterum, immo adequantur potentiis equaliter in fine I *De generatione*²⁷. Unde non generatur alterum elementum, quod tamen^{xxxix} oportet si totaliter obtinent. Unde isti dicunt quod forma mixti non est aliud nisi congregatum ex hiis realitatibus, continens illas realitates sicut medium commune.

21 This argument reshapes the argument of PETRUS AUREOLUS 1605, 208a: "Item, dato quod sit ordo formarum, illa resolutio fit per agens aliquod vincens et praedominans, quaero quid sit ille agens." Perhaps depending on ARISTOTELES, AVERROES 1562-1574, vol. V, V, 6 D, *De caelo* I.2, 269a1-2, t. 7: "necesse est et motus esse illos quidem simplices, hos autem mistos quodammodo. Simplicium quidem simplices; mistos attamen compositorum moveri autem secundum praedominans."

22 Cf. ARISTOTELES, AVERROES 1562-1574, vol. X, *In De generatione et corruptione* I, c. 89, V, 370 F: "Mixtio autem contingit quando equaliter patiuntur et agunt, ita quod veniat post aliqua qualitas media inter duas contrarietates."

23 See PETRUS AUREOLUS 1605, 203b: "Mixtio enim contrariorum sit quando alterum non dominatur super alterum, nec habet aequalem potentiam, si enim alterum fuit simpliciter dominans, esset corruptio dominati, et generatio dominantis; et si aequales fuerint potentiae, tunc non esset aliqua forma, sed cum potentia alterius non fuerit dominans simpliciter; sed si fuerit dominans dominati generabitur ex eis aliquod medium."

24 PETRUS AUREOLUS 1605, 209a: "tunc forma mixti erit vere conflata ex realitatibus elementorum inexistentium aliquo modo in actu."

25 PETRUS AUREOLUS 1605, 207b: "ex hoc habeo propositum, ex quo enim resolutio non est corruptio, sed solutio, ergo illud quod resolvitur, continebat illa in quae resolvitur, alias esset corruptio vera."

26 Cf. ARISTOTELES 1986, 48, *De generatione et corruptione* I.10, 327b29: "Videntur autem que miscentur prius ex separatis convenientia, et queuntia separari rursus."

27 Cf. *supra*, n. 22.

[6.2] Preterea, mixta resolvuntur in elementa, quod non esset, nisi in mixto remaneret aliqua realitas ipsorum elementorum. Sicut enim domus non posset resolvi in lapides et ligna, nisi formaliter essent in domo, sic nec mixtum potest resolvi in elementa, nisi prius elementa inexistant. Unumquodque enim resolvitur in hec ex quibus componitur, I *Physicorum*²⁸.

«Contra opinionem Aureoli»

[7] Sed dubium est, quomodo ista dicta compatiantur se, quia forma elementi non remaneat in mixto secundum aliquod esse, et tamen realitates forme manent. Queratur de realitate ista, utrum sit substantia vel accidens. Hec est prima divisio entis, ut vult Commentator in VII huius et Aristoteles in *Predicamentis*²⁹. Modo illa realitas non potest esse accidens, quia ridiculum est quod forma substantialis sit accidens. Si ista realitas est substantia, vel materia, vel forma, vel compositum ex materia et forma, per sufficientem divisionem ex VII huius et II *De anima*³⁰. Non potest esse materia, quia realitas forme non est materia. Nec ista realitas est compositum ex materia et forma, quia tunc forme elementorum essent materialis pars. Ergo relinquitur quod forma remanet, et hec est dictio contradictoria, scilicet formas elementorum remanere in mixto et non remanere.

[7] Notandum quod hec membra non possunt se compati. Cum^{xl} dicitur quod forme elementorum nullo modo remanent in mixto secundum aliquod esse, nec intensum nec remissum, et tamen alique realitates eorum^{xli} manent, queratur de realitate ista, utrum sit substantia vel accidens^{xlii}. Hec^{xliii} est prima divisio entis per se, ut vult Commentator in VII huius et Aristoteles in^{xliv} *Predicamentis*. Modo illa realitas non potest esse accidens, quia ridiculum est^{xlv} quod forma substantialis^{xlvi} sit accidens. Si ista realitas^{xlvii} est substantia, vel materia, vel forma, vel compositum ex materia et forma, per sufficientem divisionem^{xlviii} ex VII huius et II *De anima*. Non est materia, quia tunc nihil remaneret nisi materia. Nec potest illa realitas esse compositum, quia tunc materia esset pars forme. Ergo oportet quod ille realitates sint forme, et hoc directe contradicit prime conclusioni.

28 HAMESSE 1974, 148: 106 (*Phys.* III.5, 204 b 33–34).

29 Cf. ARISTOTELES, AVERROES 1562-1574, vol. VIII, *In Metaphysicam* VII, c. 32, VIII, 153 I; then HAMESSE 1974, 131: 190: “Individuum substantiae est prius individuis accidentium”; ARISTOTELES 1831, *Categoriae*, 2a35–36. See also ARISTOTELES 1831, *Metaphysica* VII.1, 1028a10–13.

30 HAMESSE 1974, 131: 200 (*De anima* II.1, 412 a 6–9; *Metaphysica* VIII.1, 1042 a 26–27, 28–30);

[7.1] Item, illa realitas forme que remanet oportet quod sit pars forme postquam est aliquid forme³¹. Vel est ergo pars essentialis, vel quantitativa, vel subiectiva³². Non est pars essentialis, quia forma ultima ignis non habet partes essentielles. Nec est pars quantitativa, quia tunc in una parte mixti essent plures dimensiones, quia in una parte mixti sunt plures realitates, ut quatuor realitates, et pars quantitativa non est sine quantitate, nec tamen alia pars quantitativa est sine quantitate, et sic de aliis. Nec est pars subiectiva, quia totum predicatur de parte subiectiva. Ergo quolibet realitas forme est forma, cuius oppositum dicunt.

[7.1] Preterea, illa realitas forme^{xlix} que remanet oportet quod sit pars forme postquam est aliquid forme^l. Vel ergo est pars subiectiva, vel quantitativa, vel essentialis. Non est pars essentialis, quia forma ultima ignis non habet partes essentielles. Nec est pars quantitativa, quia^{li} tunc in una parte mixti essent plures quantitates, quia in una parte mixti sunt quatuor formalitates, et pars quantitativa non est sine quantitate. Si pars subiectiva, tunc erit forme et erit intentum, quia totum predicatur de suis partibus subiectivis, et^{lii} illa realitas erit forma; cuius oppositum dicunt.

«Responsio auctoris»

[8] Dicendum est ergo aliter ad questionem, quod forme elementorum non remanent in mixto secundum esse perfectum in ultima perfectione. Secundo dicendum quod forme elementorum remanent in mixto secundum esse diminutum et refractum³³.

[8] Dicendum est ergo aliter ad questionem, quod forme elementorum non remanent in mixto secundum esse perfectum ultima perfectione. Secundo, quod remanent in mixto sub esse diminuto et refracto.

HAMESSE 1974, 137: 261 (*Metaphysica* XII.3, 1070 a 1–2). See also THOMAS AQUINAS 1950, *Sententia Metaphysicae*, lib. 7 l. 2 n. 7: “Dicit ergo primo, quod subiectum, quod est prima substantia particularis, in tria dividitur; scilicet in materiam, et formam, et compositum ex eis”; THOMAS AQUINAS 1984, *Sententia De anima*, lib. 2 l. 1 n. 5: “Secunda divisio est secundum quod substantia dividitur in materiam et formam et compositum.”

31 PETRUS AUREOLUS 1605, 209b: “idcirco talis realitas non est forma, sed aliquid formae.” See the definition according to Aristotle, in HAMESSE 1974, 128: 160, *Metaphysica* VII.1, 1028a 18–20: “accidentia non sunt entia sed quid entis”).

32 This definition of parts depends on ARISTOTELES 1831, *Metaphysica* V.25, 1023b10–25. A different definition can be found, for instance, in ALBERTUS MAGNUS 1890, 358b (*Metaphysica*, V, tr. 6, cap. 2): “Ex inductis igitur patet partem esse triplicem in genere, quantitativam videlicet, et potestativam, et essentialem”; or in THOMAS AQUINAS 1950, *Sententia Metaphysicae*, lib. 5 l. 21 n. 9–12.

33 Jandun is now using the words of ALBERTUS MAGNUS 1971, 241a, ll. 39–42 (*De caelo et mundo*, III, tr. 2, cap. 8): “et hoc vocat Avicenna manere secundum esse secundum actum diminutum, et non perfectum, non manere autem secundum esse distinctum et perfectum.”

[8.1] Primum probatur, quia, si forme elementorum remanerent in mixto secundum esse perfectum in ultima perfectione, tunc in mixto essent simul qualitates contrarie secundum esse in ultima perfectione; sed hoc est impossibile; ergo primum. Falsitas consequentis patet, quia nullus dicit quod ignis fit calidissimum et frigidissimum. Consequentia patet, quia formas substantiales elementorum in ultima perfectione consequuntur qualitates in summo³⁴, immo tanta est propinquitas qualitatum ad formas substantiales elementorum quod quidam putaverunt qualitates esse formas substantiales eorum, ut imponitur Alexandro³⁵. Unde Commentator dicit quod si elementa manerent in mixto

[8.1] Ratio primi: si forme elementorum remanerent in mixto^{liii} sub suis ultimis perfectionibus, tunc in mixto^{liv} essent simul qualitates contrarie, quod est falsum, quia contraria in summo numquam congregantur. Consequentia patet, quia forme^{lv} elementorum in summo consequuntur qualitates^{lvi}, immo in tantum quod aliqui crediderunt quod qualitates essent formae substantiales eorum, ut imponitur Alexandro. Et Commentator dicit quod^{lvii} si remanerent sub esse perfecto, ex ipsis non fieret unum.

I have not found any reference to the lemma *refractio* in other Parisian masters, except for Mainus de Maineri, *Utrum in eadem portione materie possint esse plures forme substantiales* (Firenze, Biblioteca Nazionale Centrale, Conv. Soppr. J.III.6, f. 103va, partly edited by FIORAVANTI 2016, 155): “[...] et volens contradicere Avicenne, non plus curans nisi illi contradicere, voluit dicere quod remanebant refracte, et non fuit de intentione Commentatoris, ut dicunt.” Maino was student of Jandun in Paris. It cannot be excluded that the word *refractio* depend on Auriol’s concept of *fractio formae*.

34 See AVERROES 2003, 635: “Verum, si formae elementorum relinquuntur in composito in suis perfectionibus, utrum similiter relinquuntur in suis qualitatibus propriis suis formis, aut non (verbi gratia in calore et frigore). Si remanent, contingit ut in composito sit ignis in actu. Ignis enim non est ignis in actu nisi in calore et siccitate quae sunt in summo.”

35 See ALEXANDRE D’APHRODISIAS 1968, 281: “Memorat ostensorum in 2^o *De generatione et corruptione*: ostendit enim ibi quattuor esse causas, secundum quas specificantur prima corpora, hoc est elementa: caliditas enim et frigiditas, siccitas et humiditas. Hae enim ostensae sunt primae existentes tangibilium contrarietatum; secundum primas autem tangibiles contrarietates specificantur elementa.” Against Alexander, see AVICENNA 1977, 66–67: “Deinde iam aestimaverunt multi qui se reputabant sapientes quod aliqua res est substantia et accidens simul secundum respectum ad duo. Dixerunt enim quod calor accidens est corpori ignito, sed igni generaliter non est accidens, eo quod est in eo sicut pars eius; et etiam, quia non potest removeri ab igne, ita ut remaneat ignis. Igitur esse eius in igne non est ut esse accidentis in eo; si enim esse eius in eo fuerit ut esse accidentis in eo, tunc esse eius in eo non erit ut esse substantiae; et hic est magnus error”; and ARISTOTELES, AVERROES 1562–1574, vol. IV, *In Physicam* V, c. 10, IV, 215 H–I: “Et Alexander dicit ad hoc quod hoc quod dixit in libro *Praedicamentorum* est de substantiis, quae sunt compositae ex forma et materia, et in libro *De generatione* loquitur de simplicibus, scilicet de formis tantum quae sunt in prima materia.”

secundum actum extremum, tunc non fieret unum ex his³⁶.

⟨*Responsio auctoris*⟩

[9] Secundum declaratur – scilicet, forme substantiales elementorum remanent in mixto secundum esse diminutum et refractum vel corrumpuntur –, quia iam probatum est quod non remanent secundum ⟨esse⟩ perfectum, sed non corrumpuntur nec alterum nec ambo³⁷. Dicis quod virtus manet, que est qualitas³⁸. Non valet, quia corruptio tantum respicit substantiam, quia dato quod accidentia remaneant, tunc est corruptio, quia corruptio non respicit nisi substantiam³⁹. Unde Aristoteles dicit: “salvatur enim virtus. Ergo derelinquitur”⁴⁰. Tunc quando dicit “ergo derelinquitur”, vel intendit quod derelinquitur secundum formas substantiales, vel secundum qualitates. Si secundum formas substantiales, habetur intentum. Si intendit dicere quod derelinquuntur quantum ad qualitates, tunc petit quia, cum salvatur virtus et qualitas, ergo derelinquitur qualitas. Petit hoc. Aliqui ex

[9] Ratio secundi: forme elementorum remanent in mixto secundum esse refractum vel corrumpuntur, cum sic iam^{lviii} probatum est^{lix} quod non manent secundum esse perfectum, modo non corrumpuntur nec alterum nec ambo; ideo etc.. Si dicas: virtus manet que est qualitas^{lx}, non valet, cum corruptio respiciat subiectum vel^{lxi} substantiam, unde dato quod accidentia possent manere destructa substantia, adhuc esset corruptio, quia corruptio non respicit nisi substantiam. Unde Aristoteles dicit: “salvatur enim virtus eorum. Ergo hoc derelinquitur”. Si ergo intelligit quod derelinquitur secundum substantias formales^{lxii}, habetur intentum. Si vero secundum qualitates, petit^{lxiii} principium: arguendo ‘derelinquitur virtus’, ergo derelinquitur qualitas, que sunt idem omnino. Exponunt aliqui ‘derelinquitur hoc’, ideo quia non amplius determinat de ipsis. Non valet, quia postea satis de

36 Cf. AVERROES 2003, 635: “Relinquitur igitur ut sit unum secundum formam substantialem, et etiam contingit ei ut quilibet earum sit distincta ab alia – utrum igitur si forme elementorum relinquuntur in composito in suis perfectionibus [...]”

37 Cf. ARISTOTELES 1986, 48 (*De generatione et corruptione* I.10, 327b30–31).

38 This comparison of virtue and quality might follow THOMAS AQUINAS 1976, *De mixtione elementorum*, 156b: “Qualitas autem simplicis corporis est quidem aliud a forma substantiali ipsius, agit tamen in uirtute forme substantialis; alioquin calor calefaceret tantum, non autem per eius actionem forma substantialis educeretur in actum, cum nichil agat ultra suam speciem. Sic igitur uirtutes formarum substantialium simplicium corporum in corporibus mixtis saluantur.”

39 Cf. ARISTOTELES, AVERROES 1562-1574, vol. IX, *De substantia orbis et Lunae* IX, 3 H (then HAMESSE 1974, 229: 3: “Una [transmutatio] est substantialis quae transmutat ea nomine et definitione; quae transmutatio dicitur generatio vel corruptio”).

40 Jandun repeats ARISTOTELES 1986, 48 (*De generatione et corruptione* I.10, 327b30–31).

ponunt quod derelinquitur, quia non tractat de his plus⁴¹. Non valet, quia Philosophus adhuc multum tractat de elementis et virtutibus eorum.

[9.1] Item, virtus rei non manet sine substantia rei⁴². Et si virtus rei manet secundum esse remissum, tunc manet substantia secundum esse remissum. Et si manet virtus in summo, et substantia rei manet in summo.

[9.2] Item, Commentator dicit I *Physicorum*: in medio sunt extrema, quia in hoc differt medium inter contraria⁴³ a materia prima, quia in medio sunt extrema in actu, licet non secundum ultimas sui perfectiones⁴³. Sed in materia non sunt forme nisi in potentia⁴⁴. Sed mixtum est medium inter elementa.

[9.3] Item, Albertus dicit I *De generatione* quod elementa habent duplex esse⁴⁵. Primum est substantiale, secundum est per qualitates eorum. Modo dicit quod primum esse adhuc est duplex: unum est esse liberum, aliud ligatum. Modo elementa non manent in

mixtionibus^{lxiv} et de^{lxv} virtutibus eorum <tractat>.

[9.1] Item, virtus rei non remanet sine^{lxvi} substantia rei. Et si virtus rei^{lxvii} secundum esse remissum, tunc forma manet^{lxviii} secundum esse remissum; si^{lxix} secundum esse perfectum, et ipsa met^{lxx} secundum esse perfectum.

[9.2] Preterea, Commentator dicit I *Physicorum* quod in medio sunt extrema in actu, licet non in suis perfectionibus ultimis. Sed in materia non sunt forme^{lxxii} nisi in potentia. Sed mixtum^{lxxiii} est medium inter ista elementa.

[9.3] Preterea, Albertus dicit I *De generatione* quod elementa habent duplex esse. Primum est substantiale, secundum est secundum qualitates eorum. Item^{lxxiv}, adhuc primum esse^{lxxv} est duplex, ut dicit unum liberum et aliud ligatum. Modo elementa non manent

41 AEGIDIUS ROMANUS 1518, 28va: "Salvatur enim virtus eorum. Et quia de his, videlicet utrum sit dare mixtionem, sufficienter dictum est, ideo hec relinquuntur."

42 Cf. THOMAS AQUINAS 1950, *Sententia Metaphysicae*, lib. 7 l. 1 n. 13: "nullum enim accidens invenitur sine substantia, sed aliqua substantia invenitur sine accidente. Et sic patet, quod non quodcumque est substantia, est accidens, sed e contrario: et propter hoc substantia est prior tempore."

43 ARISTOTELES, AVERROES 1562-1574, vol. IV, *In Physicam* I, c. 56, IV, 33 K-L: "Medium vero est utrumque extremum non pura potentia sed alia potentia. In medio enim est utrumque extremum in actu, sed tamen non in ultima perfectione. Est igitur in potentia utrumque extremum quodammodo et in actu alio modo."

44 Cf. ARISTOTELES, AVERROES 1562-1574, vol. VIII, *In Metaphysicam* XII, c. 18, VIII, 305 H-I: "Et ideo dicitur quod omnes proportionales et forme sunt in potentia in prima materia et in actu in primo motore."

45 ALBERTUS MAGNUS 1980, V.2, 171b-172a (*De generatione et corruptione*, I, tr. 6, cap. 5): "De secundo autem quaesito, scilicet qualiter mixtabilia sunt in mixto, attende quod sicut dicit Avicenna, duplex est esse elementorum, scilicet primum, et secundum. Primum autem est esse quod habent in operatione qualitatum suarum quae sunt propriae ipsis, et fluunt ab essentiis ipsorum, quae sunt calor, frigus, humiditas, et siccitas. Dicendum ergo quod

mixto secundum esse liberum (quod est esse quod habent in propriis regionibus, et hoc est esse quod habent in ultima perfectione), sed secundum esse remissum et ligatum in mixto manent.

in mixto secundum esse liberum (quia hoc habent in propriis regionibus, et hoc est quod^{lxxvi} habent in ultima perfectione), sed secundum esse remissum et ligatum manent in mixto.

«Notandum»

[10] Notandum quod aliqui⁴⁶ substantantur super definitionem Lincolnien-
sis in I *Posteriorum*, ubi dicit quod generatio substantie elementorum non est successiva ex divisibilitate forme, sed est successiva ex partibilitate subiecti, quia forma substantialis ignis recepta in una parte in ea non intenditur⁴⁷. Cuius oppositum oportet dicere in ista via. Ad hoc dicendum quod auctoritas Aristotelis est ad oppositum in

[10] Nota. Aliqui substantantur super^{lxxvii} dictum Lincolnien-
sis I *Posteriorum*, ubi dicit quod generatio substantie^{lxxviii} elementorum non est successiva ex divisibilitate forme, sed est divisiva ex partibilitate subiecti, quia forma substantialis ignis recepta in una parte in ea non intenditur. Cuius^{lxxix} oppositum oportet dicere istam viam ponendo. Dicendum quod auctoritas Aristotelis est in oppositum^{lxxx} in III *Celi*; unde^{lxxxi}

quoad esse secundum non manent elementa omnino. Primum autem esse dupliciter dicitur, liberum et integrum, ut ita dicam, et ligatum et partitum. Liberum autem et integrum voco quando ignis vel aliud elementum accipitur per se, sicut sunt elementa in suis sphaeris et locis naturalibus. Ligatum autem voco quando non est ab alio alteratum, et aliud alterans, et divisum in ipsum, et e converso, ita quod plurimum unius sit cum plurimo alterius : et sic manent elementa in mixto quoad esse primum. Et ideo dicit Aristoteles quod virtute manent, virtute, inquam, qua fluunt a tali essentia elementi quam habet in mixto."

46 I found no proper reference. Maybe, GUILLELMUS DE OCKHAM 1984, 619 (*Q. in Phys.*, q. 81): "Confirmatur per Lincolniensem, super 11 cap. I *Posteriorum*, qui dicit 'quod forma rei generandae, maxime in simplicibus, inducit partem materiae post partem successive, quia pars propinquior generati citius praeparatur ad receptionem formae substantialis; unde prius recipit eam quam pars remotior. Et ex hoc intellectu est generatio successiva', secundum eum."

47 ROBERTUS GROSSETESTE 1981, 181 (*Super Posteriora* I.11): "Innuitur autem hic quod generatio sit successiva, cum tamen alibi dicatur quod generatio est subita. Et dico quod forma rei generate maxime in simplicibus inducit partem materie post partem successive, quia pars propinquior generantis citius preparatur ad receptionem forme substantialis, unde prius recipit eam quam pars remotior. Et ex hoc intellectu est generatio successiva, quia pars materie post partem recipit formam substantialem, sed cum pars aliqua recipit formam substantialem non ultra recipit intensionem in illa forma recepta, sed, si forma accidentalis ut calor fuerit recepta in aliquo, potest intendi successive usque ad summum caloris et erit alteratio successiva per divisibilitatem caloris et receptionem partis eius post partem."

III *Celi*⁴⁸; unde Lincolniensis forte fuit illius opinionis, sed plus credendum est Aristoteli et Averroi. Lincolniensis forte fuit illius opinionis, sed magis est credendum Aristoteli et^{lxxxii} Commentatori.

«Dubia»

[11] Dubia sunt hic. Primo quia forma substantialis est substantia; sed substantia non suscipit magis et minus; ergo forme elementorum non intenduntur nec remittuntur. Maior^{lxxxiii} patet VIII huius; minor patet ex *Predicamentis*.⁴⁹ [11] Nota. Dubium est hic, quod^{lxxxiv} forma substantialis est substantia ex VII huius; sed substantia non suscipit magis et minus ex *Predicamentis*; ideo etc.

[12] Item, si forme elementorum intenderentur et remitterentur, tunc generatio esset motus distinctus a mutatione indivisibili⁵⁰; hoc falsum, ergo primum. Falsitas consequentis patet^{lxxxv} VII *Physicorum*⁵¹. Consequentia patet, quia illa forma successive acquiritur que suscipit magis et minus; et ista suscipit per^{lxxxvi} dicta.

[13] Item, si forme elementorum intenderentur et remitterentur, tunc generatio esset motus distinctus a mutatione indivisibili; hoc est falsum; ergo primum. Falsitas consequentis patet, quia nulla pars forme substantialis est [13] Preterea, si forme elementorum intenderentur et remitterentur, tunc pars posterior esset accidens. Consequentia patet, quia advenit materie actuate per partem precedentem.

48 AVERROES 2003, 597: "Vult in hoc capitulo declarare quod nullum corporum simplicium, que sunt elementa rerum compositarum, est eternum ingenerabile et incorruptibile, sed sunt generabilia et corruptibilia secundum omnes partes, sive generatio elementorum adinvicem et compositorum ex eis fiunt secundum divisionem aut transmutationem in substantia."

49 Concerning the major premise, see HAMESSE 1974, 131: 201 (*Metaphysica* VIII.2, 1043 a 2–4). Concerning the minor one, see HAMESSE 1974, 132: 205 (*Categoriae* 5, 4a6–9; *Metaphysica* VIII.3, 1044 a 10–12).

50 ARISTOTELES 1990, 196 (*Physica* V.1, 225 a34–b3): "Quoniam autem omnis motus mutatio quedam est mutationes autem tres sunt dicte. Harum autem que sunt secundum generationem et corruptionem non motus sunt. He autem sunt secundum contradictionem. Necesse est ex subiecto in subiectum mutationem motum esse solum."

51 Cf. ARISTOTELES, AVERROES 1562-1574, vol. IV, *In Physicam* VI, c. 45, IV, 274 L: "Forma est res indivisibilis."

accidens⁵². Consequentia patet, quia posterior pars caliditatis advenit subiecto habenti^{lxxxvii} priorem partem caliditatis, et per consequens posterior pars forme substantialis adveniret materie actuate per priorem partem forme substantialis.

[14] Item, si iste forme intenderentur et remitterentur, tunc ignis reciperet comparisonem⁵³; hoc falsum; ergo et primum. Falsitas consequentis patet, quia ignis non dicitur ignior nec aer aerior. Consequentia patet, quia forma que suscipit magis et minus recipit comparisonem.

[14] Preterea, ignis reciperet comparisonem^{lxxxviii}, ut ignior et aerior, quod est falsum^{lxxxix}. Consequentia patet, quia forma que recipit magis et minus recipit comparisonem.

⟨Ad primum dubium⟩

[ad11] Ad primum dicendum^{xc} secundum Commentatorem. Cum dicitur “substantia non suscipit magis et minus” etc., Commentator solvit quod substantia composita non suscipit magis et minus, et ⟨hoc⟩ habet ratione materie. Et hoc dicit auctoritate Alexandri. Sed simplex substantia in subiecto recepta bene potest suscipere magis et minus. Sed forme elementorum sunt simplices in subiecto recepte. Ergo recipiunt magis et minus, sicut caliditas⁵⁴. Unde quantum ignis de calore amittitur vel acquiritur, tantum de forma ignis. Unde Aristoteles in *Predicamentis* loquitur de substantia com-

[ad11] Ad primum dicendum secundum Commentatorem, quod substantia non suscipit magis et minus^{xc}, Commentator solvit et dicit^{xcii} quod verum est de substantia composita et hoc habet ratione materie. Et hoc dicit auctoritate Alexandri. Sed substantia simplex in subiecto recepta bene suscipit magis et minus^{xciii}. Sed forme elementorum sunt simplices substantie in subiecto recepte. Ergo bene suscipiunt magis et minus, sicut caliditas. Unde quantum de calore igneo amittitur, tantum amittitur vel acquiritur^{xciv} de forma ignis. Unde Aristoteles^{xcv} in *Predicamentis* per totum loquitur de

52 Cf. HAMESSE 1974, 153: 164: “Qualitates elementorum non sunt eorum formae substantiales, licet assimilentur formis substantialibus, unde caliditas non est forma substantialis ignis.”

53 Cf. ARISTOTELES 1961, 11 (*Categoriae* 3b37–4a5): “si est ipsa substantia homo, non erit magis et minus homo, nec ipse a se ipso nec ab altero. Neque enim est alter altero magis homo, quemadmodum album est alterum altero magis album, et bonum alterum altero magis bonum; et ipsum se ipso magis et minus dicitur, ut corpus, album cum sit, magis dicitur nunc quam primo, et calidum magis et minus dicitur.”

54 ARISTOTELES, AVERROES 1562-1574, vol. I, *Praedicamenta* I, 32 F: “Nec nos latere licet quod

posita, quia secundum Boetium cum triplex sit substantia, relictis extremis de media est agendum⁵⁵. Unde etiam Commentator dicit in III *Celi*, quod substantiales forme elementorum sunt medie inter formas accidentales et formas perfectas mixtorum⁵⁶. Ergo oportet quod cum utrisque conveniant, cum formis perfectis mixtorum in esse substantiali, sed cum formis accidentalibus conveniunt in hoc, quod refrangantur et intenduntur, unde ponatur quod aliqua pars caliditatis removeatur ab igne et remittatur, tunc aut pars forme substantialis amittitur vel remanet tota forma substantialis elementi. Si amittitur pars forme substantialis elementi, habetur intentum. Si tota forma substantialis manet, tunc amissa etiam alia parte caliditatis, ignis iterum remanet, quia, quatione una pars caliditatis separatur ab igne, eadem ratione et omnes, cum sint eiusdem speciei. Sed accidentium quorum unum est separabile et aliud inseparabile, non sunt eiusdem

substantia composita^{xcvi}. Secundum Boetium, cum triplex sit substantia, relictis extremis agit de medio^{xcvii}. Unde etiam^{xcviii} Commentator dicit in^{xcix} III *Celi*, quod forme elementorum sunt medie inter formas accidentales et inter formas perfectas mixtorum. Ergo oportet quod cum utrisque conveniant, cum formis perfectis mixtorum in essendo substantias, sed cum formis accidentalibus in hoc, quod refranguntur et intenduntur, unde ponatur quod aliqua^c pars caliditatis removeatur et remittatur, tunc etiam pars forme substantialis amittitur aut remanet tota integra. Si amittitur pars forme substantialis, tunc habetur intentum. Si vero tota forma substantialis manet, etiam^{ci} alia parte caliditatis amissa, adhuc manet et alia amissa adhuc, et sic tandem erit ignis absque omni caliditate, quia omnes partes caliditatis sunt eiusdem rationis et eiusdem speciei specialissime. Illa vero^{cii} quorum unum est^{ciii} separabile et aliud non, non sunt eiusdem speciei^{civ}. Et sicut

vere ipsa substantia non suscipit excessum et defectum, licet aliquae substantiae sint inter se contrariae, ut diximus de elementis – ut exempli gratia ignis. Nam licet aliquis ignis sit calidior aliquo alio igne, et sic de qualitatibus reliquorum elementorum, quae sunt formae eorum, dicendum est ut in libris scientiae physicae probatum est.” The conclusion depends on Alexander’s opinion, as it appears in ARISTOTELES, AVERROES 1562-1574, vol. IV, *In Physicam* V, c. 10, IV, 215 F–H (see *supra*, n. 35).

55 ARISTOTELES 1831, *Metaphysica* VIII.1, 1042a26–27, 28–30. XI.3, 1070a9–12; ARISTOTELES 1831, *De anima* II.1, 412a6–9; II.2, 414a14–16; HAMESSE 1974, 131: 200; 137: 261; 177: 37; 306: 3 (cf. *Metaphysica* VIII.1, 1042a26–27, 28–30. XI.3, 1070a9–12; *De anima* II.1, 412a6–9; II.2, 414a14–16). Many intellectuals wrongly attributed this sentence to Boethius. See for instance THOMAS AQUINAS 1856, *Super Sent.*, lib. 2 d. 3 q. 1 a. 1 arg. 1: “Boetius enim dicit in Comment. praedicamentorum quod Aristoteles, relictis extremis, scilicet materia et forma, agit de medio, idest de composito, cum de substantia determinat.”; THOMAS AQUINAS 1953, *De spiritualibus creaturis*, a. 1 arg. 23).

56 AVERROES 1605, 634: “dicemus quod forme istorum elementorum substantiales sunt diminute a formis substantialibus perfectis, et quasi suum esse est medium inter formas

dici quod una pars caliditatis sit separabilis ab igne et alia non, unde Commentator dicit quod idem est iudicium de toto et de parte⁵⁷. Et sic totus ignis esset sine caliditate, quod nullus diceret. Unde sicut una pars ignis potest esse sine caliditate, sic et totus ignis et pars^{cv}.

[ad11.1] Sed aliqui dicunt quod pars caliditatis ignis secundum se est separabilis ab igne, sed in comparatione ad formas elementorum non est separabilis⁵⁸. Illud non valet, quia qualitas elementorum in comparatione ad formas est ipsamet^{cvii} qualitas unum et idem. Et sic patet quod forme substantiales elementorum intenduntur et remittuntur et in mixto habent esse refractum⁵⁹. Et illud esse in mixto est possibile respectu esse forme mixti, quia forma mixti est maioris actualitatis et perfectionis.

[ad11.2] Item, hoc persuadetur alio modo, quia aliquae sunt forme substantiales que non extenduntur⁶⁰, aliquae sunt que extenduntur et non intenduntur, ut forme substantiales

non una pars ignis potest esse sine omni caliditate; sic etiam^{cvi} totus ignis, quia idem est iudicium de toto et de parte, ut dicit Commentator.

[ad11.1] Sed hic^{cviii} dicunt aliqui quod pars caliditatis est separabilis^{cix} secundum se, tamen in comparatione ad formas elementorum non est separabilis. Istud non valet, quia qualitas elementi in comparatione ad formam elementi^{cx} est ipsamet qualitas secundum^{cx} se, unde idem sunt ista. Et sic patet quod forme elementorum intenduntur et remittuntur et in mixto habent esse refractum. Et hoc esse^{cxii} est possibile respectu esse^{cxiii} forme mixti, quia forma mixti est maioris perfectionis^{cxiv} et actualitatis.

[ad11.2] Preterea, idem persuadetur^{cxv}: quomodo sunt aliquae forme substantiales, quia nec intenduntur nec extenduntur, aliquae sunt que extenduntur, sed non intenduntur. Ergo oportet

et accidentia; et ideo non fuit impossibile ut forme eorum substantiales admiscerentur, et proveniret ex collectione earum alia forma, sicut cum albedo et nigredo admiscuntur, fiunt ex eis multi colores medii."

57 AVERROES 2003, 635: "pars enim et totum idem habent iudicium, idem enim iudicium est partis et totius."

58 He seems to state this against AVERROES 2003, 635: "Si autem amittant quandam partem istarum qualitatum propter mixtionem, et forme tantum remanent perfecte, possibile est ut forme eorum denudentur ab hiis qualitatibus secundum totum: pars enim et totum idem habent iudicium, idem enim iudicium est partis et totius; et totum hoc est impossibile: paucitas vero exercitationis istius viri in naturalibus et bona confidentia in proprio ingenio induxit ipsum ad istos errores."

59 Cf. PETRUS AUREOLUS 1605, 209b: "Ad propositum elementa remanent in mixto fracta, hoc est carentia propriis terminationibus, non autem diminuta sicut albedo manet secundum realitatem a materia fractam, pertinentem ad naturam albedinis in mediis coloribus [...]."

60 I.e. formae immateriales.

mixtorum aliquorum⁶¹. Ergo oportet quod aliquae sint forme substantiales quae extenduntur et remittuntur, ut forme elementorum.

[ad11.3] Item, mixta resolvuntur in elementa, ut lignum resolvitur in ignem, aquam etc. Vel illa preexistebant <vel sunt generate de novo. Si>^{cxvii} illa eadem elementa <preexistebant>^{cxviii} in mixto, et habetur intentum quod forme substantiales elementorum remanent in mixto⁶². Si dicas quod de novo sunt generate, hoc non videtur, quia in instanti corruptionis mixti generantur quatuor elementa, <quod est falsum>^{cxix}, quia nullum agens unum immediate generat quatuor elementa simul et de novo.

esse aliquae quae extenduntur et remittuntur^{cxvi}, et hee sunt forme elementorum.

[ad11.3] Preterea, mixta resolvuntur in elementa, ut lignum resolvitur in ignem et aquam etc. Vel ergo illa preexistebant eadem numero, vel sunt generate de novo. Si illa eadem numero preexistebant, habetur intentum, quia forme substantiales remanent in mixto. Si dices^{cxx} quod de novo sunt generate, hoc est impossibile, quia in instanti corruptionis mixti generantur^{cxxi} quatuor elementa, quod est falsum^{cxix}, quia nullum agens unum et^{cxixiii} idem numero generat quatuor elementa insimul et de novo.

<Ad secundum dubium>

[ad12] Ad aliud, cum dicitur: “tunc generatio esset motus” etc., dicendum quod motus continuus dupliciter dicitur. Uno modo pro quacumque transmutatione <cuius subiectum>^{cxxiv} non maneat in actu per formam⁶³: sic generatio aliqua ut elementorum bene est motus, quia forma ignis continue acquiritur et successive sicut et qualitas. Alio modo capitur motus continuus pro transmutatione continua et successiva, cuius subiectum idem nume-

[ad13] Ad aliud dubium, si forme elementorum etc., dicendum quod non oportet quod sit accidens, quia non advenit materie actuate per formam ultimam^{cxv} et finalem, et hoc requiritur ad hoc quod sit accidens.

[ad13.1] Notandum quod^{cxvii} ponentes hanc opinionem dicunt quod illud esse sub quo remanet forma^{cxvii} elementi in mixto est ita debile^{cxviii} et^{cxix} diminute entitatis, quod elementum non posset seorsum existere absque forma

61 I.e. formae mixtorum.

62 See the opposite argument in PETRUS AUREOLUS 1605, 207b: “Sic dicunt in proposito quod lignum, et universaliter mixtum omne, habet quod resolvatur in quatuor elementa propter ordinem elementorum ad formam mixti.”

63 Cf. ARISTOTELES 1986, 24 (*De generatione et corruptione* I.4, 319b14–18): “Quando autem totum transmutat non manente aliquo sensato ut subiecto eodem, sed quasi ex semine sanguis toto aut ex aqua aer aut ex aere omni aqua [...]”; ARISTOTELES, AVERROES 1562–1574, vol. X, *In De generatione et corruptione* I, c. 23, V, 353 G–H: “Transmutatio autem in substantia est cum nichil in actu remanserit ex illo ex quo est transmutatio, quod sit subiectum illius rei quae in eo fit essentialiter non accidentaliter (v.g. cum sperma transmutatur et fit sanguis

ro manet in actu per formam finalem aliquarum^{cxix} specierum. Modo illa sub utroque termino transmutationis⁶⁴. Et sic generatio non est motus, quia in generatione elementorum non manet subiectum^{cxix} in actu idem numero sub utroque termino transmutationis per formam finalem. Unde quod generatio aliqua sit motus, ut distinguitur a mutatione indivisibili, patet ab Aristotele in III *Physicorum*, ubi diffinit motum quod est actus entis in potentia⁶⁵. Et cum induxit exempla de augmentatione et alteratione, etiam induxit exemplum de generatione, ut ibi patet⁶⁶. Et ibi diffinit motum continuum, quia dicit Commentator quod de ratione motus est continuatio⁶⁷. Et hoc idem patet per Aristotelem VII *Physicorum*, ubi comparat unam generationem alteri, que distinguitur ab alteratione, quia, cum prius ostendit de alteratione, <per> comparisonem comparat postea generationi, quia una generatio est velocior et alia tardior⁶⁸. Modo velox et tardum sunt in continuatione. Ideo non valet.

secundum totum, aut aer transmutatur secundum eo totum et fit aqua)."

64 Cf. ARISTOTELES 1986, 24 (*De generatione et corruptione* I.4, 319b10–12): "[...] alteratio quidem est quando manente subiecto sensato ente transmutat in eius passionibus aut contrariis aut mediis, puta corpus sanum est et rursus laborat manens illud idem"; ARISTOTELES, AVERROES 1562-1574, vol. X, *In De generatione et corruptione* I, c. 23, V, 354 G: "Alteratio igitur est cum subiectum fuerit aliquod in actu et fuerit transmutatum in aliqua specie qualitatis cum ille qualitates fuerint contrarie aut inter contrarias (v. g. quod idem corpus aliquando sanatur et aliquando infirmatur, permanendo idem) [...]."

65 ARISTOTELES 1990, 98–99 (*Physica* III, t. 6): "Divisio autem secundum unumquodque genus, hoc quidem esse actu aliud autem potentia, eius quod potentia existit actus, quatenus huiusmodi motus est [...]."; cf. HAMESSE 1974, 148: 99: "Motus est actus entis in potentia secundum quod in potentia."

66 *Ibidem*.

67 Cf. ARISTOTELES, AVERROES 1562-1574, vol. IV, *In Physicam* III, c. 1, IV, 85 L–M: "Deinde dedit causam in hoc et dixit: 'et ideo accidit multoties etc.', quia infinitum contingit continuo aut est definitio eius accidit multoties, cum definierimus continuum, accipere in sua definitione infinitum. Continuum enim est illud quod dividitur in infinitum."

68 ARISTOTELES, AVERROES 1562-1574, vol. IV, *In Physicam* VII, c. 34, IV, 333 L: "Et consyderan-

⟨*Ad tertium dubium*⟩

[ad13] Ad aliud, cum dicitur: “si forme substantiales” etc., negatur quod pars forme substantialis sit accidens, quia non advenit enti actu per formam finalem et ultimam. Et istud requiritur ad hoc quod forma aliqua sit accidentalis, quod adveniat enti actuato per ultimam et finalem formam⁶⁹.

[ad13.1] Unde notandum quod illi, qui ponunt illud esse elementorum debile et diminutum⁷⁰, ita quod forme substantiales elementorum non possunt esse seorsum sub illo esse in materia, sicut etiam forma generis^{cxxxii} seorsum et divisim non potest esse sine speciebus in aliqua materia. Et sic tantum dicitur forma accidentalis, que advenit enti in actu per formam illam, que seorsum et divisim existere potest in materia.

[ad14] Ad aliud de comparatione dicendum quod nomina non semper adequantur rebus, quia multe sunt res que intenduntur et remittuntur; non habent tamen nomina correspondentia que recipiunt^{cxxxiii} comparationem, quia non omnes res sunt nominate. Unde etiam illud est contra eos, quia bene dicitur magis igneum^{cxxxiv} vel aqueum et sic que accipiuntur per comparationem. Unde illud bene usitatur apud medicos. Maxime si dicas: non dicitur ignior, verum est propter turpem sonum, et de hoc habetur regula in gramatica^{cxxxv}.

⟨*Ad quartum dubium*⟩

[ad14] Ad aliud, cum dicitur: “tunc ignis” etc., dicendum quod nomina non semper adequantur rebus, quia multa sunt que possunt intendi et remitti que non habent nomina comparativa sibi imposita, quia omnes res non sunt nominate. Unde etiam illud est contra eos, quia aliquod corpus dicitur magis igneum et magis aqueum, que accipiuntur ibi pro comparativis. Et hoc bene usitatur apud medicos.

[ad12] Ad aliud, “tunc generatio esset motus verus et continuus”^{cxxxvi} dicendum quod motus continuus dicitur dupliciter^{cxxxvii}. Uno modo pro quacumque transmutatione successiva et continua communiter, sive habeat subiectum quod remanet^{cxxxviii} idem numero^{cxxxix} sub utroque termino transmutationis secundum actum perfectum per formam finale, sive non maneat idem^{cxl} subiectum modo predicto. Et

dum est de generatione et corruptione etc., id est quomodo generatio aequalis generationi. Et dixit hoc quia scito modo aequalitatis, sciatur coniunctio cum aequalitas sit proprium coniunctionis. Deinde dicit ‘et forte erit hoc’ etc., id est et forte sufficit in hoc quod generatio sit aequalis generationi, ut sint in tempore aequali et ut sit idem indivisibile in specie, non in genere [...].”

69 AVERROES 1953, 133–134, and 138–139. Then HAMESSE 1974, 183: 114: “Unde habemus quod omne quod advenit enti in actu est accidens.”

70 I.e., the followers of the Common opinion, like Thomas Aquinas.

Quod autem non dicitur igneior vel aereior, hoc est propter malum sonum, quia hoc est contra regulas gramatice. Regula gramatice prohibet certissima lege^{cxli} ne quis ius vel usus^{cxlii} comparet absque 'magis'⁷¹.

sic aliqua generatio bene est continuus motus^{cxliii}, ut elementorum, quia forma ignis acquiritur continue et successive sicut eius caliditatis. Alio modo capitur motus continuus pro transmutatione successiva que habet idem subiectum in actu per formam sub^{cxliv} utroque termino transmutationis. Et sic generatio non est motus, cum^{cxlv} in generatione, quecumque sit, non manet^{cxlvi} idem subiectum modo predicto^{cxlvii}. Quod autem aliqua generatio sit motus, prout motus distinguitur a transmutatione indivisibili, patet per Aristotelem III *Physicorum*, ubi diffinit motum continuum, ut patet ibi per Commentatorem^{cxlviii}, qui dicit quod ex hac diffinitione apparet^{cxlix} continuitas⁷². Et cum declaravit eam inducendo in alteratione et augmentatione et mutatione secundum locum, exemplificat^{cl} de generatione. Hoc etiam patet auctoritate eiusdem VII *Physicorum*, ubi comparat motus quantum ad velocitatem et tarditatem et declaravit hoc in alteratione et in aliis^{cli}, postea hoc declaravit in generatione. Velocitas autem et tarditas non sunt sine continuatione successiva.

⟨Ad rationes 'quod non' [2, 2.1, 2.2]⟩

[15] Ad rationes. Ad primam, cum dicitur: "si forme elementorum" etc., tunc mixtum non esset unum etc., negatur consequentia. Et ad probationem

[15] Per hoc ad rationes principales, "si remanerent"^{clii} etc. negatur consequentia, quia mixtum est unum per se. Cum dicitur: "omnis forma substantialis"

71 I found no reference for this argument.

72 ARISTOTELES 1990, 96 (*Physica* III.1, 200b15–21): "Diffinientibus autem de motu temptandum est eodem aggredi modo de his que consequenter sunt. Videtur autem motus esse continuorum, sed infinitum apparet primum in continuo; unde et diffinientibus continuum contingit prius indigere multotiens ratione infiniti, cum in infinitum divisibile continuum sit"; cf. ARISTOTELES, AVERROES 1562-1574, vol. IV, *In Physicam* III, c. 1, IV, 85 I: "et incepit hic declarare quod ex diffinitione nature apparet perscrutatio de motu est necessaria."

cum dicitur: “forma substantialis” etc., tunc dat esse completum vel diminutum. Et cum dicitur quod ibi sunt quatuor esse substantiales^{cliii} in materia, que non sunt unum, dicendum quod si ista essent completa et finalia, tunc non constituerent unum esse, et nisi unum esset dispositio ad aliud. Sed tamen, quia ista esse elementorum in mixto sunt dispositiones ad esse quod dat forma finalis mixti, et sunt incompleta et potentialia, et forma mixti ista unit simul in unum per se, unde in mixto bene sunt plura esse materialia et potentialia respectu esse finalis, ex quibus constituitur unum esse per se simul. Unde esse elementorum in mixto est medium inter materiam primam et actum finalem, vel formam mixti finalem. Unde ubi unum propter aliud est, ibi tantum est unum: non unum ut elementum, quia tunc mixtum non esset mixtum.

[16] Ad aliam rationem, cum dicitur: “si ita esset, tunc forma mixti” etc., negatur consequentia. Ad probationem, cum dicitur: “forma cuius subiectum” etc., dicendum quod verum est cuius est accidens, sed si advenit subiecto actuato per formam mediam et incompletam, que est dispositio ad aliam formam, non oportet quod sit accidens. Sic autem est hic, ut dictum est, quare non valet.

[17] Ad aliam rationem, cum dicitur: “si forme substantiales” etc., consequentia negatur, quod plura sint in eodem loco. Et cum dicitur: “quolibet forma elementorum habet suam corporeitatem”, verum est, si est forma in ultima

etc. verum est; vel completum vel diminutum. Cum dicitur: ibi sunt quatuor elementa vel forme eorum^{cliv}, dicendum quod non sunt sub esse completo, ideo non dant esse completum sed^{clv} diminutum et^{clvi} possibile respectu illius esse quod dat forma substantialis^{clvii}. Cum dicitur: “ista sunt quatuor”, dicendum quod si ista esse essent completa et finalia, tunc ex ipsis non fieret unum per se, si unum non esset dispositio ad aliud. Si ista esse^{clviii} quatuor sunt^{clix} diminuta et potentialia, ut^{clx} dispositiones respectu eius^{clxi} quod dat forma finalis, unit ipsa^{clxii} et sic faciunt unum per se. Unde esse elementorum^{clxiii} in mixto est medium inter materiam primam^{clxiv} et actum finalem. Unde ubi^{clxv} unum propter alterum utrobique, tamen illud totum^{clxvi} unum: non unum ut elementum, quia tunc mixtum non esset mixtum.

[16] Ad aliud negatur consequentia. Ad probationem dicendum quod non advenit materie actuate per formam finalem recipiendam, ideo non oportet quod sit accidens^{clxvii}.

[17] Ad aliud, negatur consequentia. Non sequitur quod plura corpora sint simul. Et cum dicitur quamlibet formam elementi consequitur propria^{clxviii} dimensio, verum est, si sit sub esse perfecto^{clxix}. Si vero sit remissa vel refracta

perfectione⁷³: tunc sequitur eam propria dimensio⁷⁴. Sed si sunt forme medie et refracte, et quasi dispositiones medie ordinate ad formam perfectionem, non oportet quod quamlibet formam sequatur dimensio, quia plures tales forme possunt esse sub eadem dimensione materie, et in una parte materie dimensionata unica dimensione que consequitur formam mixti. Unde cum fit mixtio, tunc elementa secundum ultima modica et minima coniunguntur ut minimum capitur seorsum existens. Et tunc minimum unius agit in minimum alterius, ut minimum ignis in minimum aque et econverso et aliud minimum. Et sic per totum. Et tunc refranguntur in excellentiis suis, quibus refractis, et pervento ad debitam proportionem, educitur forma mixti de potentia ad actum⁷⁵. Unde in instanti generationis mixti non corrumpuntur et separantur, quia tunc idem corrumpet se; unde ista transmutant materiam, et sic tunc in instanti generationis mixti <non> corrumpuntur elementa^{clxx}, quia tunc essent non entia. Ergo manent secund-

tam quam dispositio^{clxxi} ad formam finalem, non oportet quod quamlibet sequatur propria dimensio. Immo possunt omnes simul esse sub eadem dispositione^{clxxii} materie, et in una parte materie dimensionata unica dimensione consequente formam mixti. Unde cum fit mixtio, elementa secundum modica et minima coniunguntur ut accipiendo^{clxxiii} minimum seorsum existens. Et tunc minimum unius agit in minimum alterius, ut minimum ignis in minimum aque et econverso, et similiter^{clxxiv} ad minimum in aliud minimum. Et tunc refranguntur in suis excellentiis; quibus refractis, et pervento ad determinatam proportionem, educitur forma mixti de potentia ad actum. Unde in instanti generationis mixti <non corrumpuntur> nec separantur, quia tunc idem corrumpet se; unde ista transmutant materiam, et sic tunc in instanti generationis^{clxxv} <non> corrumpuntur elementa, quia tunc essent non entia^{clxxvi}. Ergo manent secundum esse remissum et refractum in mixto^{clxxvii}. Omnia illa^{clxxviii} sunt in una parte et minima sub una dimensione^{clxxix} que

73 See ALBERTUS MAGNUS 1894, 299b (*Sent.*, lib. II, dist. 17, art. 2): "Ad aliud dicendum, quod secundum esse non dependere a corpore dicitur duobus modis, scilicet quod sit forma et virtus corporea: sicut est calidum, et frigidum, vel harmonia compositionis, vel lapideitas. Sic verum est quod secundum esse non dependet a corpore: quia potest esse sine illo, licet non sit in ultima perfectione sine ipso." THOMAS AQUINAS 1856, *Super Sent.*, lib. 4 d. 43 q. 1 a. 1 qc. 2 co.: "anima in perfectione ultima speciei humane esse non potest a corpore separata."

74 See ALBERTUS MAGNUS 1960, 75a (*Metaphysica*, lib. I, tract. 4, cap. 8): "secundum hoc enim maneret corporeitas una numero in toto et omni motu et mutatione, sicut subjectum motus et mutationis manet unum numero: et secundum hoc corpus naturale constitueretur dimensionibus quantitatum"; THOMAS AQUINAS 1970, *De veritate*, q. 10 a. 4 ad 3: "Ad tertium dicendum, quod si corporeitas sumatur a corpore prout est in genere quantitatis, sic corporeitas non est rei naturalis quidditas, sed eius accidens, scilicet trina dimensio."

75 Cf. THOMAS AQUINAS 1976, 156b, ll. 130–147: "Sic igitur remissis excellentiis qualitatum ele-

um esse remissum et refractum in consequitur^{clxxx} formam mixti, ut dic-
mixto. Et illa omnia sunt in una parte tum est. Ideo etc.
materie, et minima sub una dimensio-
ne que consequitur formam mixti, ut
dictum est.

mentarium, constituitur ex hiis quedam qualitas media que est propria qualitas corporis mixti, differens tamen in diuersis secundum diuersam mixtionis proportionem; et hec quidem qualitas est propria dispositio ad formam corporis mixti, sicut qualitas simplex ad formam corporis simplicis."

- i per se] *om. F*
- ii valet] ut patet *F*
- iii ergo] quatuor *add. F*
- iv in] uno *add. F*
- v quinque] quatuor *F*
- vi preterea] quia *add. F*
- vii consequentia patet] *om. A*
- viii elementi] Substantialis essentialis *A*
- ix ergo] si *add. F*
- x celi] Celi et mundi *F*
- xi quia] ubi vult quod *F*
- xii est non solum] non solum sit *F*
- xiii Avicenna voluit] voluit Avicenna *F*
- xiv forme] substantiales *add. F*
- xv mixto] mixtis *F*
- xvi quia] si *add. F*
- xvii reciperet] recipit *A*
- xviii sed...elementorum] *om. F*
- xix remanent] manent *F*
- xx ergo... ad substantiam] *om. (hom.) F*
- xxi quantum] *om. F*
- xxii opinio nova] nova opinio *F*
- xxiii prima est] primo *F*
- xxiv nec] vel *A*
- xxv cuiuslibet] cuius *F*
- xxvi quia] *om. F*
- xxvii forme] *om. F*
- xxviii vel imperfectum... perfectum] *om. A*
- xxix ex VIII huius] ex IX huius *A*
- xxx et omnes concedunt] ex ergo hoc huius rationis concedunt *F*
- xxxi distincte] indistincte *F*
- xxxii est falsum] falsum est *F*
- xxxiii cuius] contra *A*
- xxxiv in substantia] *add. in marg L*
- xxxv consequens] Falsitas consequentis patet *praem. sed del. L*

- xxxvi consequentia] consequens *F*
- xxxvii generatur] dominatur *praem. sed del. L*
- xxxviii supra] super *F*
- xxxix tamen] non *A*
- xl cum] simul secum, ut *A*
- xli eorum] *om. A*
- xlII queratur... vel accidens] queratur utrum ista realitas sit substantia vel accidens *F*
- xlIII hec] enim *add. F*
- xliv Aristoteles in] ex *F*
- xlV quia ridiculum est] Nullus diceret *F*
- xlvi substantialis] mixti, que non est aliud nisi ille realitates *F*
- xlVII ista realitas] *om. F*
- xlVIII ex... divisionem] *om. F*
- xlIX forme] *om. F*
- l postquam... forme] *om. F*
- li quia] *om. F*
- lii et] sic *add. F*
- liii mixto] mixtis *F*
- liv mixto] eodem *F*
- lv forme] formis *F*
- lvi qualitates] in summo *F*
- lvii quod] *om. F*
- lviii sic iam] iam sit *F*
- lix est] *om. F*
- lx qualitas] equalitas *F*
- lxi subiectum vel] *om. F*
- lxii substantias formales] formales substantias *F*
- lxiii petit] patet *F*
- lxiv mixtionibus] mixtibus *F*
- lxv de] *om. F*
- lxvi sine] nisi *A*
- lxvii rei] *om. A*
- lxviii manet] remanet *F*
- lxix si] sed *A*
- lxx ipsamet] ipsa res *F*

- lxxi contraria] *add. †dco† sed del. L*
- lxxii non sunt forme] forme non sunt *F*
- lxxiii mixtum] multiplex *A*
- lxxiv item] iterum *A*
- lxxv esse] *om. F*
- lxxvi est quod] quidem *A*
- lxxvii super] contra *F*
- lxxviii substantie] *om. F*
- lxxix cuius] in *F*
- lxxx dicendum... oppositum] *om. A*
- lxxxi unde] ubi *A*
- lxxxii Aristoteli et] *om. A; Averroi et F*
- lxxxiii Maior] 8 huius *praem. L sed del.*
- lxxxiv quod] quia si *F*
- lxxxv patet] *iter. L*
- lxxxvi per] *iter. L*
- lxxxvii habenti] habentem *scripsit, deinde corr. L*
- lxxxviii comparationem] compositionem *F*
- lxxxix est falsum] falsum est *F*
- xc dicendum] dubium *L*
- xc i et minus] etc. *F*
- xcii et dicit] dicendum *F*
- xciii et minus] *om. F*
- xciv vel acquiritur] *om. A*
- xcv Aristoteles] *om. A*
- xcvi substantia composita] composito *F*
- xcvii agit de medio] agendum de media *F*
- xcviii etiam] ipse *F*
- xcix in] *om. F*
- c aliqua] ista *F*
- ci etiam] esse *F*
- cii vero] enim *F*
- ciii est] *om. F*
- civ speciei] *om. F*
- cv pars] partis *del. L, deinde correxit*

- cvi etiam] in *F*
- cvii ipsamet] met ipsa *L*
- cviii hic] hoc *F*
- cix est separabilis] separabilis est *F*
- cx non est... elementi] *om. (hom.) F*
- cxi secundum] per *F*
- cxii esse] *om. F*
- cxiii Respectu esse] respectu *A*; esse ipse *F*
- cxiv maioris perfectionis] perfectionis maioris *F*
- cxv persuadetur] possum persuadere *F*
- cxvi aliqui sunt... et remittuntur] *om. A*
- cxvii vel sunt generate de novo. Si] *Coni. ad sensum et iuxta A*
- cxviii preexistebant] *Coni. ad sensum et iuxta A*
- cxix quod est falsum] *Coni. ad sensum*
- cxx dices] dicis *F*
- cxxi generarentur] generentur *F*
- cxxii quod est falsum] *om. F*
- cxxiii et] *om. F*
- cxxiv cuius subiectum] *coni.: su L*
- cxxv formam ultimam] ultimam formam *F*
- cxxvi quod] *om. F*
- cxxvii forma] Esse formae *A*
- cxxviii debile] debilis *A*
- cxxix et] *om. F*
- cxx subiectum] idem *add. sed del. L*
- cxxi aliquarum] aliqua suarum *F*
- cxxii generis] forma *iter. L*
- cxxiii recipiunt] recipiant *F*
- cxxiv igneum] igneus *F*
- cxxv ignior... grammatica] igneor in gramatica. Regula grammaticae *F*
- cxxvi et continuus] *om. A*
- cxxvii dupliciter] duplex *A*
- cxxviii remanet] manet *F*
- cxxix numero] omnino *F*
- cxl idem] ad *F*

cxli lege] leges *L*
 cxlii usus] *coni. ex editione 1505*
 cxliii continuus motus] motus continuus *F*
 cxliv sub] ab *A*
 cxlv cum] *om. A*
 cxlvi manet] *om. A*
 cxlvii modo predicto] predicto modo *F*
 cxlviii ut patet ibi per Commentatorem] Ut ibi Commentator *A*
 cxlix apparet] patet *F*
 cl Exemplificat] exemplificavit etiam *F*
 cli aliis] et *add. F*
 clii remanerent] remanent *A*
 cliii substantiales] substantialis *L*
 cliv vel forme eorum] *om. F*
 clv sed] et *F*
 clvi et] sed *F*
 clvii substantialis] finalis *F*
 clviii si ista esse] sed ista *F*
 clix sunt] esse *add. F*
 clx ut] et *F*
 clxi eius] esse *F*
 clxii unit ipsa] vincit ipsam *A*
 clxiii elementorum] elementi *A*
 clxiv materiam primam] primam materiam *F*
 clxv ubi] *om. F*
 clxvi tamen illud totum] Tantum *F*
 clxvii accidens] actus *A*
 clxviii propria] *om. F*
 clxix perfecto] Subiecto vel completo *A*
 clxx elementa] tunc autem elementa corrumpuntur *add. L*
 clxxi dispositio] dimensio *A*
 clxxii eadem dispositione] una dimensione et dispositione *F*
 clxxiii accipiendo] potest accipi *F*
 clxxiv et similiter] similiter et *F*
 clxxv mixti nec separantur... generationis] *om. (hom.) A*

clxxvi non entia] inessentia *A*

clxxvii mixto] mixtum *A*

clxxviii omnia illa] illa omnia *F*

clxxix dimensione] dimensiones *F*

clxxx consequitur] consequuntur *F*

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