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## Exploring the medical *excerpta et opuscula* in the Greek manuscript collection of the Estense Library and their connections with Giorgio Valla's *œuvre* – Part 2: MUT. GR. 213, ff. 235<sup>v</sup>-237<sup>r</sup>

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### ABSTRACT

Following up on the scope of the previous paper, this study will focus on two medical texts contained in MUT. GR. 213, ff 235<sup>v</sup>-237<sup>r</sup> mostly through the lens of their textual transmission. My analysis has identified in the first text (f. 235<sup>v</sup>) a brief twofold compilation based on Aetius of Amida's *Libri Medicinales* on the prognosis of favourable and unfavourable signs in diseases (*a. Περί προγνωστικῶν σημείων υγείας τε καὶ ζωῆς τῶν ἄρρώστων, b. Σημεία θανάτου*), while the second text offers a new witness of the short anonymous treatise *De constitutione mundi et hominis* (Περὶ τῆς κατασκευῆς τοῦ κόσμου καὶ τοῦ ἀνθρώπου) already edited in 1841 by J. L. Ideler (partly) and in 2006 J. Jouanna, used by Valla as a source in his encyclopedia *De expetendis et fugiendis rebus opus* (1501).

**Keywords:** Estense Library - *Mutinenses Graeci* - Mut. gr. 213 - Giorgio Valla's *De expetendis et fugiendis rebus* - Ancient Greek and Byzantine medicine - Renaissance medicine - Medical Humanism

The previous study on the MUT. GR. 213, folios 239<sup>r</sup>-242<sup>r</sup>, conducted by Sandro Passavanti has enlightened some unknown medical excerpts, however, no specific correspondence could not be established with Giorgio Valla's work. This paper is another attempt to connect other medical extracts of the mutinensis with the œuvre of the humanist.

The codex MUT. GR. 213 contains medical extracts on folios 235-237 that had not been identified to this day. Unnoticed in Puntoni's catalog, they appear under the heading: *excerpta varia ex Theophili, Galeni, Hippocratis et ceterorum medicorum operibus*<sup>1</sup>. Analyzing the nature of these medical texts, their sources, and their possible reading by Giorgio Valla in his treatise *De medicina* (included in his encyclopedia *De experientis et fugiendis rebus opus*, 1501), can clarify certain aspects of the history of the Mutinensis manuscript and the sources used by the humanist when composing his magna opera.

### 1. MUT. GR. 213, ff. 235<sup>v</sup>, 11 – 236<sup>r</sup>, 5

#### **A compendium on prognostic signs from Aetius of Amida**

After a selection of passages on urines from the Hippocratic treatise *De natura hominis* and the so-called *Diaeta salubri*<sup>2</sup> (*Nat. hom.* 15-24, from f. 224<sup>v</sup>), the MUT. GR. 213 contains a short text on the signs announcing the good or bad resolution of diseases (Περὶ προγνωστικῶν σημείων ὑγείας τε καὶ ζωῆς τῶν ἀρρώστων, followed by a section on Σημεία, θανάτου).

This text, hitherto gone unnoticed in philological literature, proves to be an abridgment from chapters 3 (Τίνα ἐστὶν ἀγαθὰ σημεῖα) and 4 (Τίνα ἐστὶ φαῦλα σημεῖα) from the fifth book of Aetius of Amida's *Libri Medicinales*<sup>3</sup>. I provide here below the transcription of the text contained in the MUT. GR. 213 alongside its source, underlining the parallels and adding in footnotes some variants indicated by Olivieri<sup>4</sup>.

#### MUT. GR. 213, 235<sup>v</sup>, 17-23

Περὶ προγνωστικῶν σημείων ὑγείας τε καὶ ζωῆς τῶν ἀρρώστων:

Εὐχρον πρόσωπον· καὶ αἱ ἐν αὐτῷ αἰσθήσεις οὐσα κατὰ φύσιν· ἅμα ἀναπνοῆ καὶ διαλέκτω, ἀγαθόν· ἀγαθὸν δὲ, καὶ εὐσχημος κατάκλησις, ὡς μάλιστα εἴθιστο καὶ ὑγειαίνων· τρέφεσθαι δὲ ῥαδίως, τὸ σῶμα πάν· καὶ ἄδιψον εἶναι τὸν νοσοῦντα· καὶ εὖ ἔχειν, περὶ τὰ προσφερόμενα·

#### Aet. V, ch. 3, 20-24 (ed. Olivieri)

Τίνα ἐστὶν ἀγαθὰ σημεῖα.

εὐσμον<sup>5</sup> πρόσωπον· δυνήση γὰρ κάκ τοῦ προσώπου μόνου βεβαίαν καὶ πιστὴν πρόγνωσιν λαβεῖν, πρὶν ἄμασθαι τοῦ νοσοῦντος, λέγω δὴ ἐκ τῶν ἐν αὐτῷ αἰσθήσεων, ὅπως ἀκοῆς ὀσφρήσεως· πρὸς τούτοις δὲ καὶ ἐκ τῆς ἀναπνοῆς, ἥς χωρὶς ζῆν οὐχ οἶόν τε, δηλούσης ἡμῖν ὅπως ἡ καρδιά διάκειται. πάρεστι δὲ ἐν τῷ προσώπῳ καὶ τὸ διαλεκτικὸν ὄργανον τῆς γλώττης ἐμφαῖνον ἡμῖν τὴν ῥώμην τε καὶ ἀρρωστίαν τοῦ λογιστικοῦ μορίου τῆς ψυχῆς. ἀγαθὸν δὲ καὶ ἡ εὐσχημῶν κατάκλησις, ὡς μάλιστα εἴθιστο ὑγαιάνων<sup>6</sup> ἐπιστρέφεται<sup>7</sup> ῥαδίως. Εὐφορόν τε καὶ τὸ σῶμα πάν ὁμαλῶς θερμὸν εἶναι, ἄδιψον ὡς οἶόν τε ὑπάρχειν καὶ τὸ ἐρρῶσθαι τὴν διάνοιαν καὶ εὖ

ἔχειν πρὸς τὰς προσφορὰς ἀγαθόν. ἀγαθὸν δὲ καὶ ἡ εὐπνοία καὶ ἡ εὐταξία τῶν σφυγμῶν· ἐκ τούτων γὰρ καὶ τῶν λεχθησομένων γνωσόμεθα τὴν ῥώμην τε καὶ ἀρρωστίαν τῶν τριῶν ἐνεργειῶν τῆς ψυχῆς· τὸ γὰρ ἐρρῶσθαι τὴν διάνοιαν καὶ τὸ μὴ καταρρεῖν ἐπὶ πόδας, δηλοῖ τὸν ἐγκέφαλον κατὰ πάντα ἐρρῶσθαι· τὸ δὲ εὐανθὲς τοῦ προσώπου τὸν ἐγκέφαλον κατὰ πάντα ἐρρῶσθαι· τὸ δὲ εὐανθὲς τοῦ προσώπου καὶ ἡ εὐπνοία καὶ ἡ εὐσφυξία δηλοῖ τὴν καρδίαν ἐρρῶσθαι. ἔστι γὰρ ὅτε εὐανθὲς γίνεται τὸ πρόσωπον μετὰ δυσπνοίας, ὡς ἐπὶ τῶν περιπνευμονικῶν· τὸ δὲ ἄδιψον εἶναι καὶ εὐ ἔχειν πρὸς τὰς προσφορὰς, τὴν φυσικὴν δύναμιν ἐν τε τῷ ἥπατι καὶ ἐν παντὶ τῷ σώματι ἐρρῶσθαι δηλοῖ.

ἀγαθὸν δὲ, καὶ ὕπνοι χρηστοί· καὶ ἰδρώτες, ὄλου τοῦ σώματος εὐκρατοί· καὶ ὀμαλοί, καὶ σύμμετροι· καὶ ἐν τῷ δέοντι καιρῷ, ἐπιφαινόμενοι· ὑποχόνδριον, ἀνώδυνον, καὶ εὐβαφές· καὶ πρὸς τούτοις ἔτι διαχώρημα κοιλίας τὲ καὶ οὕρων, καὶ πτυσμάτων ἀπαραπόδιστα, καὶ χρηστὰ φερόμενα· πέψεως, γνωρίσματα·

#### MUT. GR. 235<sup>v</sup>, 23-236<sup>f</sup>, 5

Σημεία, θανάτου:

Κροτάφων, σύμπτωσις· ὀφθαλμοί, πεπηγότης καὶ κοῖλοι· δάκρυον, ἀκούσιον· καὶ τὰ λευκὰ τῶν ὀφθαλμῶν, κατὰ τοὺς ὕπνους ἀποφαινόμενα μὴ εἰθισμένως οὕτω καθέυδειν· κατάκλησις, πονηρά· ἐὰν αἱ ρίνες δξύνονται· ἐὰν ὁ εἰς ὀφθαλμὸς, σμικριθῇ· ἐὰν κάρωσις τοῦ ἡμίσεως προσώπου γένηται· ἐὰν ὁ θώραξ ῥέγχι· ἐὰν μελανθῶσι τὰ ἄκρα· ἐὰν οἱ ὄνυχες γρυπώσωσιν· ἐὰν ἄφνωτραπὴ ὁ νοῦς· ἐὰν τὰ διαχωρήματα ὑγρὰ καταρχόμενα, λίγδας ἔχουσιν ἐλεοειδεῖς· ἢ μελαγχολικὸς ἔμετος, ὡς διαχώρημα γένηται.

Ἀγαθὸν δὲ καὶ ὕπνοι χρηστοί καὶ ἰδρώτες δι' ὄλου τοῦ σώματος εὐκρατοί τε καὶ ὀμαλοί καὶ σύμμετροι καὶ ἐν τῷ δέοντι καιρῷ ἐπιφαινόμενοι· ὑποχόνδριον ἀνώδυνον τε εἶναι καὶ εὐβαφές καὶ πρὸς τούτοις ἔτι τὰς διαχωρήσεις κοιλίας καὶ οὕρων καὶ πτυσμάτων ἀπαραποδίστους τε εἶναι καὶ χρηστὰ τινα πέψεως φέρειν γνωρίσματα·

#### Aet. V, ch. 4, 1-4 (ed. Olivieri)

Τίνα ἐστὶ φαῦλα σημεῖα.

Προσώπου παντὸς καὶ κροτάφων σύμπτωσις, ὀφθαλμοί πεπηγότες καὶ κοῖλοι, δάκρυον ἀκούσιον, τὰ λευκὰ τῶν ὀφθαλμῶν ἐν τοῖς ὕπνοις<sup>8</sup> ὑποφαινόμενα<sup>9</sup> μὴ ἔχουσιν ἔθος<sup>10</sup> οὕτω καθέυδειν, καὶ τὸ σῶμα καταρρεῖν γε ἐπὶ πόδας καὶ τὸ πρηγῆς<sup>11</sup> κεῖσθαι ...

As we can see in this synopsis, the author of our compendium omitted most of the signs carefully listed in his source, but he retained the final mentions of sleep, sweats, and digestion. This could be due either to the particular scope of the compilation or to material issues such as a loss of text during its former transmission. Another point of interest in this reworking is the conclusion of the subsection on the signs announcing the death of the patient, a text that has no parallels either in Aetius or elsewhere. Some lexical elements may suggest it to be a genuine Byzantine addition, as γρυπώσωσιν, ἄφνωτραπή, or λίγδας<sup>12</sup>.

Other clues lead us to affirm that the excerpts come from a fairly old version of Aetius' work. The comparison with the variants pointed out by Olivieri in his critical edition

shows that our excerpt contains readings from two different branches of the tradition and shares variants with two witnesses: the *Palatinus graecus* 199 (Px, 13th-14th century, φ family branch according to Olivieri), and the *Parisinus graecus* 2228 (Cp, 14th-15th century, χ family branch according to Olivieri).

More can be revealed on the nature and the purpose of this text through research on its transmission, since I was able to find further copies of it in other manuscripts. The *Parisinus graecus* 2303 and the *Laurentianus Antinori* 101, both dated around the 15th century, share filiation links with our *Mutinensis*, as they contain roughly the same treatises in a similar order<sup>13</sup>.

Par. gr. 2303 (15th c.)	Laur. ant. 101 (15th c.)	MUT. GR. 213 (16th c.)
79-82 <sup>v</sup> De venae sectione varia	70 <sup>v</sup> -74 De venae sectione varia	Opera Galenica
82 <sup>v</sup> -87 De natura hominis varia = Περί τῆς κατασκευῆς τοῦ κόσμου καὶ τοῦ ἀνθρώπου	74-79 De natura hominis varia = Περί τῆς κατασκευῆς τοῦ κόσμου καὶ τοῦ ἀνθρώπου	218-224 <sup>v</sup> De alimentis (Theophanes Chrysobalantes)
87-90 <sup>v</sup> De urinis carmen (Nicephorus Blemmides)	79-84 De urinis carmen (Nicephorus Blemmides)	224 <sup>v</sup> -235 <sup>v</sup> Nat. Hom. 15-24 (de urinis + diaeta salubri)
<b>90<sup>v</sup>-91 Exc. Aetius</b>	<b>84-v Exc. Aetius</b>	<b>235<sup>v</sup> Exc. Aetius</b>
91-97 De alimentis (Theophanes Chrysobalantes)	84 <sup>v</sup> -92 <sup>v</sup> De alimentis (Theophanes Chrysobalantes)	236-237 De natura hominis varia = Περί τῆς κατασκευῆς τοῦ κόσμου καὶ τοῦ ἀνθρώπου
97-107 <sup>v</sup> Medica, De venae sectione varia (Tit. Ὅπως δεῖ τὰς φλεβοτομίας ποιεῖν)	92 <sup>v</sup> – 106 <sup>v</sup> Medica, De venae sectione varia (Tit. Ὅπως δεῖ τὰς φλεβοτομίας ποιεῖν)	237 Genitura varia
110-170 <sup>v</sup> (107 <sup>v</sup> -110: pinax) Theophanes Chrysobalantes, Epitome de curatione morborum	106 <sup>v</sup> -113 <sup>v</sup> Nat. Hom. 15-24 (De diaeta salubri)	239-242 De venae sectione varia

Our excerpt is positioned between texts on urines (namely Nicephorus Blemmides' *De urinis carmen*) and nutrition (the final part of the Hippocratic *De natura hominis* and the *De alimentis* by Theophanes Chrysobalantes), except that in the Modena manuscript the excerpt from Aetius is followed by a treatise also transmitted in the two other witnesses from the 15th century, the *Περί τῆς κατασκευῆς τοῦ κόσμου καὶ τοῦ ἀνθρώπου* (on which see *infra*). No results were yielded by research on other manuscripts already linked in scholarship to MUT. GR. 213, or on further witnesses of Nicephorus' *De urinis carmen* and Chrysobalantes' *De alimentis*<sup>14</sup>. The comparison of the versions of our text transmitted in these three *codices* shows only minimal variant readings and allows us to identify the Parisian manuscript (P) as the archetype for the versions of the Laurentianus (A) and the Mutinensis (M).

*Tit.* Προγνωστικὰ σημεῖα περὶ ζωῆς καὶ θανάτου (add. Περί ζωῆς in marg. ext. P) P A  
Περί προγνωστικῶν σημείων ὑγείας τὲ καὶ ζωῆς τῶν ἀρρώστων M || κατάκλησις P M,  
κατάστασις (post corr. κατάκλισις) A || ὑγιαίνων P A ὑγειαίνων M || σμικρινθῆ P A σμικριθῆ  
M || διαχωρήματα P M διαφωρήματα A || κατερχόμενα P A καταρχόμενα M || ἐλαιοειδεῖς P  
L ἐλεοειδεῖς M

Giorgio Valla included in his *De Medicina* (publ. 1501) two brief chapters on favourable and unfavourable signs of disease (*Quae nam sunt signa bona* and *Quae sint mala signa*). However, we can easily recognize in it not our abridged writing *On prognostic signs* but its original source Aetius.

## 2. MUT. GR. 213, ff. 236<sup>r</sup>, 6 – 237<sup>r</sup>, 16

### *Anonymi De natura hominis or On the Constitution of the Universe and the Human Body*<sup>15</sup>.

The excerpt from Aetius is followed by a short treatise on the relations between the universe and such features of the human body as humors, ages, or properties (Περὶ τῆς κατασκευῆς τοῦ κόσμου καὶ τοῦ ἀνθρώπου). It was already published by Ideler in *Physici et medici graeci minores* (1841, vol. I, p. 303-304), who, however, did not report which manuscript he relied on for his edition. In 2006, Jouanna published a new partial edition after collating two further witnesses, the Ambrosianus F 23 sup. E and the Parisinus graecus 2303. He also mentions the existence of another manuscript (Zurich C 136) that he could not consult (information provided by K.-D. Fischer)<sup>16</sup>.

The text we read in our Mutinensis is lengthier than that edited by Ideler. After consulting the database Pinakes and the information it provides from several manuscript catalogs, as well as the codices themselves, whenever possible, I could identify a total of fifteen witnesses of the treatise. Among the ten codices I consulted directly (dating mostly from the 14th to the 16th century) some report a long version of the text (α), some a short one (β)<sup>17</sup>.

Περὶ τῆς κατασκευῆς τοῦ κόσμου καὶ τοῦ ἀνθρώπου ( <i>On the Constitution</i> )	Direct consultation ?	Long version (α) ( <i>Des. ταχέως, πολιῶς ἐκ βάλλοντα</i> )	Short version (β) ( <i>Des. καὶ ἕως γήρου</i> )
<u>Laur. Plut. 75.19</u> , ff. 27-31, 14 <sup>th</sup> c.	Yes	x	
<u>Vindonbonensis med. gr. 40</u> , ff. 125-127, 14 <sup>th</sup> c.	Yes	x	
<u>Parisinus gr. 2303</u> , ff. 82 <sup>v</sup> -83, 15 <sup>th</sup> c.	Yes	x	
<u>Laur. ntinori 101</u> , ff. 74-75 <sup>v</sup> , 15 <sup>th</sup> c.	Yes	x	
<u>Mutinensis gr. 213</u> , ff. 236-237, 16 <sup>th</sup> c.	Yes	x	
<u>Parisinus 2318</u> , ff. 81-86 <sup>v</sup> , 14 <sup>th</sup> c., a. 1383-1384	Yes		x
<u>Ambrosianus F 023 sup</u> (M-B 331), ff. 134-137 <sup>v</sup> , a. 1486	No		x
<u>Monacensis gr. 521</u> , ff. 1-3, 15 <sup>th</sup> c.	No		x
<u>MS.MSL 60</u> , ff. 46-48, 15 <sup>th</sup> c.	Yes		x
<u>Parisinus gr. 2315</u> , ff. 72-76 <sup>v</sup> , 15 <sup>th</sup> c.	Yes		x
<u>Ricciardanus 0071</u> , ff. 113-114, a. 1428	No		x
<u>Vat. gr. 1759</u> , ff. 234-238, 15 <sup>th</sup> c.	Yes		x
<u>Ideler</u> (edit. 1840), 303-304	Yes		x
<u>Philippus 1583</u> (180), ff. 94v-101, 15 <sup>th</sup> c.	No		
<u>Zurich C 136</u> , ff. 118 <sup>ar-v</sup> , 15 <sup>th</sup> c.	No		

Some connections between these manuscripts are unquestionable. As for group β, the Par. gr. 2318 is the archetype of 2315. With regard to α, we may surmise that Par. gr. 2303 and MUT. GR. 213 stem from the same archetype, while Laur. ant. 101 is undoubtedly a copy of the Parisinus, since the latter shows variant readings typical of α which are omitted by the former, as we will see *infra*. I will therefore present next the text of the treatise *On the Constitution of the Universe and the Human Body* as we read it in MUT. GR. 213 together with the variant readings from the other manuscripts. What follows is a diplomatic transcription of the text and is not a new edition of the treatise. However, the analysis of the relationships between the manuscripts and the review of their variant readings is a first step for potential research and editions, as well as the study of their possible relations with Valla.

For the sake of clearness, I have adapted the structure of the treatise to the layout (declarative sentence followed by a list of elements or characteristics) presented in Jouanna's important research on late period witnesses transmitting the theory of the four humors<sup>18</sup>.

### Collated manuscripts

Manuscript	Abbreviation	Group
Vindonbonensis medicus graecus 40, 14 <sup>th</sup> c. (ff. 125-128)	W	α
Laurentianus Plut. Gr. 75.19, 14 <sup>th</sup> c. (ff. 27-28 <sup>v</sup> )	L	α
Parisinus graecus 2303, 15 <sup>th</sup> c. (ff. 82 <sup>v</sup> - 83 <sup>v</sup> )	P	α
Laurentianus Antinori 101, 15 <sup>th</sup> c. (ff. 74-75 <sup>v</sup> )	A	α
Mutinensis graecus 213, 16 <sup>th</sup> c. (ff. 236- 237)	M	α
Parisinus graecus 2318, 14 <sup>th</sup> c., a. 1383-1384 (ff. 81-82 <sup>v</sup> )	C	β
MSL 60, 15 <sup>th</sup> c. (ff. 46-v)	Q	β
Parisinus graecus 2315, 15 <sup>th</sup> c. (ff. 72-73 <sup>v</sup> )	D	β
Vaticanus graecus 1759, 15 <sup>th</sup> c. (ff. 234-238)	V	β
Ideler (ed. 1806), p. 303-304	ID.	β

### *On the Constitution of the Universe and the Human Body* (M with variant additions)

Ὁ [om. ὁ ID.] κόσμος οὗτος, [add. ὁ μέγας Q] συνέστη [συνέστηκεν β ID. W L] ἐκ τεσσάρων [δ' L] στοιχείων·

- ἐκ [add. τε L] θερμοῦ·
- ψυχροῦ·
- ξηροῦ·
- καὶ ὑγροῦ·

ἤγουν,

- ἐξ ἀέρος·
- πυρός·

- γῆς·
- [add. και β ID.] ὕδατος

- και ὁ μὲν ἀήρ, ἔστι θερμὸς και ὑγρὸς· [transp. και ὁ μὲν αἰθήρ ἐστὶ θερμὸς και ξηρὸς L]
- τὸ δὲ πῦρ, θερμὸν και ξηρὸν· [transp. ὁ ἀήρ, θερμὸς και ὑγρὸς L]
- ἡ δὲ γῆ, ψυχρὰ και ξηρὰ· [transp. τῷ ὕδωρ, ψυχρῶν και υγρόν L]
- τὸ δὲ ὕδωρ, ψυχρὸν και ὑγρόν· [transp. ἡ δὲ γῆ, ξηρὰ και ψυχρὰ L]

[add. θῶμεν δὲ και τὴν συγγενειαν αὐτῶν, ἐπὶ διαγράμματος· cum diagramma L]

ὠσαύτως δὲ [om. δὲ β ID W] και ὁ ἄνθρωπος, ὁ μικρὸς κόσμος, συνέστηκεν ἐκ τεσσάρων στοιχείων· [“Οὕτως μὲν οὖν ἡ τῶν καθόλου στοιχείων συμπλοκή και συγγένεια· ἔλθωμεν διη και ἐπὶ τῆς τοῦ ἀνθρώπου κατασκευῆς, τοῦ μικροῦ τούτου κόσμου, ὅπερ και οὗτος ἐκ τεσσάρων στοιχείων σύγκειται L]

- ἐκ θερμοῦ [add. λέγω L]·
- ψυχροῦ·
- ὑγροῦ· [ξηροῦ β ID P A L]
- και ξηροῦ· [και ὑγροῦ β ID P A L]

ἦγουν [om. ἦγουν ID.]

- ἐξαίματος·
- χολῆς ξανθῆς,
- και [χολῆς D C V L ID.] μελαίνης·
- και φλέγματος·

- και τὸ μὲν αἷμα, ἔοικεν τῷ ἀέρι, θερμὸν [add. ὄν L] και ὑγρὸν· [hic transp. -- τὸ δὲ φλέγμα, ἔοικε τῷ ὕδατι, ψυχρὸν και ὑγρὸν W]
- ἡ δὲ [om. δ. L] ξανθὴ χολή, [ἡ χολή ἢ ξανθὴ β ID P A W.] ἔοικεν [ἀναλογεῖ L] τῷ πυρὶ, θερμὴ [add. οὕσα L] και ξηρὰ· [hic transp. -- τὸ φλέγμα, ἔοικε τῷ ὕδατι ψυχρὸν και ὑγρὸν· β]
- ἡ δὲ [om. δ. L] μέλαινα χολή, [ἡ χολή ἢ μέλαινα ἔοικεν β ID P A W.; add. ἔοικε L] τῇ γῆ, ψυχρὰ και ξηρὰ [add. οὕσα L]:
- τὸ δὲ [om. δὲ ID.] φλέγμα, [add. ἔοικεν P A ID.; add. ἀναλογεῖ L] τῷ ὕδατι ψυχρὸν και ὑγρὸν [τ. ὑ. ψυχρῶ ὄντι και ὑγρῶ L]

- Καὶ τὸ μὲν αἷμα, πληθύνεται [πληθύνεται D] εἰς τὸ ἕαρ [τῷ ἔαρι L]·
- ἡ δὲ [om. δ. L] ξανθὴ χολή, [ἡ χολή ἢ ξανθὴ, πληθύνεται (om. πληθύνεται ID.) P A W β ID.] εἰς τὸ θέρος [τῷ θέρει L]·
- ἡ δὲ χολή [om. δ. χ. L] μέλαινα, [ἡ χολή ἢ μέλαινα πληθύνεται (om. πληθύνεται ID.) β ID P A W] εἰς τὸ φθινόπωρον· [μετόπορον P A, ἐν φθινόπωρον β, τῷ φθινοπώρῳ L]
- και τὸ φλέγμα, [add. πληθύνεται PA] εἰς τὸν χειμῶνα [ἐν χειμῶνι W L β ID.]·

- [add. και W β ID.] ἐπὶ μὲν οὖν [om. οὖν W β ID.] τῆς παιδικῆς ἡλικίας τὸ αἷμα πληθύνεται [πληθύνεται D] ἕως ἐτῶν ἰδ' [δεκατεσσάρων W β], και ἔστι θερμὸν και [om. και W] ὑγρὸν και γλυκὺ·
- ἐπὶ δὲ τῶν νεανίσκων, ἡ χολή ἢ ξανθὴ πληθύνεται [ἡ ξανθὴ χολή L], ἕως ἐτῶν εικοσιοκτῶ, [κη' P A L ID] και ἔστι θερμὴ και ξηρὰ, και πικρὰ [om. κ. ἐ. - πικρὰ L]·
- ἐπὶ δὲ τῆς τελείας ἡλικίας, ἡ χολή ἢ μέλαινα [ἡ μέλαινα χολή L ID.] πληθύνεται [om. πλ. L] ἕως ἐτῶν μβ' [τεσσαρακονταδύο W β, μρ' ID.]· και ἔστι ψυχρὰ και ξηρὰ· και ὀξώδης· [om. κ. ἐ. - ὀξώδης L]·

- ἐπὶ δὲ τῶν γερόντων, τὸ φλέγμα πληθύνεται, ἕως ἐτῶν π' [ὀγδοήκοντα W β], καὶ ἔστιν ψυχρὸν καὶ [om. καὶ W] ὑγρὸν καὶ [om. κ. ID.] ἄλμυρόν [ἄλμηρόν P A] [om. κ. ἐ.- πικρὰ L].
- Καὶ τὸ μὲν αἷμα ἔστιν ἐν τῇ καρδίᾳ· καὶ ἐν τῇ καρδίᾳ [κ. ἐ. αὐτῇ L] τὸ πνεῦμα·
- ἡ χολή ἢ ξανθὴ [ἡ ξ. χ. L] ἐν τῷ ἥπατι, καὶ ἐν τῷ στομάχῳ·
- ἡ χολή ἢ μέλαινα [ἡ μ. χ. L], ἐν τῷ σπληνί, καὶ ἐν τῇ ψυᾷ [ψοᾶ W L β, spat. vac. ID.].
- καὶ [om. κ. L] τὸ φλέγμα, ἐν τῷ ἐγκεφάλῳ, καὶ ἐν τῇ κύστει [καὶ τῇ κύστει (-ει C V ID.) W β]

Πόθεν οἱ μὲν τῶν ἀνθρώπων εἰσὶ [Ἀπορία (in marg. ext.): Ἐκ τῆς αἰτίας τῶν τοιούτων στοιχείων, οἱ μὲν τῶν ἀνθρώπων εἰσὶ L]

- χαριεντικοὶ, [χαρίεντες L]
- καὶ πέζωσι [παίζωσι P A Q, γελῶσι W D C V L ID.]
- καὶ γελῶσιν· [παίζουσιν W L ID. παίζουσιν C V πέζουσιν D]

- οἱ δὲ εἰσὶ στυγγοὶ [στυγνοὶ P A W L β ID.] καὶ σκυθρωποὶ [νοθοὶ L], καὶ κατηφεῖς·
- οἱ δὲ, ὀργίλοι καὶ πικροὶ [om. κ. π. L], καὶ μανιώδεις· [μανιώδης P Q]
- οἱ δὲ, ῥάθυμοι, καὶ ὀκνηροὶ, καὶ ὀλιγόψυχοι·

ἡ αἰτία [ἐτία D], αὕτη ἔστιν [ἡγοῦν αἰτία, ἔστιν αὕτη· W; transp. ἔστιν αὕτη β ID.] ἐκ τῶν τεσσάρων [δ' P A ID.] στοιχείων [om. ἡ αἰτία – στοιχείων, add. Λήσις in marg. ext. L]

- οἱ μὲν οὖν ἐξαίματος καθαρωτάτου [-οι W, καθαροῦ L] τυγχάνοντες, [τυχόντες P A] οὗτοι [om. οὔτοι β ID.] εἰσὶ πάντοτε [om. π. L] χαρίεις, καὶ [om. κ. L] πέζωσι [παίζωσι A W Q C V, παίζουσι L ID.] καὶ [τε καὶ L] γελῶσι· καὶ [add. τῷ Q L] σώματι [-τά ID.] εἰσὶ ῥοδινοὶ, καὶ ὑπόπυροι, [ὑπόπυρι P ὑπόπυρροι ID.] καὶ καλόχροοι [καλλίχροοι ID., κ. τῷ χρώματι κάλλιστοι L].
- ὅσοι [οἱ L] δὲ ἀποξανθῆς χολῆς [χολῆς ξανθῆς P] τύχωσιν [τύχάνουσιν W β ID., om. τ. L], οὗτοι εἰσὶν ὀργίλοι, καὶ πικροὶ, καὶ εὐτολμοὶ· καὶ [add. τῷ L] σώματι [-τά ID.] εἰσὶν ὕπαυροι, καὶ ξανθόχροοι [ὑπαυροὶ καὶ ξανθίχροοι (ξανθήχροοι β) W β]:
- ὅσοι δὲ ἀπὸ χολῆς [om. χ. L] μελαίνης [μελένης P, transp. μ. χ. W β ID.] τύχωσιν [τύχάνουσιν W β ID.], οὗτοι εἰσὶ ῥάθυμοι· καὶ ὀλιγόψυχοι, καὶ φιλάσθενοι· καὶ σώματι [-τά ID., κ. τῷ χρώματι L] εἰσὶ μελανόψιοι, καὶ μελίτριχοι [μελάντριχοι β ID.; εἰσὶ - μελίτρι.: εἰσὶ μελάνες, ἀλλὰ μὴν καὶ κόμη L].
- ὅσοι δὲ ἀπὸ αἵματος [φλέγ- cog. in marg. ext.] [φλέγματος P A W L β ID.] τύχωσιν [τύχάνουσιν W β ID.], οὗτοι εἰσὶ λυπηροὶ, καὶ ἀμνήμονες· καὶ τῷ σώματι εἰσὶ λευκόχροοι·
- ὅτι μὲν οὖν τὰ παῖδια [Τὰ μὲν οὖν παῖδια ὅτι εἰσὶν β ID.] ἐκ τοῦ αἵματος εἰσὶ χαριεντικὰ [χαριεντα L], καὶ παίζωσι [πέζωσι P A παίζουσι L ID.] καὶ γελῶσι· καὶ διατοῦτο [transp. διατ. κ. L] ὅταν κλαύσωσιν, τάχιστα [μάλιστα W β ID.] μεταλάσσονται [μεταλλάσσονται A W Q μεταλλάσσονται C V ID., transp. μεταλλάσσονται τάχ. L].
- οἱ δὲ νεανίσκοι ἐκ τῆς ξανθῆς χολῆς, εἰσὶ πικροὶ καὶ ὀργίλοι, καὶ μανιώδεις· [μανιώδης P] καὶ διατοῦτο, ὅταν τι [om. τι W L β ID.] πικρανθῶσι, βραδύ [-δέως W Q C V ID. -δαίως D] μεταλάσσονται· [μεταλλάσσονται A Q D, μεταλλάσσονται C V L, λάσσονται ID.].
- οἱ δὲ τέλειοι [τέλειοι P] ἄνδρες, ἐκ τῆς μελαίνης [μελένης P] χολῆς [add. ὄντες L] εἰσὶ ῥάθυμοι, [add. καὶ ID.] ὀλιγόψυχοι· καὶ ὀκνηροὶ· [ὀκνηροὶ P] καὶ διατοῦτο ὅταν μαίνονται, [saut de même à même, add. εἰσὶν (εἰσὶ W Q C V L ID.)] δυσμετάβλητοι·
- οἱ δὲ γέροντες εἰσὶν ἐκ [εἰς ID.] τοῦ φλέγματος λυπηροὶ [πολυπηροὶ ID.] καὶ (om. καὶ W) στυγνοὶ καὶ ἀμνήμονες· καὶ διατοῦτο ὅταν μαίνονται P A W L β ID.] ἀμετάβλητοι διαμένωσι [διαμένωσιν A διαμείνουσι L ID.].



[add. ὑπὸ Q D C, ὅτι L] τῶν τεσσάρων [δ' A L] στοιχείων ἔστιν [εἰσι W] ἡ αἰτία, καὶ τοῦ κόσμου, [om. ἡ - κόσμου W] καὶ τοῦ ἀνθρώπου· καὶ διαταῦτα [διατοῦτο L; om. ἔστιν – διαταῦτα Q D C] ὁ κόσμος, γαληνᾶ [γαληνὰ D], καὶ ἀκαταστατεῖ· καὶ ὁ ἄνθρωπος ὑγιαίνει [ὑγιαίνει P A W Q D C L] καὶ ἀσθενεῖ: [om. ὑπὸ τῶν τεσσάρων – καὶ ἀσθενεῖ V ID.]

ἔχουσι δὲ τινὰ τόπον ἴδιον [ἴδιον ID.] κατὰ μέρος, ἕκαστον τούτων

- τὸ αἶμα, διὰ ῥίνος πνέη [πνέει A W β ID.]·
- ἡ χολῆ ἢ ξανθὴ [ἢ ξανθὴ (add. ἢ β) χολῆ W β ID.], διὰ τῶν ὠτων [add. πνέει W β ID.]·
- ἡ μέλαινα [μελένα P] χολῆ [om. χ. ID.], διὰ τῶν ὀφθαλμῶν [add. πνέει W β]·
- καὶ τὸ φλέγμα, διὰ τοῦ στόματος [add. ἐκχέει W β ID.]·

μερίζονται δὲ οἱ χυμοὶ, διὰ [add. τὸν ID.] τεσσάρων· [δ' ID.]

- αὐτῇ [ἐν τῇ W β ID.] πρώτη [α' ID.] ἡλικία, [add. καὶ W] κυριεύει [κυριεύη P] τὸ αἶμα, ἕως ἐτῶν ἰδ' [δεκατεσσάρων W β]·
- ἐν τῇ δευτέρῃ [β' P ID.], ἢ ξανθὴ χολῆ, ἕως ἐτῶν, κη' [εἰκοσιοκτὼ W β]·
- om. [saut de même à même, add ἐν τῇ γ' (τρίτη A W β) ἢ μέλαινα (μέλαινα A W β ID.) χολῆ [om. χ. ID.] ἕως ἐτῶν μβ' (τεσσαρακονταδύο W β) P A W β ID.]

ἐν τῇ τετάρτῃ [δ' P ID.] τὸ φλέγμα, ἕως ἐτῶν π' [ὀγδοήκοντα W β]· καὶ ἕως γήρους [om. ἔχουσι δὲ τινὰ τόπον ἴδιον - καὶ ἕως γήρους L]

#### [β om. seq. tex.]

ἔχουσι δὲ [add. καὶ P L] ἰδίαν γνώμην·

- τὸ αἶμα, ποιεῖ τὸν ἄνθρωπον [om. ἀνθ. L] ὄλον καλὸν· [add. ἡγουν τῷ εἶδει· οἶον, γρήγορον· ἀνυπερήφανον W] ἀπλοῦν [om. καλ. ἀπλ. L]· χαριεντικὸν [χαριέντα L]· παίζοντα, καὶ γελῶντα·
- ἡ χολῆ ἢ ξανθὴ [transp. ἢ ξ. χ. L], ποιεῖ τὸν ἄνθρωπον, ὄλον [om. ὁ. L] πικρὸν· [add. καὶ W] ὀργίλον· κακὸχρῶν· [add. μανιάρην· P, μηνιάρην A, (add. καὶ L) μνησικάκον W L]
- ἡ μέλαινα χολῆ [om. χ. L], [add. ποιεῖ τὸν ἄνθρωπον P A W L] ὄλον ἐπίβουλον· φθονερόν [transp. φθ. ἐ. L]· πολυμέριμον [om. π. L]· [add. κ. L] πολύθλιβον·
- τὸ δὲ [om. δὲ P A L] φλέγμα, ποιεῖ τὸν ἄνθρωπον, ὄλον [om. ὁ. L] καλὸν τῷ εἶδει· [add. ἐγρήγορον (γρήγορον W) ἀνυπερήφανον (ἀκενόδοξον L)· P A W L] [add. καὶ W L] ταχέως, πολιάς ἐκ βάλλοντα [βάλλει W]·

[add. ἐν οἷς εὐρ' γσεις τοῦτο· καὶ ἐπὶ τοῖς νέοις· ὅτι ἀπὸ τοῦ ψυχροῦ φλέγματος τυγχάνουσι καὶ αἱ τρίχες τούτων, λευκαί· W; add Σώματι μὲν ἔοικεν ὁ κόσμος· καὶ ὥσπερ τὸ σῶμα ἐνὸς τινὸς ὁποιοῦδήποτε πλεονάσαντος χυμοῦ ἀνώμαλον γίνεται καὶ οἶον τρέπεται καὶ νοσοῦνται, οὕτω καὶ τὸ περιέχον ἡμᾶς περιγείον, ἐν τῷ μάχεσθαι τὰ στοιχεῖα ἐνὸς τινὸς πλεονάσαντος, ἢ ἀνωμαλία τοῦ περιέχοντος γίνεται·- L]

Evident chronological reasons rule out that Valla could have consulted the MUT. GR. 213<sup>19</sup>, even though it cannot be excluded that he could have read the treatise in its model. The analysis of Valla's *De medicina* provides nevertheless several clues to Valla's knowledge of the treatise *On the Constitution of the Universe and the Human Body*. We will give two examples, concerning respectively Valla's arrangement of humoral theory and the influence of the sky on the human body. One should not forget

that our anonymous opus is a composite text compiled assembling different sources. When exploring the possible linkages among Valla's text and *On the Constitution*, the individualization of its sources must be addressed to avoid confusion with, and to exclude, other similar medical treatises.

On folio Sii<sup>v</sup> of Valla's encyclopedia, we find a text about humors, ages, and places of production and exhalation:

*Sane augetur sanguis in humano corpore ad annos usque xiiii. Flaua bilis ad annos usque xxii. Atra bilis ad xlii. Pituita lxxx usque habetque sanguis receptaculum cor respirationem nares. Flaua bilis uesiculam in qua fel ipsum. Spiracula aures, atra bilis receptaculum splenem et sinistrum latus, spiraculacculos. Pituita receptaculum uesicam urinae, spiraculum os potissimum, sed et alias aliquando occupat partes.*

In this passage, the theory of the four humors is arranged along two axes:

1. The humors predominating in the body according to age (*Ita in reliquos, ubi humor aliquos abundarit*)

- Sane augetur sanguis in humano corpore ad annos usque xiiii.
- Flaua bilis ad annos usque xxii.
- Atra bilis ad xlii.
- Pituita lxxx usque

2. The places where the humors are located and from where they are exhaled.

- habetque sanguis receptaculum cor respirationem nares.
- Flaua bilis uesiculam in qua fel ipsum. Spiracula aures
- atra bilis receptaculum splenem et sinistrum latus, spiraculacculos.
- Pituita receptaculum uesicam urinae, spiraculum os potissimum, sed et alias aliquando occupat partes.

This scheme is consistent with the theory of the four humors as it was developed in late Antiquity and beyond. An analysis of Valla's possible sources would be of great help in understanding his *modus operandi* and in verifying whether a model for the MUT. GR. 213 could have been used by the humanist in his encyclopedic work.

Jouanna highlighted in an article from 2005 a set of sources in which humors are related to human temperaments. We add to this list the anonymous *On the Constitution of the Universe and the Human Body*<sup>20</sup>:

- Letter of Vindicianus (Latin)
- Pseudo-Soranus (Latin)
- Pseudo-John of Damascus (Latin, *Quid est homo?*)
- The treatise *On the Pulse and Human Temperament* (Greek)
- Anonymous *On the Constitution of the Universe and the Human Body* (Greek)

Let us start with the location of the humors and their exhalation. Valla could have built on Vindicianus and Pseudo-Soranus as well as *On the Constitution*.

Valla's text	Vindicianus	Ps-Soranus	Ps-John Dam.	<i>On the Pulse and Human Temperament</i>	<i>On the Constitution of the Universe</i>
habetque sanguis receptaculum cor respirationem nares.	x (A and B)	x			x
Flaua bilis uesiculam in qua fel ipsum. Spiracula aures	x (B)	x			x
atra bilis receptaculum splenem et sinistrum latus, spiraculacculos.	x (A and B)	x			x part.
Pituita receptaculum uesicam urinae, spiraculum os potissimum, sed et alias aliquando occupat partes.	x (A and B)				x

Valla's account of the relations between humours and ages of life shows strong similarities both with Ps.-John of Damascus' *Quid est homo*, *On the Pulse and Human Temperament* and with *On the Constitution of the Universe*. On the other hand, the Letter of Vindicianus assigns two humors to each age, while Pseudo-Soranus follows a different order of exposition. Here are parallels and variations between Valla, the treatise *On the Pulse*, and *On the Constitution*.

Humor	Valla	Ps.-John Dam.	<i>On the Pulse</i>	<i>On the Constitution of the Universe</i> <sup>21</sup>
Blood	XIV	ιδ'	ιδ' (A)	ιδ'
Yellow bile	XXII	κη'	κη'	κη'
Black bile	XLII	ν'	μβ' (A), ν' (P)	μβ', μρ' (ID.)
Phlegm	LXXX	γέρους	π'	π'

Ps.-John of Damascus can therefore be removed from the list of the possible sources of Valla for this section, being the only one in which the age of eighty years in relation to phlegm is not explicitly mentioned. It still remains that the treatise *On the Constitution* is the outcome of the assembly of different sources<sup>22</sup>. The most influent among them is *On the Pulse and Human Temperament*, on which (the end of) *On the Constitution* seems to be moulded. In Valla's Latin adaptation we may recognize the influence of John of Damascus and other sources with regard to the section on humours and ages, while the section on the locations of humours and their exhalation shows parallels with the Letter of Vindicianus and Pseudo-Soranus: since this is the same pattern of *On the Constitution of the Universe*, it is likely that Valla followed this text without consulting any other of the aforementioned Greek sources.

Further clues point to the same conclusion. After a rendering of the pseudo-Hippocratic treatise *Epistula ad Ptolemaeum regem de hominis fabrica*<sup>23</sup>, Valla returns on the connections between the elements of the universe and humors in the body in a collection of texts toward the end of the compilation, gathered under the heading *De corporis commodis et incommodis* (folio QQ<sup>v</sup>, chapter ii):

*De caeli cum nostris corporibus affinitate*

*Anni tempora quatuor, cum elementis affinitatem habent: aer cum uere est siquidem mediocriter humidus, et mediocriter calidus, et intemperie saluberrimus, respicitque pueritiam; aestas aetatem iuuenilem, ignis faciem refert, qui pariter calidus, et aridus autumnus confinis terrae est, quae arida, et frigida, sicut aquae hyems, quae frigida et humida grandiore aetatem respiciens. Haec ipsa tempora humores suis singula augent: sanguine muer, bilem flauam aestas auget et amaram, autumnus acrem et atram, pituitam hyems. Verum tamen tempora tam mixta sunt...*

The title of this section, *On the sky and its affinities with our bodies*, strongly echoes the Περί τῆς κατασκευῆς τοῦ κόσμου, καὶ τοῦ ἀνθρώπου. The link was already highlighted by A. M. Ieraci Bio, who identified the *Epistula ad Ptolemaeum regem de hominis fabrica* as Valla's source for these two chapters of the second book of *De corporis commodis et incommodis* (Book 48 of the encyclopedia)<sup>24</sup>. But the parallel between the *Epistula* and the development of Valla's chapter stops at τροπαὶ δὲ ὡσαύτως ἐν τῷ ἐνιαυτῷ τέσσαρες: ἔαρ, θέρος, μετόπωρον καὶ χειμῶν ("The seasons of the year are also four: spring, summer, autumn, and winter", ed. Ermerins p. 289, 7), whereas the pseudo-Hippocratic writing continues with the connection of the seasons with properties and humors (289, 9-15). Valla, instead, goes on pointing out the properties related to taste and ages of life, a topic which is not mentioned in the *Epistula*. Here, he provides two systematizations. According to the first, the four elements of the Universe – air, fire, earth, and water – are to be linked to the seasons, life stage, and their properties:

Element	Season	Life stage	Property
Air	Spring	Childhood	Moist, warm
Fire	Summer	Youth	Warm, dry
Earth	Autumn	(Adult)	Dry, cold
Water	Winter	(Adult)	Cold, moist

Afterwards, he discusses the humors in relation to the seasons, in some cases associating them to a particular taste:

Humor	Season	Taste quality
Blood	Spring	
Yellow bile	Summer	Bitter
Black bile	Autumn	Pungent/sour
Phlegm	Winter	

Another possible source then could be the anonymous treatise *On the Constitution of the Universe and the Human Body*. Both Valla and our anonymous author present the elements of the universe in a different order from that of the pseudo-Hippocrates writing. For instance, when linking humors, seasons, and taste, the *Epistula* provides a list where humors are connected with tastes (279, 7-9), and mentions only briefly the four seasons (289, 7-8):

Valla	<i>On the Constitution</i>	<i>Epistula</i> , Ps.-Hipp. (general presentation)	<i>Epistula</i> , Ps.-Hipp (relation with humors) <sup>25</sup>
Aer	ἀήρ	πῦρ	αἷρ (blood)
Ignis	πῦρ	ἀήρ	ῥῥῶρ (phlegm)
Terra	γῆ	ῥῥῶρ	πῦρ
Aqua	ῥῥῶρ	γῆ	γῆ

We can also compare the order of humors in Valla's description with the *Epistula* and the *On the Constitution*:

Valla	<i>On the Constitution</i>	<i>Epistula</i> , Ps.-Hipp.
Blood	αἷμα	αἷμα
Yellow bile	χολή ξανθῆ	φλέγμα
Black bile	μέλαινα χολή	χολή ξανθῆ
Phlegm	φλέγμα	μέλαινα χολή

In conclusion, these parallels show that Valla also drew on our anonymous treatise also in this part of his compilation. We adhere to Ieraci Bio's opinion on the identification of the source of the first chapter (*De corporis*) in the pseudo-Hippocratic *Epistula*, a text that he could have consulted in a manuscript of his library, the MUT. GR. A.P.5.17<sup>26</sup>. But the following chapter (*De caeli nostris corporibus affinitate*), although showing strong similarities with the second part of the *Letter to Ptolomaeus*, has to be considered as an insertion from the treatise *On the Constitution of the Universe*<sup>27</sup>. The collection of Greek codices at the Estense library contains a large part of the books that belonged to Giorgio Valla. As for the MUT. GR. 213 manuscript, it is evident that due to asynchrony, Valla would not have been able to consult it. However, his knowledge of the treatise *On the Constitution*, as our research suggest, could indicate that he could have had access to the copy model. The research conducted has allowed us, however, to explore in depth a part of the content overlooked in Puntoni's catalog and to address more precisely the textual history of the analyzed excerpts.

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- Sonderkamp J, Untersuchungen zur Überlieferung der Schriften des Theophanes Chrysobalantes [sog. Theophanes Nonnos., *Poikila Byzantina* 7. Bonn: Rudolf Habelt; 1987.

1. Puntoni V, *Indice dei codici greci della Biblioteca Estense di Modena. Studi italiani di filologia classica* 4. Firenze: F. le Monnier; 1896. pp. 509-510.
2. The hypocratic *Diaet. Sal.* deals with the regim of life and administrating a proper nutrition.
3. Ed. Olivieri (1935).
4. The text from the manuscript Mut. gr. 213 is a diplomatic transcription.
5. εὐσχημον Cp, Px, X, ω; εὐχρο(ν)ον ψ (...σχήμων supra scrips. m. 1a T).
6. Ante υγ. add. και Ιχψ (exc. T).
7. ἐπιστρέφεται Ι στρέφεσθαι χ ψ ω.
8. κατὰ τοὺς (κατ' Px) ὕπνους Cp Mo ω.
9. ἐπιφ. Px.
10. ἔχ. εθ.] εἰθισμένον (...νω Cp ...νοι Px) γε (om. Cp) Px ω.
11. τὸ πρην.] ἄσημον ἐπὶ γαστέρα τε Cp ἄσημος κατάκλισις ἐ. γαστρὸς δὲ Px ἀσχήμων κατάκλισις ἐπὶ γαστέρα τε A P T.
12. The words γρῦπώσωσιν, ἄφνωτραπή (possibly an error from ἄγνωτραπή) and λίγδας seem to be hapax legomena – the first one attested in the *Book of Job* (39:30), ἄγνωτραπή in the *Orphic Hymns* (60.1), and the third one in Aristophanes' *The Wasps* (line 1202). Regarding the use of λίγδας in a medical context, see also the "Epitome of the Kriaras Dictionary" (greek-language.gr), [https://www.greek-language.gr/greekLang/medieval\\_greek/kriaras/search.html?lq=%CE%BB%CE%AF%CE%B3%CE%B4%CE%B1](https://www.greek-language.gr/greekLang/medieval_greek/kriaras/search.html?lq=%CE%BB%CE%AF%CE%B3%CE%B4%CE%B1).
13. According to Sonderkamp 1987 the Par. gr. 2303 is the archetype of the Laur. ant. 101, and probably also of the Mut. gr. 213 (a view confirmed from what follows here).
14. I have consulted the following manuscripts where our excerpt does not appear: Phillips 1587 (180), Ricc. 0071, Monac. gr. 521, Par. gr. 2315, Par. gr. 2318.
15. Also referred as *On the Constitution* in this paper.
16. Jouanna J, La postérité du traité hippocratique de la Nature de l'homme: la théorie des quatre humeurs. In: Müller CW, Brockmann C and Brunschön CW (eds), *Ärzte und ihre Interpreten: Medizinische Fachtexte der Antike als Forschungsgegenstand der Klassischen Philologie*. Berlin, Boston: B. G. Teubner; 2006. p. 123, reports that Ideler's edition is the outcome of Dietz's collation.
17. Another differentiating phenomenon identified is the title of the treatise that follows *On the Constitution*. Containing the same text about the human generation (the treatise was edited by Ideler in 1841 I, 294, Περὶ γενήσεως ἀνθρώπου καὶ γονῆς), α presents the heading Περὶ συλλήψεως ἀνθρώπου, while β has Περὶ γονῆς.
18. Indeed, this treatise is confined to Jouanna's research, especially to be compared with Jouanna's studies on the Greek source found on the theory of the four humors and the four temperaments of the Latin tradition Jouanna J, La théorie des quatre humeurs et des quatre tempéraments dans la tradition latine (Vindicien, Pseudo-Soranos) et une source grecque retrouvée. *Revue des Études Grecques*, tome 118. Paris: Les Belles Lettres; 2005; the witnesses on the posterity of the Hippocratic treatise on the theory of the four humors (Nature of Man) (Jouanna J, Ref. 16), the anonymous treatise of "L'autre Hippocrate" (Jouanna, J, L'autre Hippocrate: un traité anonyme inédit Sur les quatre humeurs par questions et réponses (Vat. gr. 293, XVe s., fol. 223r-225v). In: Cilliers L (ed.), *Asklepios. Studies on Ancient Medicine*. ActaClassica 2008; Suppl. II:76-92.); and the anonymous treatise on the four elements (Jouanna J, Anonyme, Sur les quatre éléments (Laur. plut. 75.19, fol. 26v-26r): Publication d'un nouveau témoignage sur la chronobiologie quotidienne des quatre humeurs. *Galenos* 2009;3:75-99). Ideler's version of our anonymous treatise

- On the Constitution of the Universe and the Human Body* is mentioned in Jouanna J, La théorie des quatre humeurs et des quatre tempéraments dans la tradition latine (Vindicien, Pseudo-Soranos) et une source grecque retrouvée. *Revue des Études Grecques*, tome 118. Paris: Les Belles Lettres; 2005 and Jouanna, J, Anonyme, Sur les quatre éléments (Laur. plut. 75.19, fol. 26v-26r): Publication d'un nouveau témoignage sur la chronobiologie quotidienne des quatre humeurs. *Galenos* 2009;3:81 and note 9. In the latter, Jouanna provides a sort of guide to variant readings after collating Ideler's edition with the Laur. Plut. 75.19.
19. See on this Passavanti S, Exploring the medical excerpta and opuscula in the Greek manuscript collection of the Estense Library and their connections with Giorgio Valla's *œuvre* – Part 1: Mut. gr. 61, ff. 31r-33r; Mut. gr. 213, 239r-242r. *Medicina nei secoli* 2024;36(3);63-76
  20. Jouanna J, Ref. 16, also covers a section of the *On the Constitution of the Universe and the Human Body* relating it to the previously mentioned sources in order to analyse, in particular, the theory of the four humours.
  21. *On the Constitution of the Universe* presents on two occasions the links between humors and ages. In both cases, the ages coincide.
  22. Jouanna J, Ref. 18. pp. 81-82, states that the treatise *On the Constitution of the Universe and the Human Body* is heterogeneous, with the second source being *On the Pulse and Human Temperament*.
  23. Ermerins FZ (ed.), *Anecdota medica Graeca*. Leiden; 1840. pp. 279-297.
  24. Ieraci Bio AM, Per lo studio dell'umanesimo medico. L'Ippocrate di Giorgio Valla. In: Manetti D et al. (eds), *Ippocrate e gli altri*. Rome: Publications de l'École française de Rome; 2021. pp. 437-460.
  25. In this case, the order of the elements is modified following the order of the humors: blood, phlegm, yellow bile, black bile. Furthermore, we note that the manuscript Laur. plut. 75.19 presents a variant with this order (see collation of *On the Constitution of the Universe and the Human Body*, page XX).
  26. Ieraci Bio AM, Ref. 24.
  27. The text of the *Epistula* would resume again towards the middle of the chapter: *Vernum tempus igitur calidum et humidum, nisi atra aliorsum trahant, ob hoc sanguinis est in corpore augmentum. Aestas calida.*