# Ars uero longa: Teaching Hippocrates in Medieval Italy

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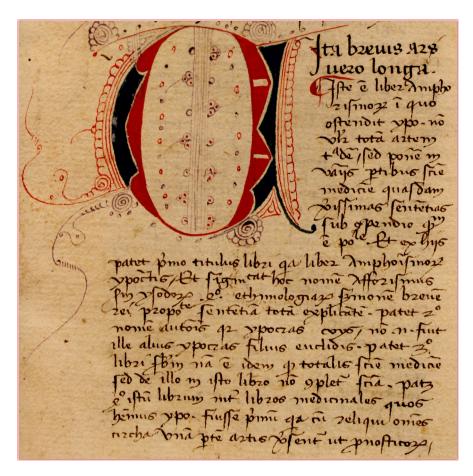


Image: the beginning of the first Aphorism, followed by Ugo's commentary. The first line reads: "Vita breuis ars." (Ugo Benzi, Expositio et questiones super Aphorismis Hippocratis [Osler MS 170], fol. 1R/André Lametti—Image courtesy of Osler Library)

#### ARS VERO LONGA: TEACHING HIPPOCRATES IN MEDIEVAL ITALY

It is custom to look down upon the medicine of the Middle Ages, along with its practitioners, with a certain measure of contempt or amusement. The ideas of bloodletting, astrology, and humoural theory seem downright bizarre to the modern student of medicine, obsessed with evidence-based decision-making and a microscopic conception of pathophysiology. Accordingly, it is correspondingly easy to relegate the wealth of documents bequeathed to us to historians of medicine.

This view, of course, ignores the entire context of the production of these documents. In a continental Europe of the late Middle Ages where medicine had become centred around universities, and where elite physicians, like today, were also academics<sup>1</sup>, scholarly production was permeated by the scholastic method of disputation, and with it the entire Western tradition of the arts and philosophy<sup>2</sup>.

It would be naive to think of this vast corpus as a collection of technical manuals and recipe books; in fact, authors, educated in universities and writing for a learned audience, were pertinently aware of their place in intellectual history<sup>3</sup>. Naturally, in an environment keenly interested in the classification and hierarchy of knowledge, there was intellectual opportunity available for reflection on the nature and role of medicine; an opportunity often taken up to provide prefatory remarks to some discourse or another.

With this in mind, I have endeavoured to provide a brief overview of a prefatory passage found in a manuscript housed at the Osler Library; as it deals with the nature and difficulties of medicine, I hoped to gain insight into another age's view of an art that, I would argue, has not changed so much in its essence since that manuscript was written, over half a millennium ago.

My correspondent from the past is Ugo Benzi, Sienese by birth and ambulant professor of medicine, who, if we are to believe our sources, was one of the eminent physicians and academics of northern Italy and beyond, at least at the peak of his career in the early 15<sup>th</sup> century<sup>4</sup>. Trained in the arts as well as medicine<sup>5</sup>, Ugo was also well-versed in the Greek medical corpus, as well as more recent Arabic or Persian works. He was, one may say, an intellectual successor of Taddeo Alderotti and his entourage, who had established the medical faculty of Bologna a century and a half before, with a strong emphasis on the arts curriculum and Aristotelian philosophy<sup>6</sup>.

Ugo's words on the *Aphorisms* of Hippocrates of Cos are extant in a few manuscripts disseminated across Western Europe and North America, as well as in print<sup>7</sup>. The manuscript

<sup>&</sup>lt;sup>1</sup> Wallis, p. 131

<sup>&</sup>lt;sup>2</sup> *Ibid.*, p. 191

<sup>&</sup>lt;sup>3</sup> Jacquart, "La Médecine médiévale", p. 117

<sup>&</sup>lt;sup>4</sup> Lockwood, p. 1

<sup>&</sup>lt;sup>5</sup> In addition to medicine, Ugo also wrote about the natural sciences; cf Jacquart, op. cit., p. 370

<sup>&</sup>lt;sup>6</sup> Wallis, p. 197

<sup>&</sup>lt;sup>7</sup> Movable type had indeed become widespread only a few decades after the manuscript's composition.

housed in the Osler Library, beyond its aesthetic value, is a valuable and rare possession today, as it would also have been during Ugo's lifetime. I will devote a few words on the volume later, and offer the reader a condensed picture of its author first.

Contemporary sources for Ugo Benzi's life are not numerous. The most "complete" source, so to speak, is the *Vita Ugonis*<sup>8</sup> written by his own son Socino Benzi. Of course, such a source is problematic in many aspects, namely regarding aggrandizing claims of Ugo's notability, the apology of his academic conflicts, or anecdotes about his character. However, it offers a detailed narrative that is too rich to ignore, given the dearth of similar sources <sup>9</sup>. It is worth mentioning that Socino's chronology is generally reliable, as it is confirmed by other documents, such as a patent of Bolognese citizenship <sup>10</sup> and an endowment bestowed upon Ugo by Niccolò d'Este <sup>11</sup>. Further, the prologue of the manuscript held by the Osler library, as well as some annotations therein, also corroborate Socino's sequence of events.

Ugo Benzi was born on February 24, 1376 in Siena<sup>12</sup>. He spent his childhood in Siena, but his education is said to have been interrupted by political tensions ca. 1390-92. He then studied under Peter of Mantua in 1393-94, but did not the following year, due to lack of funds. Ugo completed his education in Pavia in 1396 with a licence in logic, where he immediately began to teach; evidence includes his appearance as an examiner on several occasions in university records<sup>13</sup>.

Ugo's first forays into medicine were in 1403, after studying under Marsilius of Sancta Sophia<sup>14</sup>, in Bologna<sup>15</sup>. In 1405, he was appointed professor of medicine at Siena and would remain there until early 1409; from later that year until 1412, he taught in Bologna, and thereafter for four years in Parma. Through circumstances remain unclear, he returned to his native Siena amidst political intrigue and taught there from 1416 to 1420, but was effectively forced out, if we are to believe Socino<sup>16</sup>.

From 1423 on, Ugo returned to teach at Bologna. There is documentary evidence of his international reputation, presumably from that period, in the form of *consilia*<sup>17</sup> addressed to beyond the Alps. In 1424, Ugo received Bolognese citizenship; the decree is extant.

Beginning in 1425, Ugo was made professor of medicine in Pavia<sup>18</sup>. In this period, he began to produce a series of commentaries, the last of which is preserved as our manuscript of

<sup>&</sup>lt;sup>8</sup> The "Life of Ugo". The manuscript Lockwood consulted is housed in Ferrara.

<sup>&</sup>lt;sup>9</sup> Lockwood, p. 19

 $<sup>^{10}</sup>$  A partial transcription was made by Lockwood from the Archivio di Stato di Bologna; cf Lockwood, p. 147

<sup>&</sup>lt;sup>11</sup> Also partially reproduced in Lockwood, p. 148

<sup>&</sup>lt;sup>12</sup> Although Socino records this as 1375, in Sienese style: see Lockwood, p. 160

<sup>&</sup>lt;sup>13</sup> Lockwood, p. 164

<sup>&</sup>lt;sup>14</sup> Marsilius would die the following year.

<sup>15</sup> Lockwood, p. 166

<sup>&</sup>lt;sup>16</sup> *Ibid.*, p. 168

<sup>&</sup>lt;sup>17</sup> That is to say a standardized form of public epistolary medical consultation. For more, see Siraisi, pp. 270-302, which provides a very complete discussion of the *consilia* emanating from Taddeo Alderotti's circle in Bologna.

<sup>&</sup>lt;sup>18</sup> Lockwood, p. 182

interest. In fact, the end date of Ugo's tenure at Pavia would be quite unclear if not for the colophon of the Osler manuscript, which mentions Ugo's departure for Padua on August 25, 1429. These commentaries would have been delivered orally and written down by students; subsequently, they would have been copied more elegantly for publication or sale, as is the case here. Beside the 1429 commentary on the *Aphorisms* and Galen's commentary thereof, we are told in the prologue that the previous year had been devoted to a comment on the *Tegni*<sup>19</sup>.

Having left Pavia, he remained in Padua for two years, after which he settled in Ferrara at the court of Niccolò d'Este, the local marquess<sup>20</sup>. He remained there living a semi-academic life particularly prolific in terms of his output of *consilia*. Ugo died at Ferrara on November 30, 1439 of what appeared to be a longstanding illness<sup>21</sup>. His *Commentary on Avicenna IV* remained unfinished.

As was mentioned, the Osler manuscript itself contains a wealth of information concerning its date and place of production, to the extent that it tells us more about Ugo's life than vice versa. At the bottom of fol. 1, an inscription dated April 27, 1429 bears the certification of Protasius de Ferrariis, "off[icialis] bullet[tarius]"<sup>22</sup>, presumably near the end of the manuscript's production, as a guarantee of quality. This is echoed by the colophon on fols. 194 and 195, which indicates the date of completion as 1429 in Pavia, before Ugo's return to Padua later that year.

The codex is of high quality, at least in terms of aesthetics—Lockwood calls it a "magnificent manuscript"<sup>23</sup>. It is written on paper and bound in vellum. Many scribes contributed to the work; one, Alexander de Montalto de Gaino, signed it on fol. 97, dated by him April 3, 1428<sup>24</sup>. However, its scribal accuracy is by no means perfect.<sup>25</sup>

Interestingly, Lockwood considered it to be of very high quality, since he did not know of other extant manuscripts contemporary to Ugo—although Lockwood himself anticipated he would have to consult printed editions, possibly for purposes of comparison. In a letter to W. W. Francis of the Osler Library dated December 11, 1936, Lockwood was adamant about the authority of this particular manuscript, writing that "the correction and emendation mentioned in the early editions of this work is insignificant" and that "the MS naturally offers a superior text"<sup>26</sup>.

<sup>&</sup>lt;sup>19</sup> The commentaries on the Tegni, including Ugo's, are a valuable source of insight on "the nature of medieval learned medicine"; *cf* O'Boyle, p. 228

<sup>&</sup>lt;sup>20</sup> Lockwood, p. 189

<sup>&</sup>lt;sup>21</sup> *Ibid.*, p. 195

<sup>&</sup>lt;sup>22</sup> This seems to refer to a seal or toll officer; in other words, an official responsible for quality control.

<sup>&</sup>lt;sup>23</sup> Lockwood, p. 202

<sup>&</sup>lt;sup>24</sup> This date is possibly Old Style, it may in fact be 1429 New Style, as noted by Lockwood.

<sup>&</sup>lt;sup>25</sup> Already in the first few pages, there are numerous omissions, errors of orthography, substitutions, as well as two blank spaces and an incomplete rasura. In fact, I had to consult a later printed edition to clarify some difficult or nonsensical readings in the Osler manuscript. The scribe even attributed the Ethics to Galen—an egregious error to say the least.

<sup>&</sup>lt;sup>26</sup> Lockwood's letter to W. W. Francis, f. 1v

It would seem that the manuscript was composed more as a work of conspicuous craftsmanship rather than as a work of reference, despite being written in an academic center. Lockwood conjectures that the production of this specific manuscript was destined to the book trade<sup>27</sup>, rather than a private endeavour for personal study. It does appear that this book did see some use: among other annotations, there is a *manicula*, a finding aid introduced in the late 13<sup>th</sup> century pointing towards the beginning of a significant passage<sup>28</sup>.

But what does it actually contain? As is the general case with commentaries, the words of the original work are copied in a distinct font, followed by the commentator's discussion; in our case, this is then followed by Galen's comment on the Hippocratic text and Ugo's comment on Galen's.

The original work being explained is Hippocrates' *Aphorisms*, a collection of short sayings generally concerned with prognosis or regimen. Most of these may be of scarce interest to the modern reader, not concerned with purges or bloodletting. However, the most famous of the aphorisms is the very first one, concerned with the nature of medicine itself; for this reason it would appear to be, in fact, a very short introduction to the rest of the work, a sort of memento.

I reproduce the first aphorism of the first particle in its entirety here, as translated by W. H. S. Jones<sup>29</sup>:

Life is short, the Art long, opportunity fleeting, experiment treacherous, judgment difficult. The physician must be ready, not only to do his duty himself, but also to secure the co-operation of the patient, of the attendants and of externals.

The very first words of this aphorism, in Latin translation, have remained as a trope in the form of the saying *Ars longa*, *vita brevis*, inverting the original order and perhaps erasing its original reference to the art *of medicine* completely. Nevertheless, this persistence is a testament to the universal truth offered by this statement—an opportunity that did not escape Ugo, who dedicated nearly two thousand words of commentary to the first part of the aphorism alone. This long passage also serves as somewhat of an introduction to Ugo's work itself and, one could say, as an argument to the importance of his work.

Given the limited variation in treatment available to Ugo and the relatively reduced corpus of classical and eastern texts dealing with medicine (by modern standards), Ugo's expansive view of medicine as an art and science surpassing the scope of human knowledge is unexpected. It is even more surprising in light of Ugo's very rapid medical education and rise to therapeutic stardom<sup>30</sup>. Could this assertion be the corollary of a view of medicine as the synthesis of natural philosophy, a rhetorical exercise in self-congratulation? Perhaps. But Ugo's

<sup>&</sup>lt;sup>27</sup> Lockwood, p. 202

<sup>&</sup>lt;sup>28</sup> Clemens/Graham, p. 44. In the Osler manuscript, the manicula highlights the final passage of Ugo's commentary on the first aphorism. There are also other lines in the margin, possibly as reminders of interesting or important passages.

<sup>&</sup>lt;sup>29</sup> Loeb p. 99

<sup>&</sup>lt;sup>30</sup> As attested by Ugo's younger contemporary, Bartolomeo Fazio in ca. 1456; cf Lockwood, p. 156

argument rests on humility before uncertainty as well as apprehension before the grave consequences of medical error. The banal but opportune statements that "it does happen that good physicians make mistakes" and that "there is disagreement on many matters among the wise" come off more as disclaimers than boasts.

What then is medicine to this medieval academic? Evidently, it must be a natural science, based on logic, philosophy, mechanistic explanations and the great classical authors, as behooves a university professor versed in *physica*. So much is clear from the heavy references to Aristotle and Galen throughout the first passage; Ugo also reminds us that "in acquiring the art of medicine by reason one should know the true essence of things" and that the book of *Aphorisms* "pertains to natural philosophy insofar as it is a part of the whole of medicine". We are also offered a glimpse into Ugo's theory of pharmacokinetics in a short excursus on the treatment of heart disease with topical medication.

This treatment is slight, however, when compared to the treatment reserved to medicine as an art, an understandable discrepancy since the aphorism does read "*Ars uero longa*".

Ugo does devote some time to explain what he means by art in a quite obscure passage. I am not exactly certain what distinction he wished to make between his idea of art in the broad sense and the strict sense; my least nebulous hypothesis is that his "broad sense" would refer to some "fashioning" or handiwork, as would be the case with medical intervention, while the "strict sense" would refer to a habit that produces right reasoning<sup>31</sup>. Could this be in opposition to a strict sense of science, where right reasoning would lead to habit?

At any rate, Ugo obviously adopts the first definition to include medicine. More importantly, it is interesting to note that the inclusion of medicine as a science requires no such clarification. This is not altogether surprising since medicine had become well-entrenched as an academic discipline between the 11<sup>th</sup> and 13<sup>th</sup> centuries<sup>32</sup>; what is surprising, however, is Ugo's eventual reference to the old idea of the Galenic sects, opposing rationalists, empirics, and methodists—a division that would presumably be antiquated at the time of writing if the primacy of academic and scientific medicine were in fact well-established.

Having explained why medicine is an art, Ugo turns to its length, both relative to other arts and to human life. It is important to note here that Ugo is not referring to the permanence of medicine with respect to the finitude of human life; after all, we are told that "the elephant and the human being are the most long-lived of animals", and that this life is longer than an art like tailoring. Rather, it is long because "the life of no man suffices to discover and perfect this art [of medicine]". Quite recursively, he invokes this idea as a justification to "compose books with aphoristic brevity", because "without such books we are not able to hold good teachings in memory".

The reasons Ugo provides for the preeminent length of medicine over other arts are parallel to the three subsequent pairs of the aphorism, namely that opportunity is fleeting,

<sup>&</sup>lt;sup>31</sup> See fol. 1 col. 2 ll. 62-63: "[...] habitu cum recta ratione factiuo quia imediate inter habitus intellectus directiuo in opus dictum"

<sup>&</sup>lt;sup>32</sup> Wallis, p. 129

experiment is uncertain, and judgment is difficult. Ugo devotes by far the most attention to the case of experiment and experience, while his opinions on opportunity are mostly subordinate to the discussion on experiment, and his treatment of judgment is cursory in comparison.

Ugo's definitions of "experiment" and "experience" are also obscure to me. I can only assume that contemporary scholastic readers would have been more familiar with his epistemology. It does seem that his view is perhaps more restrictive than our modern conception: to wit, he suggests experience must be spontaneous, since from the comparison of individual recollections one may extract "a universal proposition without the use of induction [emphasis added]".

This view is consequent with his argument explaining the link between the pitfalls of experiment and the length of the art of medicine. Ugo offers two main reasons. One, the human body is in "continuous variation both intrinsically and extrinsically" making the effect of any action consistent only briefly and on rare occasions. Second, the physician is reluctant to try something new or untested as the material of his craft is the human body, "a very noble and changing thing", rife with internal contradiction and "fear of harm". This is in contrast with other arts where the material is either predictable, as in tanning, or indestructible, like metal, or base, like paint.

Modern readers may want to add that that experience is deceptive because it does not provide mechanistic explanations nor account for confounding factors. Ugo does acknowledge this, noting that "with many things applied we do not know from what or how the resulting effect followed". This alternative interpretation is offered in passing as an explanation for the meaning of "deceptive", and it is later discounted in a remarkable digression.

Ugo rejects the primacy of reason and deduction from first principles usually at the core of scholastic thinking<sup>33</sup>, and says that experiment is in fact the "the origin of the art". "And when it rejects reason", he continues, "we must follow experience having dismissed reason". While this would appear to agree with the Aristotelian point of view, it clashes quite dramatically with Ugo's axiomatic inclusion of medicine within the realm of *scientia*.

His attempt to resolve this contradiction is not very convincing. Ugo argues that all experience is perfect and a universal principle, and hence cannot be called "deceptive"—it is man that wrongly judges what constitutes true experience. Similarly, experience is not "fear-inducing" because it cannot predict the outcome of various interventions—rather, the physician errs because he is not aware of "occult properties", rapid variation, and most surprisingly, because "certain experimental knowledge is not the principle of operating" anyway! One is left to question the value, if any, of experience when explained in such a restrictive and unfalsifiable fashion.

The reasons for this haphazard defense of experience over reason, I do not know. It is important to note that Ugo does not dismiss reason and demonstrations entirely, since both are, as he defines them, expressions of some underlying truth. In fact, reason is given a similar treatment as experience, in terms of its supposed perfection and infallibility. It does not consist,

<sup>&</sup>lt;sup>33</sup> Wallis, p. 192

according to Ugo, only of "some probable arguments"—an assertion he supports with a very short refutation of an obviously flawed argument about nerve trunks that could hardly be construed as "reasonable". This caricature is easy to accept and of little value, but there is no further comment about what correct reasoning should look like.

We are also left in the dark about details concerning after-the-fact evaluation. Ugo's treatment of judgment is limited to mentioning its two subtypes (one preceding intervention and the second following it) and asserting quite plainly that both are difficult.

The second part of the aphorism receives only a short paragraph of attention. This is because "this part is obvious", according to Ugo, and understandably so. Essentially, we are told that without the conditions laid out by Hippocrates, treatment is "needlessly administered in pursuit of an objective", and, perhaps more academically, that conclusions may not be proven. A short digression of deontology follows, serving as a conclusion to the introduction, warning the student that the physician must not be sinister or narcissistic, but rather "skilled, applied, mindful and expert".

Globally, Ugo's introduction to the *Aphorisms* is not a critical one. He seems mostly concerned with reconciling his view of medicine with Hippocrates'—and sometimes comes off as insincere, when he must resort to subtle or borderline fallacies. Nowhere is Hippocrates' authority questioned, or nuance introduced. One would have the impression that medicine had not changed since ancient Greece. This is, of course, not the case, but those texts, including the *Aphorisms*, still formed the backbone of the medical curriculum<sup>34</sup>, and as such were held in very high esteem.

Also evident is Ugo's deference to previous authors through extensive use of indirect quotation and references, embedded in the text, especially to corroborate his conclusions or to introduce often surprising premises. This is in line with the spirit of the times, and with Ugo's legendary academic memory<sup>35</sup>.

The entire passage is also permeated with a good measure of medical exceptionalism. Ugo explicitly dissociates medicine from the other arts by its breadth and importance. Of course, this implies the practitioner must also be of a different category; this conception of self continues to permeate medicine, for better or for worse. Rare is the physician who does not see the possession of the art as part of their identity, or at the very least as a calling or vocation.

Another legacy of Ugo's time is the putative disagreement between the different types of knowledge of medicine, and their irresolvable tension. Ugo worked hard to align his commentary with Aristotle, the reference *par excellence* for natural science<sup>36</sup>, even when discussing the artistic component of medicine; today, McGill's physicianship component has adopted the three Aristotelian forms of knowledge as its motto<sup>37</sup>. It is also amusing, in light of

<sup>&</sup>lt;sup>34</sup> Wallis, p. 198

<sup>35</sup> Lockwood, p. 24 (in Vita Ugonis)

<sup>&</sup>lt;sup>36</sup> Siraisi, p. 7

<sup>&</sup>lt;sup>37</sup> That is to say, "Epistêmê, Technê, and Phronêsis", or knowledge, art, and practical wisdom.

this, to observe medicine's adoption of scientific symbolism, like the white coat, or to see some add a second "M" for medicine to the "STEM" acronym of scientific disciplines.

Most of all, Ugo managed to express the blindness of medicine, and the fear inherent. As much as we like to think of ourselves as directed by some external guide—the infallible ancients for Ugo, an incorporeal "science" for us—every clinical decision is, in a way, a new and untested intervention, with uncertain outcome.

Despite our paradoxical contempt for the pedantic ignorance of premodern physicians, medicine today can be just as stubbornly conservative and dizzyingly incoherent. The science of medicine may have progressed, but its artists remain prey to the same weaknesses, biases and errors. Will we ever, in our *vita brevis*, ever be able to move past Hippocrates' limitations on experience, judgment and opportunity? It is unlikely. But failing this, we know where to turn: the reflections of even our distant predecessors are not lost on us. We have more in common with Ugo than most of us would like to believe.

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## Translation of the passage

Ugo Benzi, *Expositio et questiones super Aphorismis Hippocratis* Osler Library MS 170

[Translation begins from fol. 1R, col. 1]

(Dedication) Jesus

(Written by rubricator) Here is written the Commentary and Questions on the Aphorisms of Hippocrates and their consequences by the premier master of Arts and Medicine, Ugo of Siena.

The gift (however small) of intensive study in the year just past, I dedicated in your name, illustrious marquis Niccolò d'Este, to your future glory, if my labour can add anything to it. The outstanding achievements of your singular virtue are not expressed here, as in the verses of poets or the writings of historians. But if I contribute something on medicine worthy of being remembered by posterity, it will be a testament of your diligence before the assembly of the learned world.

For your indulgence and the diligence of your true friend, that noble man Uguccio, summoned so many eminent men of letters as well as professors to the city of Parma for the sake of learning, it would be shameful to leave nothing to the memory of posterity.

I act to satisfy what is your due, although amid such a multitude of learned men my achievements shall be obscure, for I will take consolation from the nobility and splendour of the learned men which you have here and who will serve in my name. The labours of the previous year were devoted to a commentary on Galen's *Tegni*. Those of this year, to the commentary on the *Aphorisms* of Hippocrates where I confer as much as I am able brevity which will not conflict with understanding of the subject matter.

And this one thing I implore of you, that if these things which are dedicated to your name are less accurate that they should be, that you nonetheless receive them with kindness. For I will here discuss, along with Hippocrates, the remarks of the Prince of almost all the philosophers, but certainly of the physicians, and of those who have commented on Hippocrates, Galen not only by expounding but also by illustrating with circumstances, I have undertaken.

And as is fitting at the beginning of a work, I implore, pray and beseech aid from you, God most holy, that you direct my mind to say such agreeable things as will improve practice and virtue, and also the souls of those who hear and read.

This is the book of *Aphorisms*, in which Hippocrates intends not to convey the whole Art, but to set out in various parts certain very true statements about the science of medicine in as compendious a manner as is possible.

And from these it appears, first, the title: *Book of Aphorisms of Hippocrates*. This word "aphorism" according to Isidore, *Etymologies* book 4, means "a short utterance that explains the whole meaning of the subject under discussion."

There appears, secondly, the author's name, which is Hippocrates of Cos. He is not that other Hippocrates, who was the son of Euclid.

There appears, thirdly, the book's subject-matter, which is identical with the whole science of medicine; but in this book that science is not fully covered by [Hippocrates].

There appears, fourthly, that this book is included amongst the medical books which we have from Hippocrates. And it was the first, because although the others deal with one part of the Art – *Prognosis*, *Regimen in Acute Diseases* and the others, this book ranges over all [these subjects] in a useful manner.

There appears, fifthly, its usefulness, for it contains most true and useful instructions about the Art in a way which makes them easy to commit to memory.

There appears, sixthly, to what part of philosophy it pertains. For it pertains to natural philosophy insofar as it is a part of the whole of medicine, and with this modest prefatory remarks, I am content.

This book is divided into the preface and the tractate, which begins with the following aphorism where it says **In disturbances**. The present aphorism is divided into two parts, for the first discusses how books on medicine should be brief, and the second shows the conditions required for verifying in practice those things which are recorded in this book. The second parts begins **It is not enough.** 

In the first part he wishes to make this point. In medicine, it behooves us to compose books with aphoristic brevity, because thus in any art which is long with respect to human life, it is suitable to compose such books. But medicine is an art which is long with respect to human life, which is short in respect to this art. Therefore, etc. That it is greater is manifest because without such books we are not able to hold good teachings in memory, and shorter because this whole art is long which must be acquired through experience of many things in a timeframe which is fleeting, brief, and characterized by fear.

And beyond this, through reason. But medicine is of this kind, therefore etc. And it is evidently greater because in such arts according to the modest portion of our live we conduct experiments, and because of fear and the shortness of time, even in these reason is difficult to grasp, since on these matters we see may wise men disagree. Therefore such <an art> is long with respect to our life.

Therefore it is as if Hippocrates is saying that in medicine it behooves us to compose aphoristic books because human life is brief with respect to this Art, and the Art is long. And the cause of the length of this Art is that the time in which we can carry out interventions on a specific body is short. For the dispositions of the human body frequently vary, and furthermore it behooves us to vary interventions.

The second cause is because experiment is cause for fear because of the noble nature of the subject on which the physician works, and therefore he does not expose himself to proving/trying out sometimes many times. And the third cause is because the reason(ing) required to possess the Art is difficult.

Concerning this section one should first note that although "life" is sometimes taken to mean the operation of substantial intellects (as in *Metaphysics* book 12, comment 28), and sometimes to mean the operation of an animate being (as in *On the Soul* book 2) and sometimes to mean the persistence of a vegetative soul (as in *On death and life*), it is inferred that it is the persistence of the vegetative soul in natural heat. Here "life" is taken in the third sense, but insofar as it pertains to the human being.

This life can be said to be short or long by comparison in different ways. For if it is compared to the life of many other animals, it is long. The elephant and the human being are the most long-lived of animals, as it says in *On length and shortness of life*.

But compared to the acquisition of some arts like tailoring or the like, it is long. Compared however to many durations like that of mountains or rivers, it is brief. Likewise, compared to the acquisition of many arts and especially by discovery it is brief, as regards medicine, for the life of no man suffices to discover and perfect this art, and this is what Hippocrates meant in this first particle.

Second, one should note that art is understood equivocally with this name, for sometimes it is taken in the broad sense as any habit of intellect ordered toward doing (as distiguished with acting<sup>38</sup>), namely understanding "doing" as an intervention not concerned with its integrity or disgrace; and in this way medicine and logic and grammar are arts. In a second, strict sense, it is taken as a habit of doing with correct reasoning, because immediately it is directive of the intellectual habit in the said work; in this way, no science is an art, as can be understood from Aristotle in the sixth book of ethics, nor in this way is the science of medicine an art, but rather a practical habit acquired from interventions and thinking about particulars in curing the ill, by which it is an art where we operate quickly and with correct reasoning.

And you, see what I said about this in my first [commentary] on the Tegni, and here art will be taken in the first sense.

In this way, arts are called long either compared to other arts, or by virtue of the time required for their complete acquisition: and in this way medicine is a long art especially with respect to its acquisition by way of discovery, a way that indeed is long with respect to the way of doctrine because it is required to set down more time in acquiring it, not that it is impossible to come to in a human lifetime (as per the last chapter or the fourth book of Almansor). And in such arts a series of books of short aphorisms is required for continuous memory of the principles of things to be had.

Third, it is to be noted that the art of medicine is acquired from two instruments, according to the better sect of physicians that is by experiment and reason, as is concluded by Galen in his first comment on the third book of acute regimens and the ninth of therapeutics.

Experiment is some particular knowledge collected from multiple memories, as can be understood from the prologue of Metaphysics, not an indefinite knowledge of the cogitative faculty as Marsilius [of Sancta Sophia] said, for it would be common, and even such [knowledge] would not be without thought as it is a bodily character. Therefore, the cognition of this indefinite thing does not lead better to acquiring the principles of the art than than that of only a single particular, therefore etc. It is therefore a copulative faculty from the single elements

<sup>&</sup>lt;sup>38</sup> The nuance here distinguishes between "facere" and "agere".

remembered and proven against each other, having similarity when comparing the resemblance of their parts. And this is in the intellect; to wit, from this, in the intellect, intelligence extracts a principle of the art, namely a universal proposition without the use of induction, and rightly it is called universal. Note this, and you keep it in mind.

But in acquiring art by experiment there are two difficulties, one because only for a short time in our life can we experience any one thing, for the human body is in continuous variation both intrinsically and extrinsically, and thus a thing applied does not operate in one way except for a short time and rarely, or does not in that way happen in other arts. For in the art of tanning or dyeing or smithing we can long rely on experience because we operate over things that undergo little variation intrinsically. And the second is fear, for operating on the living human body because it is a very noble and changing thing, and not to be considered commonly of an unchanged disposition but with differences and opposites, thus there is fear of harm. For if there is deadly harm there is no remedy. But in arts around other substances there is no such fear because of the baseness of the subject as in painting or because of its permanence as in metalwork. Hence these two difficulties are the cause of the length of the art as said; for the first, Hippocrates mentioned time as fleeting, that is to say short, for the second, when he said that experiment is deceptive, that is to say fear-inducing; although this second particle could be sometimes explained as deceptive because of ambiguous meanings, for many times with many things applied we do not know from what or how the resulting effect followed.

Fourth, Note that in acquiring the art of medicine by reason one should know the true essence of things, as of diseases and health, and diseases and character, and all the accidentals from which we elicit the curative method, as taken from the final chapter of the second book of De ingenio sanitatis. And doing this to the entire art of medicine is difficult because even to the present day there is disagreement on many matters among the wise.

When Hippocrates said "Judgement is difficult", he understood the reasoning through which this art is acquired to be difficult to find and in consequence it pertains to making it a long art.

Notice that the judgement of reason is twofold insofar as it regards this subject, one preceding the intervention considering the essence and nature of the disease. Thus we judge if and/or how to operate, for example: I know that sickness of the heart is a bad hot complexion, and because the heart is a principal member, and because it is far enough from the skin of the chest, I conclude that cold [medication] is to be applied with which some subtle substance is to be combined so that it might penetrate, and something warm to conserve its heat. The other indeed follows the intervention, because it is followed by many things like evacuation and/or flux, or change, or health. And after we judge which of those things that were done was that from which such an effect proceeded.

And is certain that "Judgement is difficult" because of both of these. The first of them mostly concerns physicians of the rationalist sect. The second concerns the methodists or empirics, for the second is determined by experiment rather than reason.

And it seems to me from this that the usual questions have been answered clearly enough, thus that I have pronounced that human life is short, the answer is clear from the first note. Second, that medicine is a long art, is clear from the second note. Third, that arts to be acquired by experiment and reason are long is clear indeed from the third note. And from the fourth, what is

greater in medicine is because of the multitude of things and because of the nobility and muitability of its subject.

It is custom to doubt the argument that experiment is said to be uncertain as it is the origin of the art in the first book of Metaphysics. And it is that in which confidence is had first, and it makes us certain, as in the fifth canon. And when it rejects reason, we must follow experience having dismissed reason as per the first chapter of the fourth book on Phlebotomy. There it is said that to correctly make judgments by experiment seven conditions are needed and especially in judging the truth in medicine as is taken from the second canon, second chapter, not counting the prologue, and the first book of De simplici and the third of De complexionibus that in the interest of brevity I omit.

Thus, because it happens that many commit errors in these seven conditions, thus man is uncertain when he wants to acquire experience, either indeed he will arrive to true experience, and at some other time he is deceived, believing he has true experience or a true experiment, all the while not having that knowledge that ought to be called experience. On the other hand experience that is true is not said to be deceptive because it is uncertain, because it is certain and a principle of the art, but it is said to be deceptive because intervention is fear-inducing in and of itself by virtue of the nobility of its subject and the variety that is found in different individuals, and in each one according to various dispositions. For certain experimental knowledge is not the principle of operating, except in certain individuals in whom we judge their dispositions to be similar to those [dispositions] that were in those [individuals] in whom a proof was made. Indeed such credulity of similarity in every way is not firm because of measures that are not known distinctly, and because of occult properties. And therefore experiment is not uncertain in itself, but in relation to the intervention that we carry out, not only following experiment.

You keep it in mind this way. For from this you see that experiment should be certain, however it does happen that good physicians make mistakes.

And further when it is said that when reason opposes experiment we follow experiment, by reason we should not understand "demonstration" but "some probable arguments". For demonstration does not oppose experience, as both are true. And this is clear from those thinds that were said in the first [chapter of the] fourth [book of Phlebotomy]. For reason would have that the saphenous [nerve] and the sciatic [nerve] arise from the same trunk and therefore would essentially confer the same pains, a demonstration that does not make sense, but is disappointing.

Next, when he says "It is appropriate that" he now lays down what the required conditions are to verify the sayings in medical books. And he intended in this conclusion that to rightfully pursue the end of the art of medicine it is appropriate that not only the physician do as he should, but that the afflicted be obedient, and the attending be so in serving as appropriate, and the external elements must be opportune; the conclusion may be proven. Without these things the instruments of the art are needlessly administered in pursuit of an objective, thus these things are suitable. And because this part is obvious, I will not go on further.

And as is said in the twelfth book of Therapeutics, the physician is threefold: one is the sinister one who intends to harm the ill. The other is the adulator who wants to please and be adulated. The other is the righteous one who strives to do the things that are necessary for health; and this discourse is of this kind. The proofs of this were laid down by Razes in the last chapter of the

fourth book of Almansor and by Galen in comment 38 on the second book of acute regimens. For he must be skilled, applied, mindful and expert, and many other things; in these places read the demands. In agreement with the first part is the introductory chapter of the first book of the Colliget and the last chapter of the fourth book of Almansor and the last chapter of the second part of the third book on critical days. And its utility itself is evident. And it is extended towards all great arts and difficulties.

[Translation ends fol. 1v, col. 2, l. 68]

## Transcription of the passage

#### Ugo Benzi, Expositio et questiones super Aphorismis Hippocratis Osler Library MS 170

Apparatus criticus:

MS: Manuscript 1429, Osler

ed: Printed edition s. XV (1498?), Venice (?)

Lockwood: "Ugo Benzi". UCP, 1951. (cf Bibliography)

INCIPIT CODEX

Yesus

Hoc est scriptum Expositio et Questiones super Afforismis Ypocratis et eorum consequentis secundum Artistarum et Medicorum principem Magistrum Vgonem Siniensem.

Precedentis anni a lugubrationum munus quamuis paruum tuo nomini Nicolae Estensis Illustris Marchio dedi39 ad futuram tui gloriam si quid me-10 us labor illi addicere possit non quod in illis ut in poetarum uersibus aut vsto-15 ricorum<sup>40</sup> litteris tue singularissime uertutis eximia

facta exprimantur. Sed si quid dignum memoria in medicina contulero quod ad posteros manet erit testimonium diligentie<sup>41</sup> tue collocandis hominibus studio litterarum. Tua enim indulgentia et magnifici uiri ugutionis ueri amici diligentia tam multos praeclaros hominum litterarum quam magistros in ciuitatem parmen sem conuocati pro studio ut sit indignum nihil ad tante rei memoriam relinqui posteris. Agam pro uirili parte satisfaciens. Et si in tanta doctorum

multitudine res mee in obscuro future sint. Nam

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<sup>&</sup>lt;sup>39</sup> dedi] sic *ed*.; dicendi *MS* 

<sup>&</sup>lt;sup>40</sup> ystoricorum] sic *ed.*; ystoriocorum *MS* 

<sup>&</sup>lt;sup>41</sup> diligentie] *sic omnes codd. in* Lockwood 1951; gentis *ed. MS* 

nobilitate et gloria doctorum quos hic habes et qui nomine meo offitient consolor. Precedentis igitur anni opera ad expositionem Tegni Galieni data est. Huius anni ad amphorismorum ypocratis explanatio-

Huius anni ad amphorismorum ypocratis explanationem instabunt uigilie ubi conferam quoad potero breuitatem que rerum cognitionemnon offendat. Atque illud unum a te obsecro ne si minus accurata quam tuo nomini dicenda esse debent fuerint. Recipias tamen

benigne. Conferam enim in illud quantum opere potero cum Ypocrate fere philosophorum omnium. Sed certe medicorum principis dicta et eius commentatoris Galieni non solum exponenda sed etiam rebus illustranda circonstantibus sumpserim. Et ut decet ante initium operis,

opem a te sanctissime deus posco, oro ac efflagito qua dirigas mentem ad ea dicenda que tum operi et uirtuti tum etiam audientium animis et lectorum conformia profitiant.

Vita breuis ars

45 <u>uero longa.</u>
Iste est liber amphorismorum in quo intendit<sup>42</sup> ypocras non uniuersalis totam artem tradere, sed ponere in uariis partibus scientie

uariis partibus scientie medicine quasdam uerissimas sententias sub compendio quam est possibile. Et ex hiis

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patet primo titulus libri quia liber Amphorismorum Ypocratis. Et significat hoc nomine Afforismus secundum Ysodorum 4º Ethimologiarum sermonem breuem rei proposite sententiam totam explicantem. Patet 2º nomen autoris qui est Ypocras cous, non enim fuit

ille alius Ypocras filius Euclidis. Patet 3° libri subiectum nam est idem quam totalis scientie medicine sed de illo in isto libro non completur scientia. Patet 4° istum librum inter libros medicinales quos habemus Ypocrate fuisse primus quia cum reliqui omnes circha unam partem artis uersentur ut Pronosticorum

Regiminis acutorum et alii. Iste utiliter circha omnes uagatur. Patet 5° utilitas nam continet plurima uerissima et utilissima documenta artis modo quo possunt facillime m[e]morie comendari. Patet 6° cui parti philosophie supponatur, nam philosophie naturali quemadmodum pars totalis medicine supponitur, et hiis modicis prohemialibus sum contentus. ¶ Diuiditur autem iste liber

<sup>42</sup> intendit] sic ed.; ostendit MS

in prohemium et tractatum qui incipit sequenti afforismo ibi. <u>In perturbationibus</u>. Presens afforismus diuiditur in 2<sup>as</sup> partes nam primo ponit libros breues esse componendosin medicina. 10 2º ostendit condiciones requisitas ad uerificandum opere ea que in isto [lib]ro dicuntur. 2ª ibi Oportet autem. In parte prima uult istam condicionem. Oportet in medicina componere libros afforistica breuitate probatur sic. In arte qualibet longa respectu uite humane est oportunum tales 15 libros componere, sed medicina est ars longa respectu uite humane que respect artis illius est breuis eigitur etc. Maior est manifesta quia fine talibus libris non possumus memoriter bonas sententias tenere. Et breuior propter quia omnis illa ars est longa que debet acquiri per experientam 20 faciendam. Plurimarum rerum in tempore acuto et breui cum timore. Et ultra hoc per rationem. Sed medicina est huiusmodi ergo etc. Et patet maior quia in talibus artibus secundum modicam uite nostre partem facimus experimentum propter timorem et temporis breuitatem, etiam in eisdem ratio 25 comprehendi est difficilis cum in illa uideamus plurimos sapientes discordare, igitur talis est longa respectu uite nostre. E[s]<sup>43</sup>t ergo ac si Ypocras dicat in medicina oportet componere libros afforisticos quia uita hominis est breuis respectu istius artis et ars est longa, et causa longitudinis 30 artis est quia tempus in quo specialiter operamur circha corpus nostram operationem est breue. Nam uariantur dispositiones humani corporis frequenter et preterea oportet uariare operationes. 2<sup>a</sup> causa est quia experimentum est timorosum propter nobilitate subiecti circha quod medicus operatur et ideo non multotiens se exponit 35 ad probandum res. Et 3<sup>a</sup> causa est quia ratio requisita ad artem habendam est difficilis. ¶ Circha istam partem notandum primo quod licet uita quandoque sumatur pro operatione substantiarum intellectualium ut in 12° methaphysice commento 28. Quandoque uero per operatione cuiuslibet animati ut 2º de anima 40 quandoque pro presentia anima uegetiue in corpore ut in libro de morte et uita colligitur quod est permansio anime uegetiue in calido naturali. Hic uero sumitur uita. 3º modo etiam prout ad hominem <contrahitur>44. Hec autem uita potest dici breuis et longa diuersimode comparata. Nam si comparatur ad 45 plurimorum aliorum animalium uitam tunc est longam, longissime enim uite animalium sunt elefans et homo ut in de longitudine et breuitate uite. Sed comparata acquisitioni quarundam artium est longa sicut arti sutorie et similibus. Comparata autem multis durationibus etiam montium et 50 fluminorum est breuis. Item, comparata acquisitioni multarum artium et praecipue per inuentionem est breuis, ut

<sup>&</sup>lt;sup>43</sup> Est] *a.m. MS*; Et *p.m. MS* 

<sup>44</sup> contrahitur] sic ed.; lac. in MS

respectu medicine, nam nullius hominis etas sufficeretur ad hanc artem inueniendam et complendam, et hoc intendit Ypocras in ista prima particula. ¶ Secundo notet quod hoc nomine ars 55 equiuoce sumitur quandoque enim sumitur large pro omni habitu uero intellectus ordinato in facere ut distinguitur contra agere scilicet capiendo facere pro operatione non concernendo eius honestatem uel turpitudinem et isto modo 60 medicina et logica et grammatica sunt artes. Secundo modo sumitur stricte pro habitu cum recta ratione factiuo quia imediate inter habitus intellectus directiuo in opus dictum, et hoc modo nulla scientia est ars ut potest colligi Aristotele<sup>45</sup> sexto ethicorum. Nec isto modo scientia medicine est ars, sed bene habitus praticus acquisitus ex operationibus et particularibus<sup>46</sup> me-65 ditationibus in curis infirmorum per quem prompte et recte cum ratione operamur ars est. Et tu de hoc uide quid dixerim in primo tegni, et hic sumitur ars

primo modo. Huiusmodi autem artes dicuntur longe aut aliis artibus comparate, aut ratione temporis requisiti ad earum completam acquisitionem, et isto modo medicina est ars longa praecipue quoad acquisitionem eius per uiam inuentionis, per uiam uero quoad acquisitionem eius per doctrinam est longa quia plurimum temporis oportet in ea acquerenda ponere non quia sit impossibile<sup>47</sup> ad eius sufficientiam in uita humana uenire, ut 4º Almansoris capitulo ultimo. Et in talibus artibus ut rerum precipuarum<sup>48</sup> habeatur<sup>49</sup> continua memoria requirit ordo librorum breuium afforismorum. ¶ 3° 10 notandum quod ars medicine duobus instrumentis acqueritur secundum meliorem sectam medicorum scilicet experimento et ratione ut colligitur a Galieno in commento primi regiminis acutorum 3º et 9º terapeutice. Experimentum est quaedam particularis cognitio ex multis memoriis collecta, ut potest colligi prohemio 15 Metaphysice nec est indefinita cognitio cogitatiue uertutis ut dicit Marsilius, nam esset communis etiam talis non esset<sup>50</sup> in cogitatiua cum sit corporea uirtus. Preterea<sup>51</sup> cognitio illius indefinite non plus confert ad principium artis acquerende quam una sola singulis igitur 20 etc. Est igitur cognitio copulatiue ex membris singularibus memoratis et probatis inuicem<sup>52</sup> similitudinem habentibus cum collatione simillitudinis partium. Et ista est

<sup>&</sup>lt;sup>45</sup> Aristotele] scripsi; Galieno *MS*; om. *ed*.

<sup>&</sup>lt;sup>46</sup> particularibus] sic *ed.*; praticus *MS* 

<sup>&</sup>lt;sup>47</sup> impossibile] sic *ed.*; possibile *MS* 

<sup>&</sup>lt;sup>48</sup> precipuarum] sic *ed*.; conf. *MS* 

<sup>&</sup>lt;sup>49</sup> habeatur] sic ed.; habentur *MS* 

<sup>50</sup> esset] sic ed.; est MS

<sup>&</sup>lt;sup>51</sup> Preterea] sic *ed*.; propterea *MS* 

<sup>&</sup>lt;sup>52</sup> probatis inuicem] sic *ed*.; promptis et uerum *MS* 

in intellectu, et ex hac uniuersalis intelligentia intellectus ellicere potest<sup>53</sup> principium artis scilicet uniuersalem propositionem sine complemento 25 inductionis, et ideo ista uniuersalis dicitur per se<sup>54</sup> nota, et tu ita tene menti. Sed in acquerendo artem per experimentum due sunt dificultates, una quia per modicum tempus in uita nostra possumus experiri rem unam. Nam corpus humanum est in continua uariatione tam ab in-30 trinseco quam ab extrinseco, et ideo res applicata non operantur uno modo nisi modico tempore et raro, non sic autem contingit in aliis artibus<sup>55</sup>, nam in arte coriarorum aut tinctorum aut fabrorum possumus diu stare super experientia quia operamur circha res que modicam 35 suscipiunt ab intrinseco uariationem, et secunda est timor, nam operando circha corpus humanum uiuens quia est res ualde nobilis et permutabilis et non communiter immutata dispositione consciderabilis sed cum differentiis et contrariis, ideo timor est de nocumento. Nam si mortali 40 nocumento noceret non est ei remedium. Sed in artibus circa alia subiecta operatibus non est talis timor propter subiecti uilitatem ut in pictura aut propter subiecti permanentia ut in metalica. Has ergo duas difficultates qui sunt causa longitudinis artis modo dicto explicauit vpocras primam 45 tempus acutum id est breue, secundam cum dixit experimentum falax id est timorosum, licet hec secunda particula possit exponi aliquando falax quia ambigue sententie, nam multoties multis applicatis sequente effectu nescimus a quo uel quomodo sequatur. ¶ 4º nota quod in acquerendo 50 artem medicine per rationem oportet cognoscere ueram essentiam rerum, ut morborum et sanitatis et morborum et uertutis et omnia accidentia ex quibus eliciamus ingenium curatiuum, ut sumitur secundo de ingenio capitulo finali. Et hoc facere quo ad expletam artem medicine est difficile cum 55 usque in hodiernam diem de hoc in multis sit discordia sapientum. Ypocras autem cum dixit Judicium autem difficile intellexit rationem per quam ista ars est inuenienda esse difficilem et per consequens pertinere ad artem longam faciendam. Attende tamen quod duplex est iudicium etiam rationis quantum 60 ad propositum spectat, unum est precedens operationem et est cum considerata<sup>56</sup> morbi essentia et morbi natura. Ita iudicamus sic uel taliter operandum esse, uerbi gratia cogito quod aegritudo cordis est mala complexio calida et quod cor est membrum principale et quod satis distat a cute pectoris 65 concludo quod applicanda sunt infrigidantiua in quibus

<sup>53</sup> potest] add. ed.; om. MS

<sup>&</sup>lt;sup>54</sup> ideo ... se] sic *ed*.; de illa uniuersalis dicitur proprie *MS* 

<sup>55</sup> artibus] sic ed.; hominibus ras. MS

<sup>&</sup>lt;sup>56</sup> considerata] sic *ed*.; conseruata *MS* 

coniugatur aliquid subtilis<sup>57</sup> substantie ut penetrare faciat et aliquod calidum pro caloris eius conseruatione. Aliud uero est sequens operationem, nam multis factis sequitur aliquando evacuatio uel fluxus aut alteratio aut sanitas, et postea

70 iudicamus quod istorum que facta sunt fuit id a quo processit talis effectus et certum est quod utrumque istorum iudiciorum est difficile. Primum tamen horum maxime ad medicos de secta rationalium pertinet. Secundum uero ad metoycam uel empiritam, nam hoc secundam est potius determinatio experimenti qua ratio-5 nis. Et ex hiis uidetur mihi satis clarum respondere ad dubia hic mouerim solita an uita hominis sit breuis, patet enim ex primo notato responsio. Secundum an medicina sit ars longa, et patet ex 2º notato. 3° an artes acquirende experimento et ratione sint longe 10 patet enim ex 3º notato et 4º quod est magis in medicina propter multitudinem rerum et propter sui subiecti mutabilitatem ac nobilitatem. ¶ Solet tamen dubitari questio experimentum dicatur falax cum sit principium artis primo methaphysice. Et sit illud in quo primo habetur fiducia et facit nos esse certos canone 15 quinto. Et cum repugnat rationi debemus experimentum sequi <ratione dimissa ut quarto primi capituli de flebotomia. Hic dicitur quod ad recte iudicandum per experimentum>58 requiruntur septem condiciones et praecipue in iudicando de ueritate medicine ut sumitur 2º canone, capitulo 2º, non computato59 prohemio, et primo de simplici et 3º de complexionibus quas gratia 20 breuitatis obmitto. Ideo quia multos contingit errare in illis septem conditionibus, ideo homo est ambiguus cum uult experimentum acquerere, utrum aduc peruenerit ad ueram experientiam, et quandoque decipitur credens habere ueram experientiam <seu experimentum uerum et nondum habet illam cognitionem qui debet dici 25 experimentum.>60 Cum autem illam qui uere est experimentum habuerit non dicitur falax quia ambigua, nam est certa et principium artis, sed dicitur falax quia timorosa est operatio secundum ipsum propter subjecti nobilitatem et uarietatem que in indiuiduis diuersis reperitur, et in uno eodem secundum uarias dispositiones. 30 Nam certa experimentalis cognitio non est principium operandi nec certa indiuidua in quibus iudicamus similes esse dispositiones cum illis que erant in eis in quibus est facta probatio. Talis autem credulitas omnimode similitudinis non est certa propter mensuras que distincte non cognoscuntur, 35

et propter proprietates ocultas. Et ideo experimentum non est ambi-

guum in se sed in relatione ad operatione quam facimus non solum experimentum sequentes. Tu uero hunc modum serua menti, nam ex hoc uides quod licet experimentum

<sup>&</sup>lt;sup>57</sup> subtilis] add *ed*.; lac. *MS* 

<sup>&</sup>lt;sup>58</sup> ratione ... experimentum] sic *ed*.; om. *MS* 

<sup>&</sup>lt;sup>59</sup> computato] sic *ed*.; computari *MS* 

<sup>60</sup> seu ... experimentum] sic ed.; om. MS

- sit certum, tamen est in bono medico contingit quod erret. Quod autem dicitur quod cum ratio repugnat experimento sequimur expermientum, per ratione non debemus intelligere demonstrationem sed argumentationes quasdam probabiles. Nam demonstratio non repugnat experientie cum ambe sint uere. Et
- hoc patet ex hiis que 4ª primi dicuntur. Nam ratio erat saphena et sciatica ab eodem truncho oriuntur ergo eisdem passionibus essentialiter conferint qui ratio non est demonstratio sed deficiens. ¶ Deinde cum dicit <u>Opportet autem</u> nunc ostendit qui sunt condictiones requisite ad uerificandum
- dicta in libris medicorum. Et intendit istam conclusionem ad recte consequendum finem artis medicine oportet non solum medicum facere ut debet, sed egrotantem oportet esse obedientem, et astantes in seruiendo ut oportet, et debent esse res extrinsece oportune<sup>61</sup>. Conclusio probatur. Sine istis
- indebite administrantur instrumenta artis ad consequendum finem, ergo ista sunt oportuna. Et quia pars ista est manifesta, ideo non extendo. Et ut dicitur 12° terapeutice<sup>62</sup> triplicem esse medicum unus est sinister<sup>63</sup> qui intendit infirmo malefacere. Alius adulator qui
- 60 conatur adulari et complacere. Alius est rectus qui nititur facere pro salute ea qui sunt necessaria. Et huiusmodi est sermo hic. Illius probationes ponit Rasis 4º almansoris capitulo ultimo et Galieno 2º regiminis acutorum comento 38. Nam debet esse solers solicitus memorans
- et expertus, et plures alias istis locis lege conditiones<sup>64</sup>. Concordia prime partis est primo colliget capitulo introductoris et 4° almansoris ultimo capitulo et 2° partis 3° de creticis capitulo ultimo. <Et ipsa><sup>65</sup> utilitas patet. Et ampliatur ad omnes magnas artes et difficultates.

[Transcription ends fol. 1v, col. 2, l. 68]

<sup>&</sup>lt;sup>61</sup> oportune] sic *ed*.; om. *MS* 

<sup>62</sup> terapeutice] scripsi sic ed.; tarapeutice MS

<sup>&</sup>lt;sup>63</sup> sinister] scripsi sic *ed*.; sinistre *MS* 

<sup>&</sup>lt;sup>64</sup> conditiones] scripsi sic *ed*.; condictiones *MS* 

<sup>&</sup>lt;sup>65</sup> Et ipsa] sic *ed*.; om. *MS* 

## Photographic tables of the passage under study

Ugo Benzi, Expositio et questiones super Aphorismis Hippocratis Osler Library MS 170, fols. 1r-v / Photographs: André Lametti-Images courtesy of **Osler Library** 

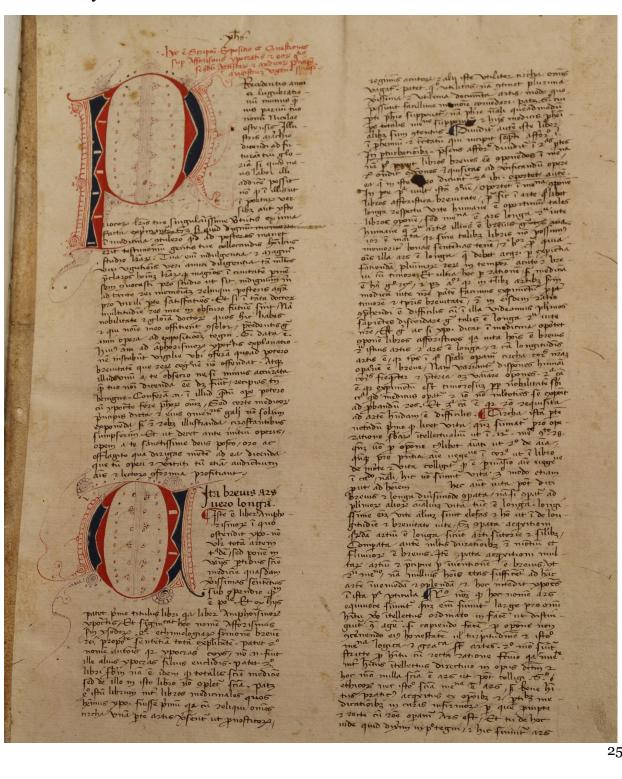


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Detail from bottom of *fol.* 1r:

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