Neoclassical Medicine: Transformations in the Hippocratic Medical Tradition from Galen to the Articella.

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Neoclassical Medicine: Transformations in the
Hippocratic Medical Tradition from
Galen to the Articella.

Abstract

My dissertation contends that teachers/practitioners of medicine in second century
Rome and fourteenth century northern Italy have invoked Hippocrates and his alleged
works, the Hippocratic corpus, to create a sense of relative stability in the form and focus
of medicine, while at the same time transforming medical thought significantly.

Galen of Pergamum in second century Rome, and northern Italian physicians of
the fourteenth century working on a master collection of medical texts known as the
Articella, recast and artificially established the figure of Hippocrates following their
specific concerns and political interests. Hippocrates became the author of whatever
works they decided as legitimately Hippocratic, claiming their process of selection was a
refinement of the Hippocratic tradition. The result was an entirely different Hippocrates
and Hippocratic Corpus, disguised as a continuous tradition from the time of classical
Greece up to their present.

These two periods represent unexplored moments of radical alteration of the
Hippocratic tradition, commonly perceived by historians of medicine as unchanged from
the time of Hippocrates to the nineteenth century.

Galen of Pergamum was the first editor of the *Hippocratic Corpus* from the perspective of medicine, and made a series of controversial selection of Hippocratic texts claiming they encompassed the whole knowledge of medicine and the main ideas of the mayor philosophical schools of his time, reflected in the theory of the four humors. His interpretations were highly contested during his time and in fact opposed other views on Hippocratic medicine.

The early thirteenth century inherited scholastic models inspired on Galen’s Hippocratism, and learned medical men of the time choose to elaborate a new version of Hippocratism focused on practical medicine and embodied in a new version of the collection known as the *Articella*, a canon of Hippocratic and Galenic works for the practice and teaching of medicine. Moving away from the previous organization of Hippocratic texts, learned medical men in northern Italy placed different Hippocratic treatises at the center of a new Hippocratic canon, foregrounding a variety of works relating to medical and surgical practice. In the process, they set Galen aside, moving away from his theoretical frame.
The Mission of Harvard College

Harvard College adheres to the purposes for which the Charter of 1650 was granted: “The advancement of all good literature, arts, and sciences; the advancement and education of youth in all manner of good literature, arts, and sciences; and all other necessary provisions that may conduce to the education of the … youth of this country…. ” In brief: Harvard strives to create knowledge, to open the minds of students to that knowledge, and to enable students to take best advantage of their educational opportunities. To these ends, the College encourages students to respect ideas and their free expression, and to rejoice in discovery and in critical thought; to pursue excellence in a spirit of productive cooperation; and to assume responsibility for the consequences of personal actions. Harvard seeks to identify and to remove restraints on students’ full participation, so that individuals may explore their capabilities and interests and may develop their full intellectual and human potential. Education at Harvard should liberate students to explore, to create, to challenge, and to lead. The support the College provides to students is a foundation upon which self-reliance and habits of lifelong learning are built: Harvard expects that the scholarship and collegiality it fosters in its students will lead them in their later lives to advance knowledge, to promote understanding, and to serve society.

Harry R. Lewis

Dean of Harvard College

February 23, 1997
# Table of Contents

Abstract iii

Aknowledgements viii

Introduction xii

Chapter 1: Corpus Romanum 1

Chapter 2: Corpus Galeni 41

Chapter 3: Corpus Aphorismorum 73

Chapter 4: Corpus Divisionum 122

Conclusion 165

Appendix I: Proemium to Niccolò Bertucci Commentary on Aphorisms 169

Appendix II: Proemium to Marsilio of Santasofia Commentary on Aphorisms E. 174

Appendix III: Proemium to Marsilio of Santasofia Commentary on Aphorisms V. 183

Appendix IV: Martin de Saint-Gille Division of Hippocrates’ Works 192

Bibliography 196
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To my mother and grandmother, in memoriam.
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Introduction

The importance of what the Greeks contributed to “Western Culture” is given priority; the Greeks are of interest principally as our ancestors. In a highly circular argument, we look at what impresses us, and what impresses us is what we define ourselves as being. Helen King, *Hippocrates’ Woman.*

The context

My dissertation studies a very specific way of understanding history and science. Two different groups of people in two different moments in time envisioned themselves as directly connected to a certain past—the time of Hippocrates of Kos. They practiced and taught medicine according to principles they understood as Hippocratic and saw themselves as maintaining this tradition within its original roots. First, in second-century Rome the Greek physician Galen of Pergamum, as part of a movement of Greek renaissance known as the Second Sophistic, reimagined the figure of the “divine” Hippocrates, who was identified as a direct descendant of the god of healing Asclepius. A careful genealogy had already been laid out in the pseudo-Hippocratic letter from Paitus to Artaxerxes, probably written around the first century C.E., which attributes special healing abilities to Hippocrates due to his divine nature:

Now then, the divine Hippocrates is ninth in the line of descent from Crisamis the King, and eighteenth from Asclepius, and twentieth from Zeus, while on the side of his mother, Praxithea, daughter of Phainarete, he is descended from the family of the Heracleidae. Thus, on both sides the divine Hippocrates is the offspring of gods—being by his father a descendant of Asclepius, and by his mother a

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descendant of Heracles.²

Thereafter, the figure of Hippocrates then had a special mystique, particularly in the context of a Greek Renaissance. As an inheritor of this tradition, Galen referred to Hippocrates as divine as well.³ Presenting Hippocrates as a figure endowed with powerful moral and intellectual qualities, he reorganized the Hippocratic Corpus, a series of diverse and disconnected texts attributed to the physician of Kos, according to precise rules—his rules—intended to reveal the “true” medical tradition of Hippocrates.

In fourteenth century Italy, as part of a movement of Greek renaissance started in the twelfth century and increasingly robustly expressed in the fourteenth and fifteenth centuries, a number of academically trained Italian physicians, active in university teaching and often described as “scholastic,” reimagined the figure of Hippocrates, also attributing to him divine qualities, albeit in a Christian rather than a pagan context. Hippocrates was often described by late-medieval learned physicians and commentators as the first inventor of medicine, as the first to systematize and create a medical science out of a chaotic collection of empiric, unorganized knowledge, and as the ultimate gift from God to mankind. According to medieval medical writers, if humans had acquired disease and death through the Fall, God had given mankind the physician of Kos to alleviate those evils.⁴ Once again, the figure of Hippocrates acquired a special mystique and became one of the great pillars of scholastic medicine. It is in this context that the


³ Galen, De uteri dissectione, II 888 K.

⁴ I will discuss more about the imagined identity of Hippocrates in chapter four. For the adoption of Hippocratic medicine in early Christianity see Owsei Temkin, Hippocrates in a World of Pagans and Christians (Baltimore, MD: Johns Hopkins University Press, 1991).
fourteenth- and fifteenth-century Italian physicians also reorganized the *Hippocratic Corpus* according to precise rules—their rules—intended to reveal the “true” medical tradition of Hippocrates.

The reason I chose these two episodes is straightforward. I believe these two different moments in time represent two of the most significant periods in the history of Western medicine in which the image of Hippocrates and his legacy were reinvented. They are both examples of a time when a new Hippocratic tradition was fully expressed, after centuries of slow change. Both Galen and the Italian physicians of the fourteenth- and fifteenth-century saw these transformations as a process leading to a true understanding of the Hippocratic legacy.

The argument

In this dissertation I argue that both the figure of Hippocrates and the *Hippocratic Corpus* were significantly transformed during the above-mentioned periods. Galen’s version of Hippocrates and the *Hippocratic Corpus* is very different from that of his predecessors, while the version of Hippocrates and the *Hippocratic Corpus* developed by Italian physicians of the fourteenth and fifteenth centuries is very different from that of Galen. These transformations are more meaningful than they seem to be on the surface and have been often overlooked by historians of medicine and medical practitioners alike. The claims made by Galen, on the one hand, and the Italian physicians of the fourteenth and fifteenth centuries, on the other, helped to hide these transformations, which they clothed in language that emphasized the continuity and stability of the Hippocratic legacy.
over the period that separated them from the physician of Kos. These claims of continuity served specific political and cultural interests that will be analyzed in the present dissertation as well.

In light of my research, I propose a new reading of the Hippocratic tradition. Instead of approaching this tradition as a continuous one, as has usually been done, I approach it as a discontinuous one. The changes represented by the two different moments I am studying are significant and cannot be overlooked. Galen constructed his figure of Hippocrates using a specific Hippocratic text as the center of his approach: *On the Nature of Humankind*. This is a highly theoretical work that introduces a series of ideas about the material composition of the human body. Galen wrote several commentaries on this text that put together a complex medical theory encompassing philosophy, medicine, and morals. By contrast, the fourteenth- and fifteenth-century physicians I study constructed their own figure of Hippocrates using a different text as the center of their approach: *Aphorisms*, which is a highly practical work. Around it, they elaborated a series of commentaries that connected other Hippocratic texts relating to practice with *Aphorisms*, crafting a highly practical medicine.

The move from *On the Nature of Humankind*, a systematic and theoretically coherent treatise, to *Aphorisms*, a collection of brief and heterogeneous statements relating to practice, is a drastic change in what Gianna Pomata has characterized (in another context) as “epistemic genre.” Pomata discusses standardized textual formats. For example, the appearance of works on *observationes*, a genre that describes specific cases, raw information if you may, for practical use in medicine. These textual formats are handed down by tradition and designed for the transmission of certain forms of
knowledge among physicians. Consequently, an “epistemic genre” constitutes new ways of gathering, describing, and organizing information for its transmission. The “epistemic genre” then is a way to build up communities. In its transmission of new forms of knowledge in standardized formats, it implies a community of readers and writers familiar with the genre and actively involved in them: “As shared textual conventions, genres are intrinsically social. Contributing to a genre means consciously joining a community; indeed, some genres are eminently instruments of “community-building,” tools for the establishment of a community of scholarly endeavour as a social and intellectual shared space.”

In this sense, the differences between Galen and the fourteenth- and fifteenth-century physicians could not be more staggering. Galen was responding to a Greek renaissance, which took place during his lifetime, and which included the crafting of classical figures that could serve as models for Hellenized Roman culture. In this context, Galen’s theoretical interpretation of Hippocrates made the physician of Kos a classical figure associated with the great philosophers Plato and Aristotle, and with the time of the Golden Age of Pericles. The theory Galen attributed to Hippocrates was based on the four elements, the four humors, the four ages of man, and the four seasons of the year. More than anyone before or after him, Galen crafted a figure of Hippocrates that largely resembled Galen himself. From this point on it was impossible to understand the Hippocratic Tradition without Galen. He created a “New Hippocrates” that was (and to


some extent still is) indiscernible from himself.

By contrast, the aphoristic genre made particular sense to scholastic writers of the Late Middle Ages. It transmitted concrete thoughts that could easily be assimilated by medical students and that could also be explicated and interpreted by teaching masters in the context of medical pedagogy. *Aphorisms* also transmitted specific examples for the treatment of diseases and the conservation of health, an element that would ultimately solidify the importance of this Hippocratic text for a new practical perspective characteristic of fourteenth- and fifteenth-century physicians, as I will discuss in chapter three. From this new perspective, medical theory (*scientia*) and medical practice (*ars*) were understood as complementary and mutually reinforcing strands of medical knowledge unified under *Aphorisms*, as allegedly announced in aphorism I, 1: “Life is short, the Art is long; the crisis fleeting, experience perilous, and decision difficult. The physician must not only be prepared to do what is right himself, but also to make the patient, the attendants, and externals cooperate.” And while these learned physicians taught within a traditional curriculum organized around both *theorica* and *practica*, delivering lectures that took the form of commentaries on a standard list of set texts, the prefaces to their commentaries on key Hippocratic texts, most notably *Aphorisms*, revealed a new focus on practice. This focus corresponded to the professional needs and aspirations of the great majority of their students, who had no desire for academic careers. At the same time, the more theoretically oriented *On the Nature of Humankind* was deemphasized and given a decidedly Aristotelian interpretation, eventually coming to be studied under the gaze of Aristotle. Galen, the definer of Hippocrates, became scholastic, and the new Hippocratic tradition was transformed into a scholastic legacy. Hippocrates
was still revered as *divine* (either as classical demigod descending from Asclepius or as gift from the Christian god to mankind), but he was not the same.

Consequently, I will argue for the need to rewrite the history of at least these two moments of the Hippocratic tradition as a history of discontinuity and change. More generally, medical practitioners and historians of medicine have cultivated the fallacy that the medical tradition inherited from Greek antiquity and perfected throughout history constituted a unified system of knowledge. My thesis challenges this assumption, disclosing the radical discontinuities among canonical texts that traced their claims to the teachings of one individual, Hippocrates of Kos. Taking into account the ways in which the figure of Hippocrates was recast between the time of Galen and that of fourteenth-century Italy will yield a far richer understanding of the assumptions and actions that accompanied the development of medical thought in the West

**Neoclassicism**

I began my introduction with a quote from Helen King: “The importance of what the Greeks contributed to ‘Western Culture’ is given priority; the Greeks are of interest principally as our ancestors. In a highly circular argument, we look at what impresses us, and what impresses us is what we define ourselves as being.” In a sense, my concept of “neoclassical medicine” is an expansion of this quote; King points out a circular exercise that makes elements of the past that are relevant to us those that most resemble what we think ourselves to be. If we think of the “classical” Greek past, we recognize in it what *we* recognize in ourselves, what *we* identify as “classical”, and what *we* consider the most
relevant aspects of it. The Greeks of the “classical” period are attractive and significant because of the characteristics that they purportedly share with us. This exercise is what I call “neoclassical”: we invent a classical past with the characteristics we cherish and bring it back, then we claim that classical past for ourselves and by means of this constructed connection we argue that we are better because we are like the classics. We become “neoclassical.” For the purpose of this dissertation, I study this “neoclassical” approach in the hands of Galen and the fourteenth- and fifteenth-century physicians, since it took place in the context of medical practice and theory, I furthermore call it “neoclassical medicine,” hence the title of my dissertation.

Additional elements of the concept of “classical” and “neoclassical” inform my idea of “neoclassical medicine.” “Classic” is an early modern concept. The origins of the term, although with a different meaning, can be traced back to ancient Rome. The term “classicus” referred to the highest class in society, a definition the resulted from the division of Roman citizens in different social classes sometime during the reign of the sixth roman king Servius Tullius (578-535 B.C.E.). Quintillian in the first century C.E. used the noun “classis” to refer to a pupil or student trained in texts considered authoritative, and Aulus Gellius in the second century C.E. used “classicus” to refer to authoritative authors of literature, as opposed to pedestrian ones. The term thus maintained a connection with the idea of a superior class, including an association to pedagogy, a connection that survived into the early Middle Ages. However the term faded with time (the last mention we have comes from Magnus Feliz Ennodius in the sixth century) and was replace with the noun “auctoritas,” referring to the authority of a person or writer. “Classic” was then revived in the sixteenth century as part of a
movement to reaffirm the superiority of ancient writers over later ones. The term referred to an ancient author of high quality and can be portrayed as a “neoclassical” movement in Early Modern Europe. However the noun “classic” is not attested in English until 1597 in Bp. J. Hall’s Virgidemiarum. “Classical” as an adjective was used to refer to works by ancient Greek and Roman authors, and it is first attested in English in W. Peryn’s 1546 Thre Serm.7 “Neoclassical” is a Victorian concept that refers to a style of art, architecture, music, literature, etc., based on models designated as “classical.”8 These “classical models” are identified with a collection of characteristics designated as “classical,” which, as I argued above, reflect the values of their proponents, which vary according to place and time.

As King points out, the proponents of these characteristics of the classical model, decide what the model is, hence defining what “classical” is. Consequently, “classical models” look back to an imagined place in the past where the essence of a given identity, a set of practices, and an aesthetic ideal was established. In the present dissertation, the classical models are those allegedly established by Hippocrates in his writings. Since I view “model” as a prescriptive category, I believe the medical practitioners I study, the proponents of “classical models,” described the Hippocratic legacy as a set of principles to be followed and emulated. Galen presented Hippocrates as a philosophical, theoretical figure to be imitated. In their turn, the scholastic practitioners identified Hippocrates, who they defined as the inventor of medicine, and Hippocratic medicine as the model for


medical knowledge. By consequence, what I understand as medical neoclassicism is a style of medicine based on, or influenced by, classical models selected by the neoclassical practitioners themselves.

It is also relevant for my work that the concept of “classical” is closely related to that of “canonical.” A classical model requires a standard by which to determine or exclude given principles, and to determine which principles belong to the model and which do not—what is “classical” and what is not. This standard is the canon, the criterion that I use to judge not only my own principles but also those of others. The standard applies whether or not others follow the standard, and thus whether or not they too can be considered classical. Furthermore, a canon can also be a body of texts that reflect this standard, and in this sense this body represents the canon. “Classical” then refers to the principles and/or works that are included in the canon and can therefore be viewed as “established” or, by implication, canonical. A text is classical if it follows the canon, but it could also be the model of the canon. In the specific case of this dissertation, the canon is the set of texts chosen as representative of the Hippocratic legacy. For example, in the eyes of the late medieval scholastic medical writers who are the focus of the second section of my dissertation, if you do not follow *Aphorisms* you are not canonical.

Following the notion of canon, I contend that since Hippocrates was defined as the author of whatever works happened to be understood as Hippocratic at a given time, to determine the *Hippocratic Corpus* was to describe whom Hippocrates was. Following what Michel Foucault describes as the construction of an author-function, I will study the ways in which the invocation of Hippocrates was used to unify a series of different and
even contradictory texts under a single name and authorial persona.\(^9\) Hippocrates became the author of whatever texts were considered to be central to the accepted medical knowledge of the time, the canon. Thus, the physician of Kos served as a commonplace to claim authority and legitimacy. For the purpose of this work, I aim to describe the circular process by which Hippocrates and the *Hippocratic Corpus* were established; the ways in which medical authority was associated with Hippocratic authority; the varying and problematic notions about medicine as theory (*scientia*) and as practice (*ars*) that this entailed; and how claims to medical knowledge reinforced the claims of university-educated medical men to practical superiority in the medical marketplace.

Finally, I use the category “medical neoclassicism” as a modern interpreter. It helps me highlight this process of selection of a “classical model” defined by the specific texts that represented the canon and the specific practices that followed the model. I introduce this concept as a way to clearly identify the practices and selections of Galen and the Italian physicians of the fourteenth- and fifteenth-century. I call a specific way of describing medical teaching and practicing “neoclassical” not because the historical actors (Galen or Italian masters of medicine of the fourteenth and fifteenth century) called themselves so, but because their practices can be explained in a way tangible to us as “neoclassical”—a modern category—without betraying the nature of their inquiries. The questions they asked in their own time addressed restoration, continuity, and respect for an original past with specific characteristics that revealed the nature of knowledge and the world. In this sense, these ancient and medieval practitioners understood and defined

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themselves as heirs and continuators of the Hippocratic tradition—they were Hippocratic physicians. I thus use medical neoclassicism as a “mirror” concept that illuminates both a set of medical practices (considered as following a classical model reflected in a canon of texts) and a group of medical practitioners who followed these practices. It projects the image of this “classical model” on a group of medical practitioners, the creators of the model themselves, who identify as the continuators of this image, of this “classical model.” They are neoclassical practitioners who practice neoclassical medicine. Ultimately, this relationship between actors and practices shows the circularity of the concept.

“Neoclassicism” and, by implication, “medical neoclassicism” are concepts that mirror the potential disagreements, the political decisions, and the random selection behind what we define as classical, as well as how we position ourselves in relationship to it. As the quote from King above implies, we are the “classical” ones, revisited and amplified, presumptuously better versions of what was already great. This requires us to project “classical” status back onto an earlier period(s) and author(s), as, for example, Galen, Pietro d’Abano, Niccolò Bertucci, and Marsilio de Santasofia projected “classical” status onto Hippocrates. Galen of Pergamum and the Italian physicians of the fourteenth and fifteenth centuries were Hippocratic in this sense of redefinition, of creating a “classical model.” By so doing they were able to claim access to a “true,” canonical form of knowledge about the human body and nature. In essence, they were neoclassical physicians.

**Historiography**
Modern historiography of Western medicine has taken at face value the claims for the unity and stability of Hippocratic principles and practices. For the most part, specialists have ignored the drastic changes in the Hippocratic tradition that took place between the time of Galen and the time of the fourteenth- and fifteenth-century Italian physicians. Much of this problem comes from a lack of dialogue between classicists and medievalists, who represent two different historiographical traditions that are essentially self-contained and self-referential, which has resulted in a serious underestimation of the differences in the Hippocratic legacy. Traditionally, classicists have focused on developments in antiquity and from there have moved to the sixteenth and seventeenth, or even the eighteenth and nineteenth centuries, when, as the Renaissance gave way to the Neoclassical period and modernity, classicism became a recognized criteria. However, in the case of medical historiography, I believe this is an implicit acknowledgement of the discontinuity in the Hippocratic tradition: historians of ancient medicine omit the medieval period because it simply doesn’t fit in their narrative, while medievalists have tacitly assumed continuity in the Hippocratic tradition between Galen and the medieval learned physicians, and have not adequately addressed its disjunctions. Medievalists have traditionally been more concerned with medical theory and Aristotelian natural philosophy, and although there is a certain amount of recent scholarship on praetica there is very little written on practice itself, because the sources are much trickier and scarcer. This limits the ability of historians to see the changes in the Hippocratic tradition when, in fact, the fourteenth- and fifteenth-century Italian physicians are making a gesture to Aristotle, but in reality are working with a practical Hippocrates as described in
Aphorisms.

In contrast, my dissertation attempts to bring these two stories together, in a revisionist history of the Hippocratic tradition that emphasizes discontinuities rather than continuities and accounts for those discontinuities. In other words, I have aimed to provide a unified narrative of a disjointed history of medicine, which attends to the whole story behind the Hippocratic tradition from the time of Galen of Pergamum to the time of the fourteenth- and fifteenth-century Italian physicians. In addition to emphasizing discontinuities in the history of the Hippocratic tradition, I argue that the genealogy of this tradition calls into question the relation between medical practice and theory as closely related and mutually interdependent. I show how practice became separate from theory, as well as how theory was a constantly changing and movable base that served to associate different practices of medicine could be associated with the alleged authority of universal precepts. This created a new relationship to textual authority where medical legitimacy came from the study and mastery of a specified set of medical works. As Jan Ziolkowski has argued, medieval culture “rested upon texts, first and foremost Scripture and liturgy but also canonical texts drawn from both ancient and medieval literature. Those fundamental texts had to be transmitted in readable form and had to be authentic, which is to say, sufficiently in agreement with a standard or norm so as to carry authority.”10 In this scholastic context, Hippocrates’ authority acquired a very different set of associations than it had in Galen’s time—one closely connected with the specialized and institutionalized teaching of medicine. The contrast between the ancient

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period and the Middle Ages is striking.

Even where many of Galen’s assertions are questioned and his facts subjected to scrutiny, his overall ideas are so pervasive and so firmly rooted in the Western tradition of medicine that they are often adopted without hesitation or thought about their origin. Indeed, it is precisely because they have become so accepted as part of what we consider medicine today that they are difficult to detect and to challenge.¹¹

This quote criticizes the assumption of a single medical tradition that comes from antiquity to the present and that passes unrevised by scholars. It comes from Vivian Nutton, whose research I address below, an extraordinary classicist who has not studied the Middle Ages.

Although there is little work that calls attention to the disjuncture between the classic and medieval Hippocratic tradition, modern scholarship on Galen, Galenism, and the Hippocratic tradition is by no means sparse. The publication, in 1979, of Wesley Smith’s The Hippocratic Tradition, which was to become the road map in the field, gave this line of studies a canonical work. My own work is in debt to Smith’s, and proceeds sometimes along similar lines. However, I am addressing sources and themes that Smith saw as secondary, explored only superficially, and even left untouched as he was pursuing specific images of both Galen and Hippocrates.

My views on Galen himself, and thus on the intentions behind his work and the outcome of his ideas, are also different from Smith’s and those of most modern scholars who write on this topic. To most scholars, Galen is a borderline Machiavellian thinker who twists and turns evidence in order to obtain supremacy in his field. For example,

Smith writes, “I have given reason to believe that one [Hippocratic text], the present Regimen, was the work of Hippocrates. The other, the present Nature of Man, is the subject of Galen's fantasy and the basis of his Hippocratic elemental theory.”¹² In contrast, I believe Galen was a brilliant scholar who was doing for the most part what his contemporaries and predecessors were doing, and what was expected of him as a cultivated Greek living in Imperial Rome in the second century C.E. I do not believe Galen was trying to alter the truth. In fact, with the evidence we currently have, it is not possible to identify the “true” Hippocrates. Smith himself criticized scholars before him who argued for the authenticity of specific Hippocratic treatises. He devoted much of his book to analyzing the motives behind the arguments for a “true” Hippocrates. In the end, however, Smith himself could not resist the temptation. The last chapter of his work, “From Hippocrates to Galen” is in fact a quest for the legitimate works of Hippocrates.

Smith, of course, was a product of his time, much as I am of mine, and his influential work was responding to specific needs of the academic world of the late 1970s. Ultimately, it is my belief that Galen understood his work as truly rooted in the Hippocratic tradition, and defended his views in a world where literary, performative, and cultural styles dictated the ways the entire past and present was understood.

In addition to Smith, other classicists have contributed to my work in meaningful ways. As I have already indicated, Vivian Nutton has helped me understand how Galen and Galenism constituted the adaptation and significant transformation of Hippocratic medicine disguised as continuity. Galen embraces Hippocrates as part of a revival of ancient Greek culture in Rome. At the same time he makes Hippocrates, through his

editions and commentaries of the *Hippocratic Corpus*, a projection of his own image and his own philosophy. Consequently, what I have learned and what is the premise of my work is that Galen is the ultimate inventor of Hippocrates, waving in the most influential philosophical concepts of Galen’s times, making the Hippocratic tradition an amalgamate of the most powerful and influential philosophical schools of the time, thus a powerful cultural “bomb shell” that represented a turning point in medicine. In turn, Helen King helped me reflect on personal experience and history. Her work taught me about the complex relations between the present and the past, between historians and history. I learned how subjective experiences are taken over by cultural models, and how this alters our ways of knowing. Thanks to King, I have been able to position myself in relationship to my own time and my work.

Historians of medieval medicine such as Danielle Jacquart, Luís García-Ballester, and Nancy Siraisi have also shaped my work.¹³ I own much of my understanding of the medieval university to them. Jacquart and García-Ballester have given me the larger context of medical education across Western medieval Europe. Siraisi introduced me to the world of Taddeo Alderotti and taught me much about the social relations between physicians of the thirteenth and fourteenth centuries in Italy. I have particularly benefited from the work of a group of scholars working under the auspices of what has been called

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These works have been very useful in helping me to trace the development of the medical curriculum in Italian universities of the thirteenth and fourteenth centuries. In addition, Tiziana Pesenti has produce amazing work focused on Marsilio of Santasofia and his evolving understanding of the works of Hippocrates that has proven essential for my dissertation. Pesenti, in collaboration with the Articella Project, shed light into my understanding of the transformations of the canon of medical works in the fourteenth century, and forced me to think about the way these transformations related to medical authority and medical practice. Katharine Park taught me about the construction of knowledge. Doctors and Medicine in Early Renaissance Florence introduced me to tight communities of learned medical practitioners and the way they envision themselves, allowing me to understand how the social and institutional organization of knowledge is linked with the economy, the law, and medicine. Secrets Of Women: Gender, Generation, and the Origins of Human Dissection taught me to understand how practice (in her case the practice of dissection) informed theory and social perceptions of the human body. Finally, Chiara Crisciani’s work has been of special importance for my work. In her article “History, Novelty, and Progress in Scholastic Medicine” she explores the medieval construction of Hippocrates’ identity, and what Hippocrates meant for scholastic physicians. This study has been a focus of

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reflection for me and has provided a model for my own research. In various ways, her work moves beyond the limits of her field and is closely linked to what I have intended to do in this dissertation.

While my work is directly indebted to the historians of ancient and medieval medicine I have already mentioned, I have also drawn on the works of other scholars whose influence may be less immediately obvious. Particularly useful for my rethinking of Galen’s use of Hippocrates has been Shigehisa Kuriyama’s The Expressiveness of the Body. Kuriyama’s comparative work between Chinese and ancient Greek medicine gave me the tools to see beyond superficial similarities and to study more meaningful connections. He showed me Galen’s complex relation to theory, and how important it was for the physician of Pergamum to unify philosophy, medicine, and morals to produce a coherent system of knowledge under the umbrella of Hippocrates.

The first section of my dissertation focuses on second-century Rome, the Greek renaissance of the Second Sophistic, and Galen of Pergamum. In the first chapter, I will discuss the Hippocratic tradition before Galen, the Roman context for the revival of ancient Greek culture known as the Second Sophistic, and the innovations made by Galen in the social context of the Second Sophistic. In the second chapter I will explore the ways in which Galen, using the intellectual tools of his time, including rhetorical devices, performative deliveries (whether in public debates or written texts), and active intellectual disputes, put together a Hippocratic Corpus reunited under philosophy, medicine, and morals.

The second section of my dissertation explores how the tradition of Hippocrates changed over time in the medieval Latin West. My third chapter, the first of this section,
follows a similar layout to that of the first chapter: I explore early medieval efforts to create a Hippocratic canon, the social changes that transformed the understanding of ancient Greek medicine in the later Middle Ages, and the establishment of a new Hippocratic tradition. My fourth chapter parallels my second: I introduce the changes made in the Hippocratic canon by fourteenth-century Italian physicians, following a distinctive genealogy of learned medical men: Mondino de’ Liuzzi, Niccolò Bertucci, and Marsilio de Santasofia, who taught at the universities of Padua and Bologna. I then discuss their respective commentaries to *Aphorisms* and the resulting new perspective on Hippocratic medicine.

Marco A. Viniegra
I found Rome a city of bricks and left it a city of marble. 
Emperor Octavian Augustus.  

The present chapter is divided into three sections organized in chronological order, each one discussing different periods in the history of the Hippocratic tradition in antiquity and its Roman context. The first section presents the history of the Hippocratic Corpus from the time of its creation in the third century B.C.E. up to the second century C.E. The second section offers a view of the context in which a renaissance of Greek culture in ancient Rome, known as the Second Sophistic, took place, and how it relates to Galen of Pergamum and the Hippocratic legacy. The third section introduces the difference in Galen’s approach to previous interpretations of the Hippocratic tradition.

A central issue of this chapter is the debates of the authorship of the different texts in the Hippocratic Corpus. Known today as the Hippocratic Question, these debates seem to be as old as the Corpus itself. I will discuss how the Hippocratic Question shaped the meaning and the content of the Hippocratic tradition and how the plastic nature of the Corpus allowed many different interpretations. It is important to note that the debates continue today and still shape much of the way we think about Hippocrates and the Hippocratic Corpus. Starting in the 1930s, a series of scholars, lead by Ludwig

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Edelstein,\textsuperscript{18} raised serious doubts about the identification of any Hippocratic text as genuine. The core of the “skeptic” argument is the lack of sufficient background and information to accurately identify any text as written by Hippocrates. The wide range of theories and practice within the Corpus complicates the issue further. The “positive” argument made by those trying to identify genuine Hippocratic texts relies on the sparse secondary evidence provided by Plato and Aristotle. The argument is that once a single text is proved as authentic, other could be identified as spurious or genuine on the basis of internal evidence.\textsuperscript{19}

One of the most recent discussions came after the work of Jacques Jouanna, who has relatively recently made a very informative and systematic attempt to put together the archeological and historical evidence about the physician of Kos. Still, Jouanna’s work relies heavily on different legends to create a biography of Hippocrates, and Jouanna assumes, against most modern scholarship, that certain works from the Hippocratic Corpus can be identified as genuine, even if the theories and practices described in such texts are very different from each other.\textsuperscript{20}

Also, an important issue for this chapter is the subject of the Second Sophistic, a renaissance of ancient Greek culture in Rome. This movement took place in the context of the Hellenization of Rome, and sought to link Roman culture as a whole with the tradition of the “Golden Age of Pericles” (fifth-century Athens). Romans and Greeks of


the second, third, and fourth centuries embarked on a project based on the notion of a “classical” from which the mythical and historical figures from Greek antiquity were made into to the forefathers of Roman civilization. This movement was characterized by performative and rhetorical models shaping the way and the content of public debates in the arena of politics, science, philosophy, literature, and history.

A final issue of importance to this chapter follows the steps of the Second Sophistic from the perspective of the Hippocratic legacy. Galen of Pergamum transformed the figure of Hippocrates and the *Hippocratic Corpus* as part of this process of the Hellenization of Rome, but he also went a step further. He forged Hippocrates as the father of medicine and also as the first Greek philosopher, far more important than the great Plato and Aristotle. Galen built a Hippocratic persona that served as an ideal exemplar, a model to follow associated with the Golden Age. Galen revised and unified the *Hippocratic Corpus* under a specific medical model and approached the problem of the Hippocratic Question from the perspective of medicine, unifying philosophy, science, and Greek culture under the Hippocratic persona, a model for the Roman world.

**Hippocrates, the Classical Canon, and Hippocratism before Galen**

The earliest surviving references to the physician of Kos come from Plato and Aristotle in the fourth century B.C.E., who wrote about him as a physician from the family of the Asclepiads. In the *Phaedrus* Plato attributed to Hippocrates some form of systematic method for the study of medicine, although the reference is rather general.
Socrates: And do you think that you can know the nature of the soul intelligently without knowing the nature of the whole? Phaedrus: Hippocrates the Asclepiad says that the nature even of the body can only be understood as a whole. Socrates: Yes, friend, and he was right—still, we ought not to be content with the name of Hippocrates, but to examine and see whether his argument agrees with his conception of nature. Phaedrus: I agree. Socrates: Then consider what truth as well as Hippocrates says about this or about any other nature. Ought we not to consider first whether that which we wish to learn and to teach is a simple or multiform thing, and if simple, then to enquire what power it has of acting or being acted upon in relation to other things, and if multiform, then to number the forms; and see first in the case of one of them, and then in case of all of them, what is that power of acting or being acted upon which makes each and all of them to be what they are? Phaedrus: You may very likely be right, Socrates.2

Aristotle says in his Politics, “A city too, like an individual, has a work to do; and that city which is best adapted to the fulfillment of its work is to be deemed greatest, in the same sense of the word great in which Hippocrates might be called greater, not as a man, but as a physician, than some one else who was taller.”22 This reference, like the passage in Plato’s Phaedrus, makes no mention of what books the physician of Kos wrote, and does not provide information about the specific theories of Hippocrates,23 leaving us with no real information about his life or works.

Biographical legends about the life of the physician of Kos were already common

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22 Aristotle, Politics, 1326a14 ft.

23 The papyrus Anonymus Londinensis V 35 ff, allegedly written by Meno, a student of Aristotle, attributes to Hippocrates the view that pneuma or breath leaves noxious residues in the body from which disease arises. The closest text in the Hippocratic Corpus that discusses breath as a source of disease would be On Breaths. However this text does not quite follow this reasoning. For example, it contains nothing about residues in the body and attributes disease to breath that comes from the outside. W. H. S. Jones, The medical writings of Anonymus Londinensis (Cambridge, UK: Cambridge University Press, 1947), 19-20, 132.
in the Hellenistic world by the time of Galen. These were understood not as myths but as historical and biographical facts, and many were considered biographical information up to the nineteenth century.\textsuperscript{24} The common thread that all of them share is an emphasis not only on the healing abilities of the “divine” Hippocrates,\textsuperscript{25} but also on his moral and civic virtues. The legends, which come mostly from the pseudepigrapha or collection of letters attributed to Hippocrates, make him an ethical model for physicians and men alike. While at least some of the pseudepigrapha, now considered apocryphal, were attached to the \textit{Hippocratic Corpus} when it was first arranged in Hellenistic Alexandria, during the third century B.C.E.\textsuperscript{26} The Erotian lexicography of Hippocratic writings from the first century C.E., discussed below, suggests that many of these letters might have been incorporated into the Hippocratic tradition later on.\textsuperscript{27} In the second century Discorides and Capiton, also discussed below, used the pseudepigrapha to try and make sense of the \textit{Corpus}, following the “life” of Hippocrates. This produced a solid interlock between the

\textsuperscript{24} Lloyd, “The Hippocratic Question”, 171 ff. A relatively recent book collecting much of the most relevant works on the Hippocratic legends is Jody R. Pinault, \textit{Hippocratic Lives and Legends}; see also Wesley Smith, \textit{Pseudepigraphic Writings} (Leiden: E. J. Brill, 1990); \textit{The Hippocratic Tradition}.

\textsuperscript{25} As mentioned in the introduction, Hippocrates was considered the descendant of the healing god Asclepius, and thus was considered to have had divine attributions. A careful genealogy is already established in the pseudo-Hippocratic letter between Paitus and Artaxerxes, probably written around the first century C.E. The letter attributes especial healing abilities to Hippocrates due to his divine nature. “Now then, the divine Hippocrates is ninth in the line of descent from Crisamis the King, and eighteenth from Asclepius, and twentieth from Zeus, while on the side of his mother, Praxithea, daughter of Phainarete, he is descended from the family of the Heracleidae. Thus, on both sides the divine Hippocrates is the offspring of gods—being by his father a descendant of Asclepius, and by his mother a descendant of Heracles.” Pinault, \textit{Hippocratic Lives and Legends}, 145.

\textsuperscript{26} See Smith’s Introduction to the \textit{Pseudepigraphic Writings}, also \textit{The Hippocratic Tradition}, 99 and ff., 199 and ff.

\textsuperscript{27} Ernst Nachmanson, ed. and trans., \textit{Cum Fragmentis} (Upsaliae: Appelbergs boktryckerei-aktiebolag, 1918), 9; Smith, \textit{The Hippocratic Tradition}, 222.
legendary traditions and the works within the *Hippocratic Corpus*.\(^{28}\) What we know for sure is that by the time of Galen most of the legends had been in place for some time and were standard references in the works of most writers.\(^{29}\)

Of the letters, the *Decree of the Athenians*, *Embassy* and *Speech from the Altar* seem to form the oldest strata. Later biographies of Hippocrates follow them, of which the best known, *The Life of Hippocrates According to Soranus*, is attributed to Soranus of Ephesus and was probably written between the second and the sixth century C.E.. Later lives were mostly based on this material.\(^{30}\) Jody Pinault has pointed out that at least two of these letters, *Embassy* and *Speech from the Altar*, fit well within the political needs of the citizens of Kos to be incorporated in the Hellenistic imaginary during the third century B.C.E., as they were becoming an integrated Greek nation. Thus, the *Embassy* and *Speech from the Altar* comprise a history that reconciles the newly forged history of Kos with the history of the Peloponnesian Wars and Athens.\(^{31}\) Wesley Smith has suggested that the letters, which he dates as far back as the mid-fourth century B.C.E.,

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\(^{30}\) A tenth century encyclopedia called the *Suda* has an entry on Hippocrates that seems to draw mostly from *The Life of Hippocrates According to Soranus* or at least a common source. It offers a condensed version of what *The Life* presents. In the twelfth century, Joannes Tzetzes’ *Historiarum variarum chiliades* wrote forty-eight verses about Hippocrates. It is important to notice that this particular work was intended as an entertainment piece; still it seems to be drawing from *The Life of Hippocrates According to Soranus* and Tzetzes cites Soranus as his source (line 986). There is also a twelfth-century anonymous manuscript containing a Latin life of Hippocrates, edited and amended by Hermann Schöne in *Bruchstuecke einer neuen Hippokratesvita*, Rheinisches Museum für Philologie, Neue Folge 58 (Germany: J.D. Sauerländers Verlag, 1903). There are some significant differences between *The Life* and the text edited and amended by Schöne. He argued that the Latin life of Hippocrates went back to a Greek original written no later than the fifth century.

\(^{31}\) Pinault, *Hippocratic Lives and Legends*, 41-44.
might have been the only “biography” available to those assembling the *Hippocratic Corpus* in third-century B.C. E. Alexandria. That such letters were placed along the other materials of the *Corpus* may have contributed to the attribution of the *Corpus* to Hippocrates, although the letters contain no references to specific Hippocratic treatises.\(^{32}\) Other references to Hippocrates come from many sources, including Plato and Aristotle, as mentioned above, as well as Varro, Erotian, Strabo, Pliny, Celsus, Plutarch, and Galen, among others. These references were not intended as biographical and were used only to illustrate the point at hand.

As far as the Hippocratic works themselves are concerned, the gathering of texts and assembly of the *Hippocratic Corpus* took place in several stages some time around the third century B.C.E. in Alexandria. The assembly of the *Corpus* was probably the result of a growing interest in books and medical works at the court of Ptolemy I Soter, a Macedonian general under Alexander the Great who had been crowned pharaoh after the Hellenistic conquest of Egypt. According to Galen, Zeuxis, a commentator on Hippocratic texts of the second century B.C.E. reported the story: “And, they say, the Ptolemy who was king of Egypt became so greedy for books that he ordered that the books of everyone who arrived by ship be brought to him. After he had them copied on new paper he gave the copies to the owners of the books that had been brought to him on the debarkation, and deposited the confiscated books in the library with the inscription ‘Of those from the ship.’”\(^{33}\) This implies that many of the texts of the *Corpus* were personal copies belonging to travelers and merchants, probably from Asia Minor. It

\(^{32}\) Smith, *The Hippocratic Tradition*, 8-10.

would explain why many of the Hippocratic texts seem to be composite, or even anonymous works.\textsuperscript{34} This very diverse collection of texts gathered over the span of 200 years was placed in the Alexandrian Library and labeled as by “Hippocrates” for reasons that are unclear. And so the \textit{Corpus} came to be, composed of a variety of works collected from a variety of sources during a long span of time.

The haphazard nature of the assembly itself, as well as the nature of the \textit{Corpus} that resulted from it (very diverse and disparate), would ultimately lead to questions about the legitimacy of the texts in the collection, including questions of authorship—typically whether Hippocrates or one of his students was the true author of a given text. A dispute arose around the third to the first century B.C.E between Empiricists and Dogmatics, two separate sects of medical practitioners.\textsuperscript{35} Their disagreements involved different interpretations of the Hippocratic tradition, as well as disputes about the authenticity of particular treatises.\textsuperscript{36} Empiricists were well known for their careful analysis of Hippocratic texts, and invoked the authority of Hippocrates and some works within the \textit{Corpus} (\textit{Epidemics}, \textit{Prorrhetic}, \textit{Aphorisms}, \textit{Ancient Medicine}) to attack the

\textsuperscript{34} Smith, \textit{The Hippocratic Tradition}, 200-201.

\textsuperscript{35} Different medical sects were already part of the Alexandrian marketplace of the third century B.C.E.. Among them were the Empiricists and the Dogmatists. The Empiricists believed medicine was experimental in essence and medical knowledge was the result of experience. Dogmatists on the other hand, believed medicine was grounded in theory (\textit{Logos}, reason), and the practice of medicine depended on it. Additionally, we can find different groups within sects that followed specific figures from the Greek past. For example, Herophileans followed the physician an anatomist Herophilus, and Erasistrateans followed Erasistratus (famous anatomist who founded a school of anatomy in Alexandria). They both were well known for having given the first detailed descriptions of the nervous system. A third sect, said to have been founded as a reaction against Empiricists and Dogmatists was the Methodist sect. They believed that medical knowledge was the collection of general, recurring principles, rather than specific cases of disease. Many of them were identified as Asclepiadeans, following Asclepiades.

\textsuperscript{36} Smith, \textit{The Hippocratic Tradition}, 204 ff. Galen, \textit{On Medical Experience}, edited and translated by Richard Walzer (Oxford, UK: Oxford University Press, 1944), 87. His discussion of the present disputes is rather general in nature, and it is fairly brief considering the vast period of time it addresses and the many possibilities on the matter of these debates.
Dogmatics. The Dogmatics in turn did exactly the same, also invoking Hippocrates and the same works of the Corpus. These battles for the Hippocratic tradition, which extended well into the time of Galen, already signal the controversies that arose from the diversity of ideas and works within the Hippocratic Corpus. They also points in the direction of a diversified approach to medicine based on the Hippocratic legacy. The works in the Hippocratic Corpus were so diverse that the collection was extremely plastic and could be used to argue for different and opposing views. It is important to notice that much of our information about such debates comes from Galen himself, since there are very few other sources available, particularly so for the earlier stages of the assembly of the Corpus.

Sometime around the third century B.C.E., Bacchius of Tanagra produced the first lexicon (collection of words in need of explication) of medical works attributed to Hippocrates.\(^{37}\) Our main sources for the study of Bacchius’ work, the earliest known author-specific lexicon,\(^ {38}\) are Erotian, an Alexandrian lexicographer of the first century C.E., and Galen. Bacchius’ work was alphabetized and abridged by Epicles of Crete and condensed by Apollonius Ophis sometime in the first century B.C.E. This limits what our sources can reveal. However, Erotian’s discussion of Bacchius includes specific references to the organization of the texts Bacchius used. While this organization seems unclear (Erotian refers to three different collections), his includes direct mention of the

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\(^{37}\) Erotiani Vocum Hippocraticarum Collectio, Cum Fragmentis, 5, 1-3; Galen, In Hippocratis Epidemiarum librum II commentaria V, Corpus Medicorum Graecorum V 10,1 (Leipzig and Berlin: 1934) 19, 65.

Hippocratic texts used by Bacchius.

It seems that Bacchius worked with the texts *On Prognostic; Prorrhetic; On Humors; Epidemics I, II, III, V, VI; Aphorisms; Places in Man; The Surgery; Instruments of Reduction; Joints; Wounds in the Head; On the Nature of Bones; On fractures; Regimen in Acute Diseases; Diseases I; Airs, Waters, Places; On the Sacred Disease; On the Use of Liquids; The Art;* and *On the Nature of the Child*. Smith suggests, following Erotian and Galen, that the work of Bacchius was inspired by literary motivations, rather than medical ones, and he argues that Bacchius followed Aristophanes of Byzantium, the famous lexicographer of Homeric poetry, as a source. This would explain why Bacchius used quotations from classical poets and prose writers to illustrate many of the words in the Hippocratic texts. Later criticisms of the work of Bacchius were made on literary grounds and as part of the lexicographic tradition, as opposed to medical concerns. The fact that the criterion to organize the lexicography was literary also may explain the divergences between and differences in the texts contained in the *Corpus*. Bacchius did not attempt to organize his lexicography following any given theory in the Hippocratic works or according to one or more specific author. In contrast, as will be noted in the next chapter, Galen attempted an organization based on theory and authorship. This is one of the elements that makes Galen and his work on the *Hippocratic Corpus* particularly important.

In addition to lexicographies, the early Greek scholarship on Hippocrates included


41 Smith, *The Hippocratic Tradition*, 203.
commentaries. Galen gave notice of a commentator to several works of the Corpus named Zeuxis, who lived in second century B.C.E. Alexandria. According to Galen, in his commentary to Epidemics III, Zeuxis described a series of shorthand alongside the pages of the Hippocratic text, summarizing the development of the case histories to which they refer. Galen suggests they referred to some form of summary of the case histories of Epidemics III.

In the first century B.C.E. a physician named Apollonius of Citium, who worked in Alexandria where he had studied medicine, wrote the earliest existent commentary to a Hippocratic work. Apollonius was an Empiricist who commented on the treatise On Joints, probably in the context of producing a guide for practical trauma intervention. His work thus is a descriptive commentary with practical aims and makes little reference to theoretical principles or specific controversies. His commentary was divided in three parts. The first part discusses the dislocations of the shoulder, the second part discusses those of the elbow, wrist, jaw, and spine, and the third part discusses the dislocations of the lower limbs. The text was accompanied by 30 illustrations explaining the procedures of the Hippocratic treatise.

In the first century C.E. the Alexandrian grammarian Erotian, probably the most famous lexicographer of Hippocratic texts in Antiquity, made his own glossary of Hippocratic writings, relying heavily on earlier sources of Hippocratic lexicography. His references illustrate what seems to have been a long tradition of Hippocratic lexicography,

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44 Apollonii Citiensis *In Hippocratis De articulis commentaries*, Corpus Medicorum Graecorum XI 1,1 (Berlin: 1965).
at least in Alexandria, much of it in response to Bacchius work. The work of Erotian, however, survives only in a heavily revised form. An unknown redactor alphabetized Erotian’s lexicon, which was also abridged. A later editor of the work apparently omitted references to the Hippocratic texts from which Erotian’s glossary was drawn. However, Von Staden, following Johannes Ilberg and Ernst Nachmanson, was able to reconstruct at least some of the original sequence of Erotian’s work, since the original version followed a treatise-by-treatise order, glossing words from each given treatise before moving to the next. This makes the reconstruction possible inter alia, since the alphabetized edition kept the original structure mostly intact. Erotian organized the Hippocratic works according to three categories: a “semiotic” class, a “physiological-aetiological” class, and a “therapeutic” class. This organization crossed through the entire Corpus, an element that also sets Erotian apart. Furthermore, such organization is not present in Bacchius and seems to be exclusive to Erotian.

The next major interventions in the Hippocratic Corpus come from Dioscorides and Capiton, who published a series of complete, literary editions of the Corpus in the early second century C.E. The editions of Dioscorides and Capiton openly called into question the authorship of certain Hippocratic texts. They also seem to have been the first to make conjectures about the authorship of texts in the Corpus, attributing some of them to sons or sons-in-law of Hippocrates. Their method of discriminating between texts followed the literary tradition of Alexandrian editors of classical Greek texts. This meant that they attempted to find distinctive stylistic patterns as well as the alleged voice of the


author, which implied identifying specific moral virtues and traits of character unique to the physician of Kos. Dioscorides, probably the earlier editor of the two, marked sections in the Hippocratic texts that he considered spurious, explicitly following the model established by Aristarchus, a librarian and grammarian at the Alexandrian library famous for his edition of Homeric poetry. Both Capiton and Dioscorides went as far as to omit passages that they considered false. They also altered the language of the Corpus to conform to what they understood to be the dialect of Kos.\(^{47}\)

Smith suggests that Dioscorides’ and Captiton’s editions of Hippocratic texts were the first attempts to make sense of the disparate materials in the Corpus. Both based their speculations on the tradition of the pseudepigrapha. Dioscorides dismissed Diseases \(\text{II}\) as written by a different Hippocrates, the grandson of the legendary Hippocrates, to whom both he and Capiton also attributed On the Nature of Humankind.\(^{48}\) Dioscorides also signaled a specific passage of Epidemics \(\text{VI}\), in which the physician is advised to withhold information from his patient, as unworthy of the true Hippocrates. He then claimed, based on stylistic considerations of Epidemics as a whole, that Thessalus, the son and literary executor of Hippocrates, must have added this passage.\(^{49}\) Smith, following Galen,\(^{50}\) suggests Dioscorides was the first to put together a canon of “unquestioned” or “most genuine and most useful” works of Hippocrates, which would have included the surgical works, Aphorisms, Prognostic, Regimen in Acute Diseases,

\(^{47}\) Galen, In Hippocratis Epidemiarum librum III commentaria III, 6, 483.

\(^{48}\) Galen, In Hippocratis Epidemiarum librum III commentaria III, 58.

\(^{49}\) Galen, In Hippocratis Epidemiarum librum III commentaria III, 283.

\(^{50}\) Galen, In Hippocratis Epidemiarum librum III commentaria III, 60.
Airs Waters Places, and Epidemics I and III. This “most useful” canon would have come from the tradition of the Empiricists (hence the emphasis on texts of a practical nature). Still, it seems Dioscorides also excluded some works from the list of the Empiricists based on stylistic grounds.51 The works collected by Capiton and Dioscorides comprise the canon that Galen inherited.52

Roman Neoclassicism

According to Dio Cassius, as Octavian Augustus, the first Roman emperor, lay on his deathbed on August nineteenth, fourteen C.E. he celebrated his renewal of the city of Rome, saying “I found Rome a city of bricks and left it a city of marble.”53 Rome was a city fashioned after the Corinthian order and upon the Greek model. Classical Greece had become the canon for Rome. Romans were striving to become like the Greek ideal they imagined: the Athenian empire of “The Golden Age of Pericles” in the fifth century B.C.E.

Centuries of coexistence with the neighboring Hellenistic kingdoms and the Greek city-states of southern Italy had Hellenized the political and cultural elites of Rome.54 The second-century Roman emperor Hadrian invested massive resources in the

51 Smith, The Hippocratic Tradition, p. 238.
52 Galen, In Hippocratis Epidemiarum librum III commentaria III, 87.
53 Cassius Dio, Roman History, 56.30.3.
restoration of Greek cities all over the Mediterranean, particularly Athens. Two
generations later the “emperor philosopher” Marcus Aurelius wrote his Meditations in
Attic Greek (the dialect spoken in fifth-century Athens), a collection of reflections
inspired by Stoic philosophy. Over the next three centuries, from the first to the fourth
centuries C.E., Romans and Greeks would embark together on a political and cultural
movement that transformed them all: the Second Sophistic.\(^{55}\) According to the new
political rhetoric, Rome was to become the full realization of the Greek ideal as first laid
down in fifth century B.C.E. Athens.\(^{56}\) In the second century C.E., the Greek orator
Aelius Aristides had argued that ancient Greece, particularly Athens, was the origin of
Rome, and that Rome was the realization of the Greek ideal,

Therefore, o men of Greece, it is reasonable that you neither are envious of the
city [of Rome] nor feel shame in giving precedence to it, but that you aid in its
increase as far as you can and feel pride therein. For when the Athenians prevail,
the victory is yours… It is fitting that you too honor the city [of Rome] in deed
and word, in the belief that it is as it were a sort of Acropolis or summit of Greece
and its kindred races.\(^{57}\)

\(^{55}\) Traditional accounts of the Second Sophistic place this movement starting from the second to the fourth
centuries C.E. However, more recent studies have argued that the models, intellectual traditions, and
educational program characteristic of the Second Sophistic are already present in authors like Paul the
Apostle and Philo of Alexandria. See, Bruce W Winter, Philo and Paul among the Sophists: Alexandrian
and Corinthian Responses to a Julio-Claudian Movement (Grand Rapids, MI: W.B. Eerdmans, 2002).
Furthermore, and for the purposes of this work, I argue that the Second Sophistic was an all-encompassing
movement part of a general process of Hellenization and embrace of Greek culture in Rome, which
included the political and aesthetic choices of the first century C.E. See Simon Goldhill, ed., Being Greek
under Rome: Cultural Identity, the Second Sophistic, and the Development of Empire (Cambridge, UK:
Cambridge University Press, 2001); Tim Whitmarsh, Greek Literature and the Roman Empire: the Politics
of Imitation (Oxford, UK: Oxford University Press, 2001). After all, the most abundant resource and the
closest cultural experience for the Imperial Roman and Greek identities was the classical Greek past.


\(^{57}\) Aelius Aristides, The Panathenaic Oration in Laurent Pernot, Eloges grecs de Rome, 402-403.
The Second Sophistic was an educational project for Rome in the hands of Greek intellectuals. Lucius Flavius Philostratus, part of this Greek intellectual elite, named the movement “Second Sophistic” in his Lives of the Sophists (c. third century). The members of this movement had a strong sense of community and a profound awareness of the relationships they had with each other. They recognized themselves and were recognized by others as a select group connected with this golden past—they were the second sophists, after the orators of ancient Athens, the first sophists. They saw themselves as the constructors of a Hellenistic identity for the Roman elites.

The term “sophist” seems to have been associated with term “rhetor,” and to have

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been used particularly in reference to teachers of rhetoric (rhetors), capable of giving great public performances. Oratory and public display were an essential part of classical Greek culture, though this association between “sophist” and “rhetor” seems to have been made *a posteriori* by the members of the *Second Sophistic* in an effort to link their own practices with the idealized classical heritage of Athens.61

The sophists were known for paying special attention to language, clothing, affectation, and the reanimation of classical Attic Greek as a rhetorical form of reenactment. Particularly characteristic of the sophists was the constant reinterpretation and reutilization of ancient literary models, including stylistic patterns, themes and metaphors. The source for those models was indiscriminate in the sense that it included themes and images from all over the Greek past (for example, history, mythology, and politics). This use of ancient literary models was a distinctive trait of the sophists, and it was considered one of their major accomplishments.

Philostratus, in his *Life of Apollonius*, tells the story of Apollonius of Tyana, a charismatic orator, Pythagorean philosopher, and alleged miracle worker of the first century C.E. Philostratus tells the story of Apollonius alongside descriptions of religious images and piety and reflections on philosophy, education and public oration. Philostratus even presents Apollonius as immersed in a series of Socratic-style dialogues. Here Philostratus describes the encounter between Apollonius and the tyrant Domitian and argues that his hero, defying the tyrant, was superior to the great philosophers Zeno, Plato, and Diogenes: “It is indeed incumbent upon me to criticize these examples [of Zeno, Plato, and Diogenes], not in order to show that they were not as remarkable as they

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are universally famous, but only to show that they fell short of the exploits of Apollonius, in spite of their being the best of their kind.”62 This exuberant exaltation of Apollonius serves the purpose of advancing Greek values within a classical scenario. Apollonius is the link that reunites public orators (implicitly Philostratus and the sophists) and the great figures of Greek philosophy.

The core activities of the sophists were private teaching and public demonstrations, one resting on the shoulders of the other. Their reputation and ability as performers brought students to their private schools, and the success of their students contributed to their public reputation in a world where their performances often resembled the battles on the public arena.63 By the second century—the time of Galen—the members of the Second Sophistic already had significantly influenced on the cultural and political elites of Rome. We know of a long tradition of private gatherings organized by wealthy Roman politicians and intellectuals where sophists would be invited to partake in cultural demonstrations, discussions about science, politics, art, or even scientific disputes where their skills as orators could gain them either support or criticism from the elites.64

By the same token, the second sophists were able to reach the common citizens and crowds of people who came to attend public performances, which represented the ultimate demonstration of socio-cultural Hellenism. These highly popular productions

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63 Von Staden, “Anatomy as Rhetoric”, 49.

64 See G. W. Bowersock, *Greek Sophists in the Roman Empire*. 
(whether organized for the few or for the many) where characterized by the display made by an orator (the sophist) of classical culture (*paideia*), intended to present the sophist as an educated man (*pepaideumenos*). The audiences, for their part, were active participants of the performance, praising or censuring the speaker with cheers, jokes, or interruptions, and often engaging in the debates at the requests of the speaker himself. Classical scholars like D. A. Russell and E. L. Bowie have shown how this performative culture was integrated into the world of texts by the time of Galen, arguing that historiography, autobiography, poetry, and literature of all kinds resembled these battles and public discussions in writing.

Galen of Pergamum—a physician, a philosopher, a skilled public orator, a distinguished private teacher, and a devoted scholar of ancient science and philology—was immersed in the culture of the Second Sophistic. Born in one of the most important medical centers of the Hellenistic world, he also enjoyed personal wealth and strong political connections. Most of our information about his life comes from Galen himself. The physician of Pergamum never wrote a biographical work, forcing us to collect scattered information across his work to try and put together a biography. Because the references he makes are often used to illustrate a point the nature of the information we can collect is partial.

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67 Galen himself would have denied that he was a sophist, as the term would have linked him with a public activity also associated with itinerant physicians and rhetors that pursued the riddles of language for simple reputation. Heinrich von Staden, “Galen and the ‘Second Sophistic’”, *Bulletin of the Institute of Classical Studies* 41 (1977), 34–54.
Galen was the son of a wealthy architect, Aelius Nikon, member of the elite in Pergamum, a rich city in Asia Minor. Galen makes but one reference to his mother, whom he describes as a hot-tempered woman, always arguing with his father. Nikon seems to have invested considerably in his son’s education. The physician of Pergamum was trained in arithmetic, logic, philosophy, and finally medicine. His father had intended for him to be a statesman, but after a dream about the god of healing Asclepius he decided to dedicate his son to medicine. Galen studied medicine in Smyrna, Corinth, and Alexandria and was ultimately appointed physician to the gladiators in Pergamum, a prestigious position that gave him the opportunity to study trauma and injuries. He then traveled to Rome and after going back to Pergamum for three years seems to have lived in the imperial capital until his death. In Rome he quickly gained access to the imperial court, allowing him to enjoy all the privileges that come from money and influence and often make for absolute intellectual freedom. As a man of his generation, the physician of Pergamum actively engaged in the study of his classical predecessors. This renaissance served him, like many of his contemporaries, as a means of constructing authority for himself through the invocation of this distant, classical past, and by so doing undermining his contemporaries.

Careful studies made by scholars like Heinrich Von Staden reveal, in many of the Galenic treatises on anatomy and dissection, a use of language and choice of words characteristic of public performances similar to those of the sophists. Essential to this performative culture was the distinction between the scientist’s private and public morality, between his public and private teachings, between treatises intended for a wider

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audience and private exercises, and between his own public dissections or vivissections and his private anatomical drills. For example, he used the word *epideixis* (display, exhibition, declamation), to refer to public dissection or vivisection of animals; *apodeixis*, (demonstration), a word that is central to Galen’s theory of scientific method to refer to syllogistic or mathematical demonstration; and *logoi epideiktikoi* (display speeches) to refer to public oral commentary. He also constantly made specific use of the terms *autoschediazein* (improvise or extemporize), *meletan* or *gumnazein* (study, practice, prepare, rehearse), and *proballein* (propose a subject for improvisation). Finally, he often included the distinction between *demosiai* (publicly) and *idiai* (privately), and invoked *paideia* (culture referring to the Hellenistic tradition) and the *pepaideumenos* (men of culture), the audience, and restaging the past.

Galen inscribed his anatomical performances in the tradition of theatrical and rhetorical displays, part of the Greek Revival with which his audience was also familiar. In fact, Galen might have been appealing to other traditions of the Hellenistic world also characterized by their performative orientation and grandiloquent proportions. These traditions include wonder-working competitions, judicial trials, and amphitheater entertainment. In his own displays, Galen presided as authority and as contestant in rhetorical or actual public performances through a coercive element in many of his works. He constantly engaged in truth-contests with other physicians, philosophers, and, in his few public demonstrations:

69 Von Staden, “Anatomy as Rhetoric”, 54-55.
geometry, architecture, and astronomy, somehow imagine that they have found out the truths of philosophy so easily that they blithely state that the facts demonstrate themselves without the assistance of the logical method or proof… And this in spite of the fact that their lectures have daily audiences of twenty, thirty, or more, and they experience no shyness in addressing them. Sometimes I request three or four Platonist, three or four Epicureans, the same number each of Stoics and Peripatetics, and three or four Academics or Skeptics to be present at the discussion, so that we have about twenty men of philosophy; and I also ask a similar number of persons who have exercised their rational soul in logic, but have no familiarity with philosophical arguments. Such a gathering is unendurable to the former group.70

In this passage, Galen argues that only those trained in logic, arithmetic, geometry, architecture, and astronomy, much like Galen himself, are true men of philosophy. Accordingly, his own education gave him authority over those who lacked such training.

Performing physicians were a common motif in the world of public spectacles. Dio Chrysostom, the famous Greek orator of first-century Rome had already described this scene:

[T]he sort of recitation of which I speak, being a kind of spectacle or parade, has some resemblance to the exhibitions of the so-called physicians, who seat themselves conspicuously before us and give a detailed account of the union of joints, the combination and juxtaposition of bones, and other topics of that sort, such as pores and respiration and excretions. And the character is all agape with admiration and more enchanted than a swarm of children.71

As I have already mentioned, Galen started his career in his native Pergamum as Physician to the Gladiators, a public office conferred by the highest religious officials and

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granted only to those with powerful connections and renowned skills. While he occupied this office, Galen became familiar with the kinds of displays attractive to the mobs, while also studying anatomy and acquiring significant experience in treating wounds and lesions. Still, because the upper classes rejected the Games—and Galen was not exception—it is necessary to qualify this image. Although he was associated with this institution at a certain time in his life, he would reject it ever after. Thus, if we want to associate Galen with the Games we need to be clear that although he participated in the culture that sold them to the plebs as entertainment, but the point of coincidence between them and his literary cultural values related only to the fact that both represented part of the society in which Galen lived.

In these public performances, Galen would present himself in front of his audience, accompanied by a subdued or dead animal. He then would serve as a mediator between the public, the body, and the “truth” that his experiments were intended to prove, namely the reunion of form and function that proved the beauty of Nature’s design. Galen’s discourse would become a guide, an oral text that focused the eyes of the spectator to “see” what he claimed to see. Nevertheless we can easily imagine the difficulty the great majority of his contemporaries would have in distinguishing nerves, vessels, ligaments, muscles, etc. These observations were taking place then in a cultural and institutional context that regulated the format and expectations of the encounter. The authoritative eyes of a physician guided the audience, and he employed rhetorical methods to support his arguments. These rhetorical methods were not only oral displays but were also inspired by models in actual texts either previously written or to be written

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72 Galen, De usu partium, 14, 2.
by the physician himself. The double nature of these encounters—oral display and textual inspiration—granted authority to the physician as orator and writer. In the case of Galen his work *Anatomical Procedures* would have been a textual version of public debates and demonstrations of this sort, and as part of the ambiguous nature of any performative display, the double nature of these encounters would have been obvious to his audience.

Consequently, Galen’s audience, readers and spectators, participated in the observation of a physical body present in the anatomical demonstrations and a textual body represented by the medical performer and his implicit reference to texts. Scientific observation and scientific text are one—a transposition mediated and conditioned by an oral text, a performance characterized by rhetorical and logical sophistication that made the dissected body a textual incarnation, and vice versa. The physical sign acquires a double value—as something “real”, visible, and material, but also as a rhetorical device and verbal proof. The classical Greek *epideictic* culture of display and exhibition, combined with the battle-atmosphere of the amphitheater, proved to be an ideal mix for Galenic argument and the construction of a *Corpus Galenicum*.

Galenic performance employed a rhetoric of social demarcation that divided human from animal, successful performers from incompetent ones, and the true *pepaideumenoi* from pretenders, while also including a teleological vision of Greek science and a rhetoric of unity, both of which he had found in the Hippocratic treatise *On the Nature of Humankind*.

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73 Von Staden “Anatomy as Rhetoric”, 64-65; Gleason, “Shcok and Awe”, 18, 22-23.
As we have seen, the Hippocratic tradition had long, deep roots in the Hellenistic world. Some texts in the corpus of Hippocratic works dated as far back as the fourth century B.C.E., and the assembly of the Corpus itself took place some time in the third century B.C.E. However the theories, methods, and treatments contained in the Hippocratic texts are diverse. The number of authors and the dates of compositions of the different works also vary significantly. Today most scholars agreed that the fact that the pathological theories found in the Corpus trace disease back to material factors, such as fluids, but the agreement stops there. Furthermore there were many different interpretations of the Hippocratic tradition, as well as many criticisms of it.74 Part of a vast medical marketplace, Hippocratic medicine was one among many different approaches to understanding disease, the human body, and nature in the Hellenistic world.

Criticisms of Hippocrates were common, if not already old, by the time of Galen. Most of our references to early disputes or different interpretations of the Hippocratic legacy come from Galen himself. These references are limited to specific Hippocratic works and are made in the contexts of the cases discussed at hand. This limits our view of the broader history of the Hippocratic tradition; there may have been more challenges to both the Hippocratic legacy and the Corpus, but Galen may have chosen not to address them in any of his surviving works.

74 In fact, Galen mentions many physicians (either his contemporaries or antecessors) who practiced humoral medicine under the Hippocratic Tradition—Erasistratus, Chrysippus, Quintus (a significant rival of Galen), Lycus, Athenaeus of Attaleia (who even wrote a commentary on Hippocrates’ On the Nature of Humankind. Galen even mentions a Hippocratic School of medicine. But he considered all spurious and without any base, as they all practiced a different kind of humoral medicine and understood Hippocrates very differently. Galen, De Elementis ex Hippocratis Sententia, Corpus Medicorum Graecorum V 1,2 (Berlin: 1996), 96; In Hippocratis de natura hominis librum commentarii I, 15 8 K; In Hippocratis Epidemiarum librum II commentaria V, 312; In Hippocratis Epidemiarum librum III commentaria III, 17.
In the first century C.E., the famous Roman encyclopedist Celsus, included a history of medicine in his work *On Medicine*. He argued that because Hippocrates was the father of medical science and a student of philosophy he was also a founder of dogmatic medicine, which later was modified by the Empirics. Celsus adopted a mixed position on medicine different from that of Galen’s, who was very critical of the Empiricists and Erasistratus. Celsus promoted a rational treatment of medicine based, as in the case of the Empiricists, on experience and the study of natural things, somehow close to Hippocrates and Erasistratus. He was open about his disagreements with Hippocrates and analyzed that author’s failed treatments and cures that resulted in death, as described in *Epidemics* and the *Aphorisms*.

Following the criticisms of Hippocrates, Galen described the physicians Diocles and Ctesias as opposing certain Hippocratic therapies, such as the use of contraries to treat illness (hot to treat cold, dry to treat humid, etc.). Galen’s references, unfortunately, are very general. The Methodist Soranus of Ephesus, probably a younger contemporary of Galen and alleged author of *The Life of Hippocrates According to Soranus*, which I have already mentioned, also voiced criticisms of Hippocrates, discussing many of the

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75 Galen accuses the Empiricists because he believes the results of their work is due to chance, and thus are unreliable. He claims that the Empiricists refuse to deviate from these unreliable results in spite of what the circumstances of each case may dictate. Finally, Galen claims that the Empiricists are wrong because knowledge on circumstances of the patient, the conditions of illness, the power of treatments, and knowledge of the right time to apply them is required. This means that a theoretical frame is needed and experience can only be used to confirm it. See *Claudi Galeni De placitis Hippocratis et Platonis libri novem*, edited by Iwan Muller (Leipzig: B.G. Teubner, 1874), 784.

76 *A. Cornelii Celsi quae supersunt*, Corpus Medicorum Latinorum (Leipzig and Berlin: 1915), 107, 1 ff., 260 ff.; Diodes and Ctesias are reported by Galen as critics of Hippocrates, *In Hippocratis Epidemiarum librum I commentaria III*, 112 ff.; *In Hippocratis Aphorismos commentaria*, 17 B 530 ff. K.

contradictions among different Hippocratic texts.\textsuperscript{78} Another interesting case is that of Lycus, probably an older student of Galen’s teacher Pelops. From what we can gather in Galen, he seems to have been more of an Empiricist when approaching Hippocrates, causing Galen to call him a “bastard” of the Hippocratic sect.\textsuperscript{79}

Galen’s own teachers also held a wide range of views, to judge from Galen’s references. Quintus, Marinus, and Numesianus seem to have been somehow less enthusiastic in his views of Hippocrates, and were critical of at least some aspects of Hippocratic medicine. They emphasized the importance of anatomical research, something that Galen defended as well, as I will discuss later on. Galen, however, accused them of presenting Hippocrates as too much of an empiricist. If we follow these examples it would appear that a good number of Empiricists were followers of Hippocrates. This would certainly align with the content of at least some Hippocratic texts, like \textit{Aphorisms}, \textit{Prognostics}, \textit{Epidemics}, \textit{Prorrhetics}, texts that were often used by Empiricists in their criticisms of Dogmatics.

Sabinus, another teacher of Galen, credited Hippocrates with dogmatic theories by incorporating many of the conclusions reached by Dioscorides and Capiton whom Galen had criticized heavily. It appears that Sabinus knew little about anatomy.\textsuperscript{80} In the surviving fragments of his work, Sabinus seems more interested in the environment than in anatomy, and discusses the influence of air in health, the proper orientation of houses and cities, and the distribution of streets to allow a good airflow to clean away smoke and

\textsuperscript{78} Soranus, \textit{Gynaeciorum libri IV}, Corpus Medicorum Graecorum IV (Leipzig and Berlin: 1927), 31, 26 ff., 112, 14ff., 144, 145.

\textsuperscript{79} Galen, \textit{In Hippocratis Epidemiarum librum III commentaria III}, 17 ff.

\textsuperscript{80} Galen, \textit{De sanitate tuenda}, Corpus Medicorum Graecorum V 4.2 (Leipzig and Berlin: 1923), 100.
fumes.\textsuperscript{81} Thus, Sabinus attests to the existence of intellectually sophisticated Hippocrateans before Galen, and to the importance of meteorological medicine in antiquity.\textsuperscript{82}

Finally, Pelops, one of Galen’s closest teachers at least in part argued in favor of the controversial section on blood vessels present in \textit{On the Nature of Humankind}, which argues that veins and arteries originated in the brain.\textsuperscript{83} Pelops’ interpretation of Hippocrates, at least on the basis of anatomy, was thus different from Galen’s, who would argue for the centrality of correct anatomy in Hippocratic medicine. So the physician of Pergamum would have to distance himself from his teacher on this point.

Galen made a series of systematic defenses against Hippocrates’ critics. Perhaps one of the most significant ones is Galen’s attacks on Lycus since Galen was facing a significant rival in him. Lycus was already well known and famous as an anatomist in Rome when Galen arrived to the city, and, in an effort to establish his own authority, the physician of Pergamum was vocal in discrediting him. Galen even wrote a small book entitled \textit{What Lycus Never Knew About Anatomy}. The book has not survived, but Galen issued the following criticism of Lycus in \textit{On the Natural Faculties}:

\begin{quote}
[L]et us now speak of the worst doctrine of all, lately invented by Lycus of Macedonia, which is popular owing to its novelty. This Lycus, then, maintains, as though uttering an oracle from the inner sanctuary, that urine is residual matter from the nutrition of the kidneys! Now, the amount of urine passed every day
\end{quote}


\textsuperscript{82} Vivian Nutton, \textit{Ancient Medicine} (London, UK; New York, NY: Routledge, 2004), 218.

\textsuperscript{83} Galen, \textit{Galeni De placitis Hippocratis et Platonis}, Corpus Medicorum Graecorum V 4,1,2 (Berlin: 1978-1984), 393.
shows clearly that it is the whole of the fluid drunk which becomes urine, except for that which comes away with the dejections or passes off as sweat or insensible perspiration... And that even Erasistratus was aware of this is known to those who have read the first book of his ‘General Principles’. Thus Lycus is speaking neither good Erasistratism, nor good Asclepiadism, far less good Hippocratism. He is, therefore, as the saying is, like a white crow, which cannot mix with the genuine crows owing to its color, nor with the pigeons owing to its size. For all this, however, he is not to be disregarded; he may, perhaps, be stating some wonderful truth, unknown to any of his predecessors.  

Here, Galen is debating Lycus on anatomy and physiology by contrasting Lycus’ views with those of famous predecessors. He does so in order to discredit Lycus and affirm his superior knowledge not only of anatomy and physiology, but also of medical theory and history. Furthermore, in the style of the Second Sophistic, the debate is about the right interpretation of the Hippocratic tradition. Early during his first stay in Rome, Galen had been called ignorant of anatomy and the work of the ancients by his contemporaries, and his work had been doubt, and so the physician of Pergamum used the arena of the public and textual debates to affirm his investigations and knowledge, particularly when attacking Lycus. Lycus held alternative views on Hippocrates and represented the diversity of the Hippocratic tradition. This was contrary to Galen’s attempts to unify of the Hippocratic legacy under a single medical theory, as will be shown in the next chapter.

The time of Galen also saw a series of disputes on the nature of medical knowledge. The issue at hand was whether medicine should be based on the authority and knowledge of the ancients or whether it should be based on innovation and change.

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84 Galen, *De naturalibus facultatibus I*, 2 71 K.

85 Galen, *My Own Books*, in *Selected Works by Galen*, 4-6, 8-10.

These disputes became ever more powerful in the context of the Second Sophistic during which, as I have discussed earlier, much intellectual exchange took the form of debates, whether in oral presentations or in writing. Geoffrey Lloyd has called attention to the questions raised by these disputes: first, whether legitimacy should be sought by following an authority from the past; second, if the answer to the first question is yes, which authority in particular should be chosen; and third, once a figure from the past is selected, how that figure should be interpreted.

The way Galen approached these issues is central to my views on his use of specific Hippocratic treatises, discussed in the next chapter. He chose to follow the authority of Hippocrates of Kos, but, despite appearances, not in blind adoration. As the following quote exemplifies, Galen condemned his contemporaries for forgetting the way of the ancients. At the same time, he introduced scientific innovations (particularly in anatomy and physiology) disguised as a development of Hippocrates’ work:

> And this when my prognosis contained nothing remarkable, as I have shown you in my Commentary to Hippocrates’ Epidemics I and also my treatise On Crises. But these doctors are not only incapable of understanding the works of the ancients; they cannot yet even count the days beyond seven, especially if the patient has once become free of fever and then has relapsed. Yet Hippocrates in his Epidemics has described all the days in illness to its final conclusion.⁸⁷

Here Galen refers to an unknown group of physicians, probably as a general criticism of the intellectual environment of his time. He claims that his own knowledge, which yields better results than that of his competitors, is nothing but the

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development of what Hippocrates already advanced. This allows Galen to criticize Hippocrates to some degree. However, he would nonetheless present any apparent errors of the physician of Kos as a simple excess of brevity or ambiguity, or as a mistake made by an untrained reader. Nevertheless, it is evident from such passages that Galen recognized that even the great Hippocrates did not know everything to be known about medicine (or at least he did not write about everything that is to be known about medicine). It appears that Galen believed in some form of scientific progress, which meant learning “in a short time the useful things which were found over a long time, with toil and anxiety, by those before us.” Galen argued that if we follow the teachings of the ancients, “nothing stands in the way of our becoming better than those before us.” This is not meant to reject or undermine Hippocrates; rather, Galen believed that the process of discovery went hand-in-hand with the full development and realization of Hippocratic teachings. He resorted to a method of “clarification” to advance his ideas on anatomy and physiology as Hippocratic ones. This will be discussed further in the following chapter.

Similarly, when discussing the introductory passage to Hippocrates’ *On the Nature of Humankind*, Galen writes, “So far as this passage is concerned, it does not seem to be at all possible to learn clearly the intent of this work. For he censures those who take the account of nature further than what is useful for medicine…” Here, Galen raises the question of whether or not Hippocrates argued against any discussion of the elements for the purpose of medicine. If he did, this would contradict Galen’s view on the

88 Galen, *Hippocratis de Fracturis liber et Galenim in eum commentarius I*, 18 B 318 K.

89 Galen, *Claudi Galeni De Placitis Hippocratis et Platonis libri novem*, 735.

centrality of elemental theory for Hippocratic medicine. The physician of Pergamum then argues that the problem is simply a matter of proper interpretation of the Hippocratic text, which only he rightly understands. Galen then introduces his own work in elemental theory, and rearranges the conflicting paragraph to fit with his views. This particular example will be discussed further in the next chapter. In this way, Galen could rely on the authority of the physician of Kos while at the same time introducing his own knowledge, without seeming to break with tradition. This allowed him to create a lineage that started with Hippocrates, whom Galen portrayed as the best physician and the best of philosophers, and culminated in Galen. This also meant Galen was the ultimate student and interpreter of Hippocrates and the only one with the right interpretation of the Hippocratic legacy.

Like Lloyd, I believe Galen chose Hippocrates because of the moral attributes granted to the physician of Kos through legend and the possibilities of assimilating Hippocrates with the great philosophers of the past. ⁹¹ Galen could access an ample legacy of “snapshots” of Hippocrates’ “life” through the pseudepigrapha, which had already been integrated into the Hippocratic Corpus. ⁹² He could then create the image of Hippocrates as the best physician, the best philosopher, and the best man there was. ⁹³ This would also allow Galen to present his own medical therapy as inspired by events of Hippocrates’ “life” and validate his claims about the persona of the physician of Kos, ⁹⁴ as

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⁹¹ Lloyd “Galen on Hellenistics and Hippocrateans”, 140-141.

⁹² Jacques Jouanna, Hippocrate, 21, 498.


⁹⁴ See, for example, Galen, Theriac ad Pisonem, 14 280-281 K; De febrium differentiis, 7 290 K.
in the following passage from Galen’s *That the Best Doctor is also a Philosopher*, which paraphrases the pseudepigraphy.

If such a person exists [the ideal doctor], he will scorn Artaxerxes and Perdiccas, he will wish never to come into the sight of the former; as for the later he will heal him of the disease he suffers, regarding him as a man in need of the Hippocratic art. He will not, however, spend all his time with Perdiccas, but will treat the poor people of Kranon and Thasos and the small towns. He will leave Polybus and [Hippocrates’] other disciples to the citizens of Cos, and will himself travel through the whole of Greece.\(^95\)

Here Galen is describing Hippocrates in high moral and intellectual terms. Then, since Galen portrays himself as the ultimate follower of Hippocrates, he implicitly borrows these same characteristics for himself. Still, there is yet another element to the figure of Hippocrates that would explain Galen’s choice of him as a model, particularly in the context of the Second Sophistic. Using Plato and Aristotle as references, as well as the pseudepigraphy,\(^96\) Galen can connect Hippocrates with the “Golden Age of Pericles” and the Athenian tradition. Hippocrates can then be established as a sort of founding father of the classical heritage that Rome was claiming for itself. This also means that Galen, as part of the Hippocratic lineage, can claim access and a especial connection to the “Golden Age of Pericles” and the great philosophers of the past, Plato and Aristotle. Galen goes so far as to present Hippocrates as the ultimate philosopher, above Plato and Aristotle themselves.

Galen argues, first, that there was a Hippocratic method of inquiry far superior to

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\(^{95}\) Galen, *The Best Doctor is also a Philosopher*, 32.

\(^{96}\) As I have mentioned earlier Pinault argues that at least two of the letter, the *Embassy* and *Speech from the Altar*, already seek to connect Kos with Athens and the Athenian tradition.
and more successful than any other systematic approach to nature. Consequently, and following Hippocrates, any good physician should be well trained in this scientific method, which will allow him to distinguish the species and genus of all diseases, follow the proper treatment, clearly understand the nature of the body, and ultimately shape his own soul. Thus, Galen’s approach to knowledge in general, and medicine and philosophy in particular was characterized by the construction of a scientific method. For Galen, this method had provided the right kinds of proofs and solid premises conducive to agreement among those interested in such inquiries. Based on logic, arithmetic, and geometry, this particular method, Galen maintained, was present in Hippocrates’ works in the form of abbreviated premises that needed to be developed further in order to reach their full potential.

By teaching us these things [about the differences in times of life and in regions], and in addition that ‘opposites cure opposites’, (Hippocrates) imparted to us the ‘letters’ of the method of the science. Then by giving in the Aphorisms an account of the diseases that are most common in each season and at each time of life, he instructed us in the ‘syllables’ as it were, that the rest on the letters.”

This quote illustrates how Galen used bits and pieces from across the Hippocratic

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97 “Method” is a term used frequently by Galen, and it refers to the methodical and logical process of thinking inspired in geometry. For considerations on Galen’s use of the concept of “method” see Temkin, Galenism, 28 ff.

98 Galen, The Best Doctor is also a Philosopher, 32-33.


102 Galen, De placitis Hippocratis et Platonis, 517.
Corpus to create an all-encompassing methodology that could unify the different works and theories of the Hippocratic texts, and grant authority to those who, like Galen, could fully develop the Hippocratic legacy.

Galen wrote that the Hippocratic method was responsible for the highest achievements by the great philosophers of the past—first and foremost Plato, and then, in a distant second place, Aristotle. He repeatedly argued that Plato and Aristotle knew and admired Hippocrates’ reasoning, and that they tried to follow his teachings when constructing their own method of inquiry. In this sense, Galen read Aristotle’s Second Analytics as one of the greatest accomplishments of that philosopher and Plato’s Timaeus as those philosophers’ greatest accomplishments respectively, and as the centerpieces of their respective legacies. In On the Usefulness of the Parts of the Body Galen claims that Aristotle’s understanding of the parts of the body is derived from Hippocrates. Furthermore, in The Elements According to Hippocrates, Galen writes that Aristotle’s elemental theory is already present in Hippocrates, and that Plato and Aristotle merely applied Hippocrates’ teachings. Taking things a step further, Galen even maintained that these philosophers were not able to fully grasp Hippocrates’ approach to knowledge, leading to mistakes in their reasoning. According to Galen, these mistakes included Plato’s and Aristotle’s understanding of the four humors and their relationship to the four elements, and the four seasons of the year. As he wrote in On the Therapeutic Method,

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103 Galen, De placitis Hippocratis et Platonis, 105, 311-13, 419; On the Therapeutic Method, 10.


105 Galen, De placitis Hippocratis et Platonis, 105, 418.

106 Galen, De placitis Hippocratis et Platonis, 91, 503, 521.
“it was Hippocrates who first of all introduced the doctrine of the Hot, the Cold, the Dry, and the Wet; later Aristotle gave a demonstration of it. Chrysippus and his followers took it over readymade.”¹⁰⁷

Finally, the physician of Pergamum would argue that Plato’s and Aristotle’s mistakes, contrasted with Hippocrates’ great achievements, were made because the philosophers were not medical practitioners. As Galen puts it, “It would have been more proper for Plato to adopt this order of instruction [by including anatomy], if indeed it benefits a philosopher, even more than physicians, to use order and method in his instruction. Perhaps he was unable to give a precise account of these matters, as they required experience and he was not a medical practitioner.”¹⁰⁸

This quote demonstrates the ultimate link that Galen made between philosophy and medicine, a very powerful cultural synthesis. In one sense, Galen was himself the result of this cultural synthesis under the figure of Hippocrates. He was not only a disciple of the “divine” Hippocrates, but the disciple. He was able to fully understand, and fully develop, what he understood as the premises present in the Hippocratic Corpus, and to further develop what he saw as the correct scientific method. Galen even resorted to examples from his own life to make this case. He writes that he was acquainted with geometrical demonstrations through the influence of his father, an architect well trained in geometry, mathematics, architecture, and astronomy. Because of this background, he argues, he could discern the truth if there should be conflict between his various


¹⁰⁸ Galen, *De placitis Hippocratis et Platonis*, 519.
Certainly, Galen provides sufficient examples in this and other treatises of his familiarity with advanced mathematics, and also makes clear his opinion on how such a way of proceeding by means of logical reasoning concerned philosophy. Therefore Galen argues,

What Hippocrates said in the context of the art of medicine appears to hold for philosophy too. Hippocrates said that similarities give rise to errors and confusions even in the minds of good doctors, so that not only ordinary practitioners, but even the best, are tripped up by them. It is thus not unreasonable to suppose that in the context of philosophy, too, good philosophers are subject to these confusions and errors.”

Here Galen is arguing that philosophy would benefit particularly from this scientific method, since disagreements among philosophers are difficult to resolve by means of empirical proof. Similarly, in The Affections and Errors of the Soul, he provided an interesting example of a gathering among philosophers (Platonists, Epicureans, Stoics, Peripatetics, Academics, Sceptics) and men versed in logic but unacquainted with philosophy. Here, he described the philosophers as people who are always lost and who build up false, rhetorical answers and arguments.

In these and other works, Galen is “classicizing” Hippocrates and the Hippocratic tradition. He develops a cultural synthesis from the perspective of a medical tradition, a

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110 Galen, The Affections and Errors of the Soul, 128.

111 Galen, The Affections and Errors of the Soul, 129.

112 Galen, De placitis Hippocratis et Platonis, 577.

113 Galen, The Affections and Errors of the Soul, 144.
global vision unique to Galen among his predecessors and contemporaries. This synthesis is ultimately what leads to the success of the Galenic interpretation of Hippocrates, particularly in the context of the Second Sophistic, where Roman society was looking for the right kind of founding fathers of a classical Greek revivalism. Galen spearheaded this effort, building a philosophical and medico-biological model that united together some of the most important systems of thought of the Hellenistic world, including those of Plato, Aristotle, and the tradition of elemental theory according to Empedocles. He also claimed that this synthesis was all based on the true teachings of the “divine” Hippocrates, who laid the foundations for the philosophical achievements of the “Golden Age of Pericles” by way of Plato, Aristotle, and the pseudepigrapha. Accordingly, and as the next chapter will argue, very early in his career Galen chose On the Nature of Humankind as the treatise containing the essential concepts of Hippocratic medicine and philosophy, even though On the Nature of Humankind had a complex history and its authenticity had been called into question, particularly so in the disputes of the Hippocratic legacy I described earlier. Nevertheless, the physician of Pergamum rather found in it a perfect source for his model: a unified system based on elemental theory incorporating Platonic and Aristotelian philosophy with humoral theory. For this reason, Galen’s defense of the authenticity of this treatise—and of his own controversial reading of it—was at the center of his career. Accordingly, he presented On the Nature of Humankind as the essential model in relationship to which every other Hippocratic text was to be evaluated, authenticated, and explained.

Consequently it is the problem of authenticity that holds the key to Galen’s approach to Hippocrates. Identifying specific treatises as either written by Hippocrates or
as spurious meant consolidating the authority of both the physician of Kos and the physician of Pergamum. This would produce a unified system that could claim to unravel the truth behind nature. Unlike his predecessors and contemporaries, Galen chose not to affiliate himself with any other commentator of Hippocrates or any other medical sect. He became a self-styled Hippocratean whose reading of Hippocratic medicine was original. This meant that he could claim a direct link between his medical theories and those of Hippocrates, without any need for intermediaries.

Wesley Smith argues that Galen is the first commentator fully concerned with the issue of authenticity, which would imply that the legitimacy of the Hippocratic texts had been granted by tradition. However, I would argue that the problem of authenticity was more complex. Other commentators had already raised the issue before Galen. Erotian, in his glossographical work, had already argued that some works ascribed to Hippocrates were not authentic, and Dioscorides and Capiton had also proposed a method to distinguish the legitimate works of Hippocrates on literary grounds. Nevertheless, Galen did something distinctly different approaching the problem from the perspective of medical theory. Once he had established a model for what he thought was the central Hippocratic theory, he proceeded to eliminate spurious works and to assert legitimate ones based on this theoretical model.

In order to assert the authenticity of On the Nature of Humankind, Galen even wrote commentaries on texts that he considered spurious to assert the legitimacy of the texts he considered legitimate. One example is his commentary on Prorrhetic I, where he argued that this text was composed from fragments of Epidemics, Prognostics, and Aphorisms, and thus not written by the physician of Kos. (Dioscorides and Capiton, who
had argued that the text was by one of Hippocrates’ grandsons, had already disputed *Prorrhetic I.* In this particular case Galen had changed his mind. Early on, he defended the text as legitimate because of its connection with other treatises that he considered original to Hippocrates. However, by the time he wrote his commentary on *Prorrhetic I* he had changed his mind because Lycus had used the text as one of the bases of his Empiricism, and Galen had to assert his position against him and the Empiricists.\textsuperscript{114} Galen made a choice to unify the whole Hippocratic system under a specific model, and that choice, as we will see next, was *On the Nature of Humankind.*

\textsuperscript{114} Galen would also question the content of *Prorrhetic I* later in his career. He would argue the text was composed by sections of other Hippocratic treatises like *Aphorisms, Prognostics,* and *Epidemics,* but the overall therapies recommended in it were “unsound”. Galen, *In Hippocratis Epidemiarum librum III commentaria III,* 62.
Corpus Galeni

This chapter is organized in three different sections. The order of the sections follows the developments of Galen’s main tenets for the defense of a four humors theory—their numbers, qualities, and effects—as fundamental to the Hippocratic tradition. Galen believed the work *On the Nature of Humankind* presented the key points of Hippocrates’ teachings. Accordingly, I argue that Galen’s defense of the theory of four humors and his controversial reading of Hippocrates is fully expressed in his later commentary to this text, which was the result of years of reflection.

The first section of the chapter explores the problem of anatomy and the challenges it presented for the physician of Pergamum. Galen had to unify the Hippocratic legacy under a single, correct anatomical model that left room for modern discoveries, and use this anatomical model to defend his selection of specific Hippocratic texts. The next section introduces Galen’s first commentary on the Hippocratic treatise *On the Nature of Humankind*, entitled *On the Elements According to Hippocrates*. In it, I discuss how Galen associated the theory of the four humors with the four elements in a way that made any argument in favor of *On the Nature of Humankind* an argument for elemental theory. The third and final section focuses on Galen’s second commentary to the same Hippocratic work, his *Commentary to On the Nature of Humankind*. In it, I discuss the different readings the physician of Pergamum made of the Hippocratic text,

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115 Galen, *Book on Prognosis to Posthumus*, XIV, 660. This phrase is said to have been pronounced by the Roman emperor Marcus Aurelius when describing Galen.
the controversies behind those choices, and the problems behind them.

Many of these debates can be understood in the historical context of the Second Sophistic, which explains why Galen had embraced Hippocrates as part of a revival of ancient Greek culture. Like his contemporaries, Galen aimed to develop an authorial persona that provided him with the intellectual and political space to insert this ancient Greek model into the context of the Roman present. But Galen took this Greek revival a step further classicizing the figure of Hippocrates and identifying him with a particular theoretical model, based on the four humors and the four elements. Galen used this model to explain physiological processes and nosological categories, and described a body grounded in the medical theory of the four humors, connected to the four elements, the four ages of men, and the four seasons. In this way, representing what I have called a “neoclassical” physician, Galen projected himself into the ideals of a “classical model”, inserting his own image and his own philosophy in the Hippocratic tradition.

We must taken into account the fact that many of Galen’s works on ethics and philosophy have been lost and without them much of his thoughts on these topics are inaccessible. The consequence, as Owsei Temkin has noted, is that much of our work on Galen has to deal with him in the light of what was to come.\(^{116}\) Galen was a very active thinker with a large variety of ideas. Nevertheless, I believe it is possible to trace his opinions on Hippocrates and establish a solid, consistent chain of thought. I have chosen to focus on the connection between Galen’s earlier and later works through specific considerations on Hippocrates and his link to the theory of the four humors and the four elements. The works I discuss in this chapter address this connection. First, \textit{On the

\(^{116}\)Temkin, \textit{Galenism}, 8.
Doctrines of Hippocrates and Plato, a work dedicated to reconcile the ideas of Plato and Hippocrates written early in Galen’s career, during and right after his first stay in Rome. Second, On the Elements According to Hippocrates, Galen’s first commentary to Hippocrates’ On the Nature of Humankind, written during his first stay in Rome. And third, the later commentary to On the Nature of Humankind, one of Galen’s last works written close to the time of his death. In the section on Anatomy, I will also introduce Galen’s commentary to the Hippocratic On Fractures. This last one was one of his first commentaries to any of Hippocratic text, and as such it offers an insight into the method Galen used to analyze the different Hippocratic works. My selection of these texts is strengthened by the fact that Galen is constantly cross-referencing each other. This suggests that each one of them, as time goes by, is a further development or inclusion of the ideas that reunite them together in a same line of thought. I believe these texts clearly show the evolution and continuities of Galen’s ideas. He elaborated an ideal Roman Hippocrates associated with the theory of the four humors and the four elements, and also connected Hippocratic medicine with different philosophical theories. My chapter will follow these developments and thus explore the genealogy of Galen’s thought. I will discuss how the construction of the Hippocratic persona ultimately led Galen to claims of authority over other medical schools, asserting his direct and exclusive access to the Hippocratic legacy.

Hippocrates and the Problem of Anatomy

Perhaps the most difficult aspect of the Hippocratic tradition that Galen had to
face was the problem of anatomy. As I will discuss below, anatomy was an important issue for Galen because it could be used to defend his controversial reading of the Hippocratic legacy. Anatomy also offered Galen the opportunity to debate his critics in the style of the Second Sophistic. As I have argued in the previous chapter, Galen was a skillful anatomist who could use his abilities and recent anatomical and physiological discoveries to validate his position, arguing they were elements already present in Hippocrates. His main problem was that most texts within the *Hippocratic Corpus* focus on humoral pathology and the prognosis, evaluation, and treatment of specific cases, rather than on anatomy itself. Any mention of anatomy is there only to explain the specific circumstances of a given disease or treatment, or to present a regimen for health. Furthermore, the few specific texts that could potentially touch on anatomy (*On Anatomy, On Fractures, On Joints*) mostly refer to technical operations to treat fractures and open wounds—presumably some of the most common cases faced by a medical practitioner of the time.

Thus, what we can find in the *Hippocratic Corpus* is a general and vague sense of *some* kind of anatomical systems, but due to the diverse nature of the *Corpus* different texts describe different systems and never really addressed anatomy directly. In fact, it is possible to find contradictory anatomical explanations in the *Corpus* (I will discuss this point on the last section). However, Galen would argue through his entire career that anatomy was the means for the understanding of the workings of all animal bodies, that it was inherent to the authentic Hippocratic texts of the *Corpus*, and that it only required the *right* interpreter to decipher and explain it. Anatomy was at the core of the Galenic system. In fact, Galen would compose early in his career an entire treatise designed to
teach his students the art of anatomy, entitled *On Anatomical Procedures*.\(^{117}\) Also, the physician of Pergamum would eventually argue that the study of anatomy could reveal the workings of Nature (logos, phusis), a form of demiurge responsible for the creation and functioning of all things.\(^{118}\)

In *On the Doctrines of Hippocrates and Plato*, where Galen is trying to lay down the bases for his reading of the Hippocratic tradition, one of the main arguments he makes is that the brain—the seat of reason—is responsible for the movements of the muscles through the nerves. Here, Galen was defending the Platonic model of a tripartite soul by explaining how it connected with anatomy and physiology, and he was using Hippocratic medicine to reunite it all together. This model was opposed by the Aristotelian argument that said the heart was the origin of movement, nerves, and veins, a notion that was common during Galen’s time.\(^{119}\) The physician of Pergamum argued that anatomy could solve the debate, and one of his most dramatic examples of it (apparently performed publicly) was the vivisection of a pig, whose nerves were cut to prevent it from squealing, proving that the muscles of the larynx depend on the nerves that come from the brain. In *On the Doctrines of Plato and Hippocrates*, Galen argues, “the muscles move certain organs which give rise to respiration and speech, but [the muscles] themselves in turn require for their motion the nerves from the brain.”\(^{120}\) This quote illustrates both the point made by Galen about the value of anatomy and the kind of


\(^{119}\) Galen, *De placitis Hippocratis et Platonis*, 123.

\(^{120}\) Galen, *De placitis Hippocratis et Platonis*, 361.
debates that would follow the model of the Second Sophistic by means of public vivisection and debate. Galen’s arguments of a Hippocratic anatomical model reveal how, as a younger physician, he found himself forced to dispute many opponents of a Platonic/Hippocratic model. Beyond dissection and vivisection, Galen would also resort to rhetorical argumentations against those who disputed him. He accused them, often in a general and imprecise way, without specifically referring to any individual, of a lack of proper knowledge. Galen also blamed them for a lack of proper training in logic, capable of giving them insight into truth. For example, he called into question Zeno’s deficient training in logic and Chrysipus’ absolute lack of training in arithmetical reasoning.¹²¹ According to the physician of Pergamum, these men were not only ignorant but they actually were incapable of achieving any knowledge because “no one who is unversed in the demonstrative method can follow those who employ it.”¹²² Galen claimed advantage over his detractors by arguing that he was the only one who truly knew the real anatomical teachings of Hippocrates, was properly trained in logic, and in the Hippocratic method of investigation—a combination of logic, arithmetic, moral virtues, anatomy, and a mélange of philosophical traditions.

In On the Doctrines of Hippocrates and Plato, Galen made an argument for anatomical dissection as scientific proof of the four humors, and connected it with his discussion of Plato and Hippocrates.¹²³ First of all, Galen was trying to reconcile Plato with the specific elemental theory put forward by Aristotle—four basic elements: fire air,

¹²¹ Galen, De placitis Hippocratis et Platonis, 137-9.

¹²² Galen, On the Therapeutic Method, 57.

¹²³ Galen, De placitis Hippocratis et Platonis, 493.
earth, and water, that make up the universe. From there he argued that Hippocrates was the first to put forward these elemental notions. But the physician of Pergamum had to resolve the problem that neither Hippocrates nor Plato talk about elements in the sense Galen wants them to do. In this connection, Galen writes,

Yet Hippocrates too did not name them elements, but only said that when they come together and are mixed, natural bodies are generated. He says that there is no need to proceed beyond them since he is pursuing a practical, not theoretical science. Plato, however, as one who would view theoretical philosophy as the most valuable, was not satisfied simply with the observed powers in the elements but also sought the cause of their generation, an inquiry useless to the physician.

In this paragraph Galen seems to be saying that according to Hippocrates medicine is practical in nature and not concerned with the elements. He also seems to be arguing that Plato provided the theory that complemented practical medicine. To justify this argument, Galen would have to make many concessions and acknowledge the constant divergences between Hippocrates and Plato.

For example, it is difficult to assemble a Hippocratic physiology that explains and supports Plato’s theory of the tripartite soul—a rational soul located in the brain, a spirited one located in the area of the heart, and an appetitive one located in the area of the liver. G.E.R. Lloyd has explained in great detail one of the most problematic issues Galen had to face to make this match, and how he needed to force the text of the *Timaeus*

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125 Galen, *De placitis Hippocratis et Platonis*, 494-97.

126 Galen, *De placitis Hippocratis et Platonis*, 507.
(77 b) where Plato argues for the location of the appetitive soul. Here is what the *Timaeus* says: “For everything, in fact, which partakes of life may justly and with perfect truth be termed a living creature. Certainly that creature which we are now describing partakes of the third kind of soul, which is seated, as we affirm, between the midriff and the navel, and which shares not at all in opinion and reasoning and mind but in sensation, pleasant and painful, together with desires.”

In this paragraph, physiology seems to explain Plato’s theory of the location and qualities of the tripartite soul. However, only specific mentions in the *Hippocratic Corpus* allowed Galen to find an equivalent description that would make it possible to argue for a physiological explanation of the appetitive soul as described in the *Timaeus*. For example, Galen presents as the connection between *Timaeus* (77b) and Hippocratic medicine a sentence in *On Nutriment* 31, which reads, “Root of veins, liver; root of trachea, heart. Out of these travel to all parts blood and breath, and heat passes through them.” Though this sentence seems to make little sense in connection with Plato. The problem is that Galen had to argue first that the word commonly used for trachea (*arteria*) in the text, which Galen, five hundred years later used for arteries as a way to distinguish them from veins (*phlebes*), meant the same in Hippocrates’ time as in his. Furthermore, this distinction between arteries and veins in not present in the *Corpus*, where the word for veins (*phlebes*) is used indistinctively for both arteries and veins. So the original text of *On Nutriment* 31, after these concessions, would be “Root of veins, liver; root of arteries, heart. Out of these travel to all parts blood and breath, and heat passes through them.”

Another case is the argument that the spirited soul is located in the heart. Here Galen had recourse to *Epidemics II 5.16*: “[T]he man in whose elbow the artery (phleps)
throbs is frenzied and quick to anger.” To make this connection work, the physician of Pergamum had to argue that the traditional term for veins (phlebes) is also used for arteries (a claim that contradicts his own assertion when citing *On Nutriment* 31), and because the artery is throbbing as a consequence of anger, and the heart is the source of arteries, Hippocrates must have been saying that the heart is the place where the spirited soul is located, which controls anger. This reading was doubly problematic since Galen himself had previously called *Epidemics II* spurious or, at best, written by Thesalus, as it appears to be a later book with consistent anatomical mistakes, which posed a problem for Galen’s assertion of a proper anatomical model of Hippocratic medicine.127

Unlike Lloyd who sees *On the Doctrines* as a systematic effort to make Plato and Hippocrates agree on every level, however, I believe that Galen is relatively comfortable with the fact that Plato, when it comes down to talk about pathology and physiology in the *Timaeus*, makes many mistakes.128 Thus Galen says,

Not only Plato but also Aristotle, Theophrastus and the other followers of Plato and Aristotle emulated the reasoning of Hippocrates on the humors, as did also the most esteemed of the ancient physicians… But at least in his book *On the Nature of Humankind* Hippocrates excelled Plato in the order of his teaching, as in other things. He demonstrated that the four humors exist naturally—this Plato did not even attempt to do—and that a different humors predominates in each season of the year.129

In this paragraph Galen is arguing that, because of his theory of the four humors, Hippocrates reigns supreme above the best of ancient philosophers, Plato and Aristotle.


128 Galen, *De placitis Hippocratis et Platonis*, 505.

129 Galen, *De placitis Hippocratis et Platonis*, 511.
Following what I discussed in the previous chapter, I believe that after Galen argued in favor of the moral and philosophical abilities of the physician of Kos, the premise that the best physician is also a philosopher can be inverted: the best philosopher is, by necessity, also a physician. Furthermore, by assimilating his views to Hippocrates and the great philosophers of the Golden Age, Galen privileges his authority in anatomy, medicine, arithmetic, and philosophy over that of his contemporaries.¹³⁰

As a way to advance his position and associate his expertise with the advances in anatomy made by the generations after the time of Hippocrates, Galen argued for dissection as the ultimate scientific proof—in fact the incarnation of scientific proof.¹³¹ Knowing the body by means of dissection and logical reasoning according to the Hippocratic method meant knowing the human persona, because we can infer, locate, and prove the seat of the human soul and its powers. This is the point at which the medical training complements the philosopher’s premises and gives the physician, already a philosopher in the way of Hippocrates a role that surpasses that of the philosopher.

Yet many of Galen’s contemporaries read Hippocrates without any precise

¹³⁰ Von Staden “Anatomy as Rhetoric”, 62. See also, Galen, On my Own Books, 11-12. In Galen’s commentary to Epidemics II, when he introduces a discussion on the anatomy of the veins and nerves according to Hippocrates, he also talks about some of his immediate predecessors. He mentions Marinus, teacher of Galen’s own teacher, Quintus. Marinus seems to have written the first manual on anatomical demonstrations, which Galen studied and condensed four volumes (the original was twenty). It also appears that Marinus was also a commentator of Hippocrates, though such work has not survived and Galen disputed his views on the physician of Kos. See Smith, The Hippocratic Tradition, 70. Galen talks about two of the great Alexandrian anatomist of the fourth century B.C.E. too, Herophilus and Erasistratus, who Galen would constantly undermine in favor of Hippocrates. The commentary on Epidemics II contains one of the very few instances where Galen criticizes Hippocratic texts: praising the correct anatomy of veins and nerves of Hippocrates, Galen states that most other treatises of the Corpus have an incorrect anatomy of the blood vessels. It also appears that Marinus was also a commentator of Hippocrates, though such work has not survived and Galen disputed his views on the physician of Kos. Galen talks about two of the great Alexandrian anatomist of the fourth century B.C.E. too, Herophilus and Erasistratus, who Galen would constantly undermine in favor of Hippocrates.

¹³¹ Galen, De placitis Hippocratis et Platonis, 481.
anatomical system, as we saw in the case of Sabinus, or simply counted Hippocrates as an Empiricist (which meant no systematic study of anatomy). According to Galen, it appears that many actually emphasized the lack of anatomical references in the *Hippocratic Corpus*. In response, Galen wrote two treatises on anatomy, now lost, *Anatomy According to Hippocrates* and *Anatomy according to Erasistratus*. They seem to be a systematic response to claims against any anatomical system in the Corpus, and an attack against the great anatomists of the past and their observations—Erasistratus, recognized for his advancement in the study of the circulatory system, apparently had mentioned the lack of a proper anatomical model in Hippocrates. According to some references made by Galen in his treatise *On Joints*, the text *Anatomy According to Hippocrates* touched on osteology and was drawn from the surgical works within the Corpus. Furthermore, he also used the unclear references of *Epidemics II* to justify a proper anatomy of the blood vessels and nervous system, as well as using references about the organization of digestion and nutrition to further advance his argument about a Hippocratic anatomy. It is important to emphasize the fact that most of these treatises on anatomy, like Galen’s commentaries to the Hippocratic texts arguably containing anatomical descriptions, were written early in his career. Additionally, they all seem to be a defense of his Hippocratic model and his reading of the texts of the Corpus. This is relevant because Galen would constantly return to these ideas, which served as a base for

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133 Galen, *Commentary on Hippocrates’ On Joints*, XVIII.524.

many of his opinions about Hippocratic medicine.

The Hippocratic *On Fractures* would be the cornerstone of Galen’s argument for the presence of a systematic anatomy in the Hippocratic tradition. He produced a commentary to *On Fractures* early on—about the same time he started writing *On the Elements According to Hippocrates*. It appears that *On Fractures* had been associated with the Hippocratic treatises *On Joints* (Galen himself believed so) because the subjects of both texts overlapped. Furthermore, according to Galen, many speculated that they belonged together in a larger surgical treatise, *On Surgery*, now lost.\(^\text{135}\) *On Fractures* seems to have been one of the oldest texts within the *Corpus*, and was recognized as pertaining to the Hippocratic tradition.\(^\text{136}\) Galen also mentioned a tradition that attributed it to Hippocrates’ grandfather. While Galen would ultimately leave the question of the origin of his source unanswered, it seems he read *On Fractures* as written by Hippocrates.

One of the key elements of *On Fractures* is the epistemological lesson it contains. According to Galen’s *On the Doctrines of Hippocrates and Plato*, the treatise shows

…how to separate common features from individual features. In the arts this means distinguishing between similar and dissimilar; for these three inquires are in effect the same: the inquiry into common and individual features, the determination whether things compared are similar or dissimilar, and third after these, the question what is the same in them and what is other. –For it is Greek custom sometimes to call ‘similar’ the things that are the same in some respect, and Plato told us to make paradigms in accordance with what is the same in the objects that are being compared.\(^\text{137}\)

\(^\text{135}\) Galen, *Hippocratis de Fracturis liber et Galenim in eum commentarius*, 18 B 323-325 K.


\(^\text{137}\) Galen, *De placitis Hippocratis et Platonis*, 567.
What this paragraph illustrates is Galen’s argument of a Hippocratic method, in this particular case connected with a similar one given by Plato. The attribution of a systematic method of analysis to Hippocrates, as well as its relationship with Plato, gave Galen the opportunity to claim the superiority of Hippocrates. Furthermore, and as I mentioned in the previous chapter, Galen is also employing a linguistic analysis to support his interpretation, which was a common practice in the tradition of the Second Sophistic. This paragraph also lays down an interpretative model present in many other commentaries, which can also be understood as a “clarification” style. By “clarification style” I mean that Galen introduces a given sentence or paragraph from a Hippocratic text and proceeds to reveal or “clarify” for his readers what Hippocrates really meant. This, of course, makes Galen’s interpretation a way to impose his reading of the Hippocratic text. This is particularly relevant because the commentary to On Fractures is Galen’s first commentary in what he planned as a series of commentaries on every Hippocratic work. Consequently, he would make clear for his reader what was unclear in the text, and would argue that only two kind of confusions exist: a statement that is unclear in itself or a statement that seems confusing due to the reader’s lack of training or abilities. Here lies the essence of Galen’s argument for the interpretation of Hippocrates: the properly trained reader can reveal the true intentions behind a text that appears confusing to others. Since Galen presented himself as the ultimate disciple of Hippocrates this also meant only he understood fully the Hippocratic legacy, granting authority to himself.

138 Galen, In Hippocratis Epidemiarum librum III commentaria III, 60; On my Own Books, section 6.
139 Galen, Hippocratis de Fracturis liber et Galenim in eum commentarius, 18 B 318, 343 K.
An additional key element of Galen’s commentary to *On Fractures* is that, according to Galen, behind Hippocrates’ mechanical explanations on how to treat fractures and small wounds rests an anatomical system that proves the ancient writer’s deep knowledge of anatomy. Galen’s commentary to *On Fractures* resembles the systematic style of his later commentary to *On the Nature of Humankind* more than the free style in his synthetic commentary to *The Elements According to Hippocrates*, both to be discussed below. It was the controversial and contested nature of the subject that required Galen to defend, sentence by sentence, his argument for a specific Hippocratic tradition. Thus Galen gives extensive interpretations of any statement that might seem obscure, and then proceeds to give anatomical and physiological explanations that make the different procedures in *Fractures* fit within his Hippocratic model. For example, Galen writes,

For many such things are said by Hippocrates in the *On Fractures* and the *On Joints*, sometimes against one, sometimes against many mistaken people, just as in the *On the Acute Regimen*. And there, at the same time, he has written criticizing many physicians in these words: ‘I have seen physicians doing the opposite of what they ought. For at the beginning of the illness, they all impose on men a fast of two or three days, or more, and only then prescribe gruels and liquids’.\(^\text{140}\)

This paragraph illustrates how Galen includes a statement from the Hippocratic text and makes it into a powerful declaration against detractors. Later on the text, he does the same thing with another Hippocratic sentence, “In treating fractures and dislocations, the physician must make the extension as straight as possible, for this is the most natural

\(^{140}\text{Galen, In Hippocratis de natura hominis librum commentarii I, 15 23 K.}\)
But then he adds a lengthy interpretation (several pages) that expounds diverse themes from this single sentence, progressing from the different attributions of *On Fractures* and its relationship to other treatises of the *Corpus*, to the exegesis that reveals how Hippocrates intended for this treatise to be read. In this way, the commentary to *On Fractures* is, alongside Galen’s *On the Doctrines of Hippocrates and Plato* and *On the Doctrines of Hippocrates*, the very first ground where he would lay his interpretation of the Hippocratic tradition, culminating in *On the Nature of Humankind*. In fact, *On the Doctrines of Hippocrates and Plato* gives an interesting example for Galen’s reading of Hippocrates because the text is one of his first works on the Hippocratic tradition and its relation with Platonism; it was written in nine books but, although the chronology is complicated, it seems he wrote the initial six books first, during his first stay in Rome, between 162 and 166. The remaining three books were written during Galen’s second stay in Rome, between 169 and 175, roughly the same time he wrote *On the Doctrines of Hippocrates* and other Hippocratic commentaries. It is only the later books of *On the Doctrines of Hippocrates and Plato* that introduce elemental theory, one of Galen’s key elements of *On the Doctrines of Hippocrates* and, more significantly, *On the Nature of Humankind*. Galen was consolidating his particular reading of the Hippocratic tradition during this later period, and was articulating a series of complex associations of treatises in the *Corpus* that culminated in *On the Nature of Humankind*.

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**From Galen’s Hippocratic Method to the Elements and the Humors**

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Galen connected the theory of the four elements to the theory of the four humors because the four humors—blood, yellow bile, black bile, and phlegm—are, for him, the biological expression of the four elements—air, fire, earth, and water. However, both of these theories were not shared by many of Galen’s predecessors and contemporaries, and many disagreed with them, as I will discuss shortly. Galen chose to defend the idea that the theory of the four humors and the four elements was at the center of Hippocratic medicine because he was attempting to achieve synthesis with the philosophical tradition of Plato and Aristotle. Hence the physician of Pergamum addressed these issues in his works, and much of the discussion took the form of two commentaries to *On the Nature of Humankind*, the one work in the *Hippocratic Corpus* Galen saw as both legitimate and encompassing of the whole Hippocratic tradition.

Galen started working on his defense of the four-humors model early in his career, during his first stay in Rome, in a book called *On the Elements According to Hippocrates*. 142 This text was meant to be a loose commentary on Hippocrates’ *On the Nature of Humankind*. 143 Three themes dominate his discussion. First, he argued that Hippocrates had a distinctive scientific method to investigate the four elements and the four humors. Second, he wrote a lengthy defense of elemental theory and how it relates to the humors. Third, he argued that it was necessary to identify a central text in the *Hippocratic Corpus* that connected this distinctive scientific method with the theory of the four humors and the theory of the four elements. This is how Galen introduced the

142 Galen, *De Elementis ex Hippocratis Sententia*, 55.

143 Galen, *In Hippocratis de natura hominis librum commentarii I*, 15 1 K.

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What is the method of investigating these things [about the constituents of the nature and the human body]? To me it seems to be none other than that method which Hippocrates introduced. For it must be investigated firstly if there is one single element with respect to form, or if there are many various and dissimilar ones; and, secondly, if there are many various and dissimilar elements, how many and what sort they are, and in what manner do they possess a commonality with each other. That the single primary element, from which our bodies and the bodies of all others are born, is not one single thing, Hippocrates demonstrates from these questions. And it seems better for me, as I explain this, to set forth this passage of his thus: ‘And I myself say, if man were one single thing, he would never suffer, for, as one single thing, there would be nothing from which he could suffer.’

In this quotation Galen illustrates the steps necessary for any inquiry into the natural world. In this sense, the last part of this paragraph is particularly relevant because it tells us how Galen defended his reading of Hippocrates, using what I previously called a “clarification” style of interpretation. Based on a single statement within a given Hippocratic text (in this case, “And I myself say, if man were one single thing, he would never suffer, for, as one single thing, there would be nothing from which he could suffer”), Galen developed an entire argument explaining and defending his reading of the physician of Kos. As he explained in On the Elements According to Hippocrates and other works, Hippocrates adopted “the ancient brevity of expression,” laying out his ideas in a compacted and coded version within specific sentences, left behind to be deciphered and explained by his true followers. The following quotation illustrates this procedure:

144 Galen, De Elementis ex Hippocratis Sententia, 58.

145 Galen, De Elementis ex Hippocratis Sententia, 128.
So that, by giving one of these arguments [about the elements and the humors] which are of the same type, [Hippocrates] entrusts it to us to set forth logically the remaining arguments which possess the same force as this one. And, what is more, even now it seems to me that the man acted thus, showing the impossibility of the opinion from a single observation, and leaving it for us to explain in various ways from arguments possessing the same force as this one.\footnote{Galen, \textit{De Elementis ex Hippocratis Sententia}, 74-76.}

What Galen is arguing here is that Hippocrates gave us clues to his thought, which should be connected to reveal the true meaning of the Hippocratic legacy. This particular way to construct an argument serves Galen to build an entire Hippocratic theory—allegedly \textit{the} true Hippocratic theory—from a few sentences and scattered references all over the \textit{Hippocratic Corpus}.\footnote{Galen, \textit{On the Therapeutic Method}, 9.} Consequently, \textit{On the Elements According to Hippocrates} embodies the decoding process and explanation of that one sentence in \textit{On the Nature of Humankind} that is meant to contain the true defense of elemental and humoral theory: “And I myself say, if man were one single thing, he would never suffer, for, as one single thing, there would be nothing from which he could suffer.”

Galen argued that in this sentence Hippocrates was talking about the elements because man is not a single thing (i.e. a single element like “air”, or “fire”), but rather many (the four elements). Therefore, \textit{On the Elements According to Hippocrates} is a careful expounding of the four elements and four humors model, and in it Galen debates, in the style of the Second Sophistic, the many criticisms and controversies around this model, including those of the pre-Socratic philosophers, Aristotle, Erasistratus, and many other empiricists, dogmatists, and stoics. In fact, the entire text is a defense against a
multiplicity of theories about elements and humors. For Galen, the ultimate goal of medicine—the health of the body—can only be achieved by the dissection and study of the tissues and organs of the body, the analysis of the physiology of the organism, and the examination of the elemental composition of the body. To understand the ultimate, most basic constituents of the human body and their proper function was the way to diagnose and treat disease, and to restore and maintain health.

Finally, *On the Elements According to Hippocrates* also reveals the text where Hippocrates allegedly argued about the four elements and the four humors, as well as their effects on matter:

And now we propose to discuss further the elements which escape the senses, concerning which Hippocrates expounded in his *On the Nature of Humankind*, saying that the elements particular to and characteristic of our bodies are the four humors, but the elements common to all things are wet, dry, cold and hot. For he names the elements from their qualities, and through these qualities, the elements arise.\(^\text{148}\)

Here Galen introduced *On the Nature of Humankind* as the central text of Hippocratic medicine, and framed the Hippocratic tradition in the theory of the four elements. It is important to notice, however, that there is no direct connection between the elements and the humors in *On the Nature of Humankind*, as I will show in the next section. The Hippocratic text itself only offers a small part of the more general theoretical model Galen wanted to see in *On the Nature of Humankind* (the four humors). Nonetheless, this is the text Galen uses to make the connection between his own early discussion of elements and humors, and to link the different theories and philosophical

\(^{148}\) Galen, *De Elementis ex Hippocratis Sententia*, 128.
models that complemented the humoral and elemental system (the tripartite soul, the temperaments, the ages of men, the seasons). Galen’s more focused commentary on that work, written much later in his career than *On the Elements According to Hippocrates*, introduces to us some of the criticism that his reading of Hippocrates encountered in the intervening years.

**Galen on On the Nature of Humankind**

As we have seen, Galen’s discussion of anatomy in *On the Opinions of Hippocrates and Plato* and his commentary to *On Fractures* presented a model that granted him authority over his predecessors and contemporaries. He used his discussions of anatomy to assert an interpretative model based on “clarification,” expounding what he presented as the true reading of the Hippocratic legacy, and reuniting it with more recent advances in anatomy and physiology. At the same time, the theory of the four elements and the four humors could serve as the basis of a unified medical and philosophical theory, which in turn could be attributed to Hippocrates, establishing a connection between the great Greek philosophers of the Golden Age and his own time. But while his commentary to *On Fractures* and his treatise *On the Elements According to Hippocrates* were Galen’s first attempts to bring these issues together, his commentary to *On the Nature of Humankind* is the full expression of this unified “Hippocratic model,” and it offers insights into the debates that challenged it. So, Galen introduces this model in the text after the discussion between Socrates and Phaedrus in the platonic dialogue of that name: “Socrates: Do you [Phaedrus] think it is possible to understand the nature of the
soul properly by reason, apart from the nature of the human being? Phaedrus: If Hippocrates, of the Asclepiadian school, is to be trusted, the body cannot be understood except by this method.”¹⁴⁹ We have seen this discussion before where it was invoked as evidence of the existence of a historical Hippocrates. In his commentary to *On the Nature of Humankind* Galen presented it as a proof of an Hippocratic scientific method. This passage was crucial for Galen’s reading of Hippocrates because Plato is clearly attributing some sort of “scientific” method to Hippocrates. This of course leaves open the question of whether or not the alleged method was exemplified in *On the Nature of Humankind*. Galen, however, following this sentence, asks his audience: where in the works of Hippocrates is the method attributed to him by Plato to be found? Galen responds: it is nowhere but in the treatise *On the Nature of Humankind*.¹⁵⁰ The reader then might ask, what is the relevance of such method? Well, according to Galen it is this precise method that seems to inform every other Hippocratic work,¹⁵¹ as if it were the spine of a body, supporting the entire system. Very well then, but what exactly is this method and what is its usefulness? As we have seen before, according to Galen,

… is it not necessary that the nature of anything whatsoever be understood in this way? First whether it is simple or complex. Then, if it is simple, to examine its power: what it possesses making it tend to act, and what tends to undergo its action. And if it has a complex form, then to examine it with respect to each individual aspect, in the same way that the simple was examined with respect to one aspect: what does it do by nature and what is affected by it.”¹⁵²

¹⁴⁹ Plato, *Phaedrus*, 270c. Also quoted by Galen, *In Hippocratis de natura hominis librum commentarii I*, 4 K.

¹⁵⁰ Galen, *In Hippocratis de natura hominis librum commentarii I*, 12 K.

¹⁵¹ Galen, *In Hippocratis de natura hominis librum commentarii I*, 14-16 K.

¹⁵² Plato, *Phaedrus*, quoted by Galen, *In Hippocratis de natura hominis librum commentarii I*, 4-5 K.
The reader might then concede such an argument—a systematic, detailed analysis of the nature of things, from the most basic up to the most complex elements. But then an essential question follows: why Hippocrates? Why *On the Nature of Humankind* in particular? While a master of the art of logic and the first to propose a truly scientific method of inquiry, Hippocrates, also an ideal philosopher,\(^1\) was in addition a lover of human beings, and the best man there was.\(^2\) Furthermore, the Hippocratic method of inquiry as displayed in *On the Nature of Humankind* could explain physiology, anatomy, the composition of all beings, character, temperament, and morals. Any attentive reader would be left speechless, marveled at the wonders of such classical man, connected to the Golden Age of Pericles by way of the ancient philosophers.

This particular system, allegedly present in *On the Nature of Humankind*, is the center of Hippocratic medicine, Galen style. It lays out a system that moves upwards in a spiral, from the study of the most basic elements composing nature and the human body, to the body’s ecological connections: blood, yellow bile, black bile, and phlegm—the building blocks of the body—connected on one side with the ultimate universal elements: air, fire, earth, and water. On the other side of the spiral are the seasons: spring, summer, fall, and winter. In the middle of it and as the result of the interaction between the body’s building blocks and the world around it, we find diseases and, if we are to understand this Hippocratic system properly, the regime that restores and maintains health—both

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\(^1\) Galen, *De placitis Hippocratis et Platonis*, 517.

\(^2\) Galen, *The Best Doctor is also a Philosopher*, 32-33.
physical and spiritual.\textsuperscript{155}

With this particular reading (a rather controversial one, as we shall see), Galen is arguing for a unifying theory of nature. According to Galen, natural philosophy and medicine reunited, in one hand, some of the most relevant theories about nature and the body, on the other hand, Hippocrates also unified the body under a single system. In On the Usefulness of the Parts of the Body Galen cites On Nutriment: “Accordingly [on the usefulness of each part of the body] Hippocrates says ‘Taken as a whole, all the parts in sympathy, but taken severally, the parts in each part cooperate for its effect.’”\textsuperscript{156} Here Galen is arguing that the body functions as a unity. I believe this argument for unity (of the body, of natural philosophy and medicine) is what gave Galen’s reading of Hippocrates such relevance and eventual success: according to him the writer of On the Nature of Humankind explained all of nature’s different aspects and harmonized them with one another. Who else, but the divine Hippocrates presented above, could have written this treatise?

Furthermore, in his commentary to On the Nature of Humankind, as a response to controversies aroused by his earlier reading of the same treatise in On the Elements According to Hippocrates, the physician of Pergamum frames the beginning of the text as an introduction to elemental theory in the medical tradition of Hippocrates.\textsuperscript{157} However, On the Nature of Humankind itself might in fact say a very different story, and its

\textsuperscript{155} Galen, In Hippocratis de natura hominis librum commentarii I, 7-9.

\textsuperscript{156} Galen, On the Usefulness of the Parts of the Body, edited and translated by Margaret Tallmadge May (Ithaca, NY: Cornell University Press, 1968), 76 n. 20. May refers to editions other than Litrès that include “sumpathea” (suffers) in the text, which will make the citation “the body is a unity that suffers together”.

\textsuperscript{157} Galen, In Hippocratis de natura hominis librum commentarii I, 1-9.
authenticity had been widely contested by the time of Galen. The work was composed of three different sections, which sometimes circulated independently from each other. The first was *On the Nature of Humankind* properly speaking. The second was a disparate work on the anatomy of the blood vessels (which among other things claims that the origins of all veins and arteries is the brain). This anatomical model was in complete disagreement with the model Galen wanted to read in *On the Nature of Humankind*, and from early on was considered spurious by him.\(^{158}\) However this section on the blood vessels was famous at least since the time of Aristotle, who refers to it in his book *History of Animals* and attributes it to Polybus.\(^{159}\) The relevance of Galen’s discussion of anatomy comes from the fact that Galen uses anatomical grounds to reject this section on blood vessels. If the anatomical description was wrong it simply could not be by the great Hippocrates.\(^{160}\) The third section was often referred to as *On the Regimen of Health*, which had been generally attributed to a certain Polybus, who many identified as either Hippocrates’ son-in-law or a direct disciple (as we saw in the cases of Dioscorides and Capiton, for example). Though Galen originally defended *On the Regimen of Health* as Hippocratic, later on he would concede that it was spurious and probably by Polybus. The text, which basically advises on diet, exercise, and sleep, is rather general and imprecise, and has a very different style from the other texts associated with it. *On the Regimen of Health* does contain descriptions of the qualities of foodstuff according to a general, Hippocratic model that for the most part fits *On the Nature of Humankind* but in some

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\(^{158}\) Galen, *In Hippocratis de natura hominis librum commentarii I*, 9-11.

\(^{159}\) *History of Animals*, 3.3, 512a12-513a7.

\(^{160}\) Galen, *In Hippocratis de natura hominis librum commentarii II*, 146-147.
parts it presents a model of many humors, opposed to the four-humors model advocated by Galen.

When it came down to defending his Hippocratic model, *On the Elements According to Hippocrates* was a very loose commentary written early in Galen’s career, which left room for criticism. His commentary to *On the Nature of Humankind* was written roughly twenty-five years later.¹⁶¹ Galen had time to developed his ideas further, and he had changed his mind about the authorship of *On the Nature of Humankind* as a whole. In fact, in *Regimen in Acute Diseases According to Hippocrates*, written around the time of *On the Elements According to Hippocrates* he says, “they attribute it [*On the Regimen of Health*] to many authors—Euryphon, Phaon, Philistion, and Ariston—but it belongs to the great Hippocrates, son of Heraclides, whose grandfather, Hippocrates, son of Gnosidicus, wrote nothing according to some and only *Fractures* and *Joints* according to others.”¹⁶² Here Galen is in fact claiming that *On the Nature of Humankind* alongside with *On the Regimen* was by Hippocrates himself, something that ultimately contradicts his later claims. But as Galen Hippocratism grew stronger and complex, he would be forced to concede to those (without mentioning any specific names, “those” in abstract) that claimed *On the Regimen* was not by Hippocrates.¹⁶³

In fact, Galen had to face many detractors, who although not named, are present

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all over the commentary to *On the Nature of Humankind*. Ultimately, the controversy seems to have come down not only to the authenticity of the work, but also to the notion that the theory of the four elements and the model of the four humors were present in the Hippocratic text. Still, with the exception of Sabinus, a teacher and fellow Hippocratean mentioned in the previous chapter, Galen never really gives the names of his opponents, only indicates some of the reasons for opposition. Furthermore, as I have argued earlier, Galen was doing something unique and new: he was creating a unified model of nature (including philosophy, morality, and medicine) from a medical perspective. Also, he was editing the *Hippocratic Corpus* on the basis of medical theory, as well as classicizing Hippocrates. This would mean that Galen’s views required a very systematic defense. As a consequence and to a large extent, it seems that the problems Galen faced came from the way he chose to read and interpret certain Hippocratic texts as the core of the Hippocratic tradition.

Galen’s commentary to Hippocrates’ *On the Nature of Humankind* has two goals. First, it is intended to defend the authenticity of the Hippocratic *On the Nature of Humankind* according to Galen’s theoretical model. In this sense, the commentary is designed as a road map on how to read *On the Nature of Humankind*, and it places this controversial work, more specifically Galen’s reading of it, at the center of the *Hippocratic Corpus*. Second, the commentary lays out in detail Galen’s model of unity of nature, from a medical perspective. If we consider these two points in view of the disagreements Galen had to face, it is important to notice that the style of this later

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164 Galen, *In Hippocratis de natura hominis librum commentarii II*, 169. Smith refers some mentions that have survived of possible criticisms made by specific authors to his reading of Hippocrates, though none of these books has survived. Smith, *The Hippocratic Tradition*, 172 ff.
commentary reflected that of the Alexandrian commentators to the *Hippocratic Corpus*, which meant it followed a much more specific and rigorous, word-by-word model than that of *On the Elements According to Hippocrates*. This is a linear commentary, which copies a passage of the Hippocratic text and then comments on it, moving then to the next paragraph of the Hippocratic text. Galen has adopted a tight model that leaves little room for opposition and touches on all aspects of the commented work. Galen was writing a powerful defense of his views. More accurately, Galen dismantled *On the Nature of Humankind*, and reassembled the content, sentence-by-sentence, word-by-word, in what looks like a massively cross-referenced campaign to defend each argument of the text—or rather to explain it to fit the system as he sees it. This is how he explains this procedure, “And if you add to this account what is shown in this present passage, you will reconstruct the thought of Hippocrates.” Again, he is restoring to the method of “clarification”.

In fact, Galen’s task is rather difficult because *On the Nature* presents opposition to his model of unity from the very first paragraph, beginning with the key sentence, “For I do not say at all that a human being is air, or fire, or water, or earth, or anything else that is not an obvious constituent of a human being (οὔτε γὰρ τὸ πάμπαν ἡέρα λέγω τὸν ἀνθρώπον εἶναι, οὔτε πῦρ, οὔτε ὕδωρ, οὔτε γῆν, οὔτε ἀλλ' οὐδὲν ὃ τι μὴ φανερὸν ἐστιν ἐν ἐν τῷ ἀνθρώπῳ).” I believe the opening of this paragraph is of great relevance to

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166 Galen, *In Hippocratis de natura hominis librum commentarii II*, 71.

167 Galen, *In Hippocratis de natura hominis librum commentarii I*, 4-6 K. (The emphasis is mine.)
any study of the theory of the four humors and four elements in relation to Hippocrates. Although the translation I have given above is understood today as the proper one according to context, the Greek of the sentence in question is ambiguous, since it could potentially be understood as “For I do not say that a human being is all air, or fire, or water, or earth, or anything else that is not an obvious constituent of a human being.” On the first reading the writer of the text is denying that earth, air, fire, and water are constituents of the human being (instead, the human being is made up of the four humors). But Galen takes it in the second sense, since he wants the text to be arguing for the four-element theory and against elemental monism (i.e. that man is “all air”, “all fire”, etc.). For Galen the four humors theory is based on the theory of four elements, and as I have argued earlier his system rested on this connection. This is the crucial interpretation Galen made of what he considered the most definitive text on the Hippocratic Tradition. If we follow his commentary to On the Nature of Humankind, it seems that his reading of the paragraph above was very controversial, and many called it into question. Capiton had already made reference to the ambiguous nature of the sentence, and had, much like present scholars, chosen the reading that contradicts Galen’s position based on context (that is, instead of reading the sentence as saying that man is “all air”, “all fire”, etc., he believed it said “I do not believe at all that man is air, fire, etc.). According to Galen, Sabinus had also commented on this paragraph, and added references to other ancient physicians to justify his reading of the text: “For I do not say at all that man is air, as Anaximenes does; nor fire, as Heraclitus; nor water, as Thales; nor earth, as a certain Xenophanes”.168 It seems clear that many disagreed with the notion that the text was

168 Galen, In Hippocratis de natura hominis librum commentarii II, 25 K.
arguing for a four elements, four humors correspondence.\textsuperscript{169}

To further secure his controversial reading of the \textit{Hippocratic Corpus}, the physician of Pergamum resorted to (his) logic, but also used other works from within the \textit{Corpus} that enjoyed a better reputation, like the \textit{Aphorisms}, cross-referenced heavily, the second book of the \textit{Epidemics} and \textit{Regimen in Acute Diseases}. Galen also used an array of well-known ancient authorities. He quoted poets like Homer and Hesiod, referred to philosophers like Plato (mostly the \textit{Phaedrus} and the \textit{Timaeus}), Aristotle, and what he calls \textit{The Medical Collection}, attributed to Menon, a disciple of Aristotle. This last reference is used specifically against Sabinus and his reading of the controversial sentence discussed above.\textsuperscript{170} Finally, Galen used some of his own works, like \textit{The Method of Healing}\textsuperscript{171} and the \textit{Commentary to the Elements According to Hippocrates}.\textsuperscript{172}

Galen sought further explanation outside of the Hippocratic text and employed parallels in a variety of authors and genres, mostly those fashionable during his time and who enjoyed authority. A single element, in this case the notion of the nature of a thing or person (for example, whether it is or it is not made of air, fire, etc.), was rewritten in an expansive form that mixed outside references, different authors/genres, and a multiplicity of concepts to reach a new level. In turn, this level of further explanation lead to the

\textsuperscript{169} Galen, \textit{In Hippocratis de natura hominis librum commentarii II}, 27-31 K.

\textsuperscript{170} The Medical Collection survives only fragmentarily today in the \textit{Papyrus Londinensis}. Interestingly enough, a paragraph of \textit{On the Nature of Humankind} seems to be paraphrased in such document. \textit{Papyrus Londinensis}, VII, 15.

\textsuperscript{171} \textit{On the Therapeutic Method} can be understood as one of Galen most important works as it sets forth an entire program for the proper learning of medicine, enumerating the necessary texts (mostly his own) the student should read, the order, and what can be understood about them. Furthermore, \textit{The Method} is also a “distilled” version of the Hippocratic method as Galen understands it, and heavily dependent on his reading of \textit{On the Nature of Humankind}.

\textsuperscript{172} Galen, \textit{In Hippocratis de natura hominis librum commentarii I}, 2, 8 K.
construction of an entirely new concept, which was meant to replace the original Hippocratic concept of nature as “true” meaning and intention of the Hippocratic author. When analyzing a commentary made by Galen to an specific Hippocratic aphorism, Heinrich von Staden points out that in a similar circumstance Galen moved from a philological interpretation first to a doctrinal explication second—a movement that goes from the particular to the general, from one word to a whole sentence, from a concept to a universal fact. Galen’s commentary to *On the Nature of Humankind* became an essential companion to the original Hippocratic text. According to the physician of Pergamum, the true meaning of *On the Nature of Humankind* depended on Galen’s commentary. Furthermore, Galen and this new Hippocrates became almost an indissoluble single entity of scientific authority.

As I have previously mentioned, Galen originally defended the authenticity of *On the Nature of Humankind* as a whole. This meant that if he made the move to argue for the legitimacy of only *On the Nature of Humankind* proper he was left with two components that had to be explained away. Thus, Galen isolates the components he claims have been added to the original *On the Nature of Humankind* (*On the Regimen* and the section on anatomy of blood vessels), and by explaining them away as mistaken he presented them as spurious, reinforcing his reading of the document. As I have already described, anatomy played a significant role for this interpretation. From the very beginning and until the end, the physician of Pergamum engaged in a systematic critique of the “spurious” parts and moved to revise and call into question the previous exegetical

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173 von Staden, “'A Woman Does not Become Ambidextrous’”, 113.

174 Galen, *In Hippocratis de natura hominis librum commentarii I*, 164 K.
traditions of the text.\textsuperscript{175}

In his commentary Galen mixed philological analysis, scientific theory, philosophy, and medical practice as a way to dismiss any previous systematic criticism to On the Nature of Humankind—or rather, to Galen’s reading of it. Not a line is left behind, and it is possible to say that after Galen’s Commentary the Hippocratic work is no longer itself: Galen made use of his knowledge of the Corpus and ancient Greek philosophy to interweave concepts and interpretations that made the ensuing Commentary into a vast body of knowledge that surpasses the scope of the original treatise. Behind the Commentary lies the figure of an ideal Hippocrates that can only be revealed and truly understood through the teachings of the physician of Pergamum. This Hippocrates is, in many ways, a distant, classical image of Galen himself, of his ideals and those of his generation. This is what I call a “neoclassical practitioner”: Galen claims to mold himself after the model of a classical exemplar, but ends up instead constructing the classical exemplar after himself.

In the hands of Galen, On the Nature of Humankind became the spine of a theory in which any interpretation of nature could be constructed and explained—a Galenic body. In fact, in later centuries, the entire Corpus and the Hippocratic Tradition, Galen style, would be articulated around it. No doubt, the Galenic reading of On the Nature of Humankind has been remarkably influential, even into modern times. This influence has made the exegetical work done by Galen, allegedly revealing the true meaning behind the words of Hippocrates, central for the reading of the original document. In a way, the Hippocratic text became secondary, transforming it into a metaphor for an ideal unifying

\textsuperscript{175} Galen, In Hippocratis de natura hominis librum commentarii I, 14-16 K, In Hippocratis de natura hominis librum commentarii II, 161 ff K.
model, to which Galen alone had access. He was the true disciple, capable of explaining the true master.
This chapter, a parallel to the first chapter, gives the historical context necessary to explain the changes made by certain physicians (Galen, for chapter one and two, the northern Italian physicians of the fourteenth century for chapter three and four) to the Hippocratic legacy. The chapter is organized in three sections: the first surveys the early medieval attempts to create a canon of Hippocratic works; the second describes the social and cultural changes that gave room to a new understanding of ancient Greek medicine and philosophy; and the third traces the establishment of a new Hippocratic tradition, combined with philosophy—in this case, Aristotelian natural philosophy.

As the previous two chapters have shown, Galen had focused his reading of Hippocrates in the treatise On the Nature of Humankind. This gave him room to argue for a four-humors model rooted in elemental theory. He linked this model with Platonic philosophy, including morality in the mix. However, medieval medical scholars moved away from On the Nature of Humankind to other Hippocratic texts: Prognostics, Regimen in Acute Diseases, and, above all, Aphorisms. I will explore two questions resulting from these changes: first, how and why did this happen and what were the implications of this

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shift? Second, how does the Hippocrates of learned medieval medical writers differ from Galen’s? The learned medieval medical writers had little information about Hippocrates, and most of what they had came from Galen. Thus, Hippocrates was attributed with a major revolution in medicine (he was described by the medieval medical writers as the founder of medical science), but as result of a back-formation, from the works thought to make up the *Hippocratic Corpus* at any given time, he was still an obscure figure. Changes to the Corpus meant changes, whether implicit or explicit, to whom the medieval medical writers thought Hippocrates was.

Since the learned medieval medical writers knew very little about the identity of the physician of Kos, I can say much less about his imagined identity other than what transpires from the changes to the Corpus. Their Hippocrates was framed around Aristotelian natural philosophy with a strong emphasis on practical medicine, and a theory based largely on *Aphorisms*. Hippocrates came to be described as the ultimate gift from God to mankind, and the first to systematize and create a medical science out of a chaotic collection of empirical knowledge. If man, according to the medieval medical writers, had acquired disease and death through the Fall, God had given mankind the physician of Kos to alleviate those evils.  

177 Pietro d’Abano, author of many commentaries and translations of Galenic works, went as far as to equate Hippocrates

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177 Martin de Saint-Gille *Le Livre des Amphorismes*, in Danielle Jacquart, “Hippocrate en français. Le Livre des Amphorismes de Martin de Saint-Gille (1362-1363)”, in *Les voies de la science Grecque: Études sur la transmission des textes de l’Antiquité aux dix-neuvième siècle. Hautes études médiévales et modernes 78*, edited by Danielle Jacquart (Droz: Gêneve, 1997), 297-298. For more on the adoption of Hippocratic medicine in early Christianity see Temkin, *Hippocrates in a World of Pagans and Christians*. According to Danielle Jacquart this is a reference to Adam and Eve and the idea that the chain of knowledge of medicine given by God to Adam had been broken.

with a divine gift: “God, mercifully caring for mankind, may have created Hippocrates as someone without flaws to perfect medical knowledge.”\textsuperscript{179} I will discuss more about the imagined identity of Hippocrates in chapter four.

From early on, \textit{Aphorisms} seems to have been extremely influential, due to its diversity and apparent simplicity. It offers brief, concise statements touching on a large variety of symptoms that make up multiple disease clusters (for example, fevers were considered diseases in themselves, and classified according to a complex series of cycles of eruption). The text also describes medical interventions such as the administration of potions and dietary restrictions, but it does not offer any specific theoretical frame. This diversity allows for different theories to be easily rooted in the text, while maintaining an alleged connection with the figure of Hippocrates. \textit{Aphorisms} also shares a particular characteristic with other texts like \textit{Prognostics} and \textit{Regimen in Acute Diseases}: it lists a series of errors made by physicians that can worsen diseases or lead to death.\textsuperscript{180} This makes the text a perfect space to delimit authority, claim legitimacy, and assert efficacy (or the lack thereof) for any given medical theory rooted on \textit{Aphorisms}. In a scholastic context, \textit{Aphorisms}, much like \textit{On the Nature of Humankind} in the context of the Second Sophistic, could be made to say whatever the editors of the text wanted it to say. These characteristics made this text incredibly plastic. \textit{Aphorisms} could adapt to many different traditions across time, and could support different claims about the nature of medical


\textsuperscript{180} For an extended discussion on the value of errors to delimit medical knowledge and grant authority see Roberto Lo Presti, “The Physicians as Teacher: Epistemic Function, Cognitive Function, and the Incommensurability of Errors”, in \textit{Hippocrates and Medical Education: Selected Papers Presented at the Xlith International Hippocrates Colloquium, Universiteit Leiden, 24-26 August 2005}, edited by Manfred Horstmanshoff (Leiden; Boston: Brill, 2010), 137-168.
teaching and practice. In the present chapter I will follow the history of *Aphorisms* in the Medieval Latin West and the Latin Hippocratic canon in its origins and transformations during the thirteenth century. Additionally, I will focus on a program for the teaching and practice of medicine organized around *Aphorisms* that developed from early commentaries to the text.

A final crucial aspect from the previous chapter to keep in mind when reading the present chapter is the fact that Galen was the craftsman behind an idealized Hippocrates. This Hippocrates was allegedly responsible for a logical method capable to explain nature, and had reunited philosophy, medicine, and morality. The consequence of this Galenic creation was a true revolution of the Hippocratic legacy, so future generations inherited a “New Hippocrates” that shaped any attempt to understand who the physician of Kos was. The ancestral Hippocrates of the Late Middle Ages was the “New Hippocrates” of Galen, although many transformations took place. As I will argue on this and on the next chapter, efforts to discover who was Hippocrates took place, however the rediscovered physician of Kos was no other than the Galenic one. There would be no other Hippocrates after Galen, and the Hippocratic theory was that created by Galen: four humors connected to the four elements in a spiral that moved upwards and included the four ages of man and the four seasons. The scholastic Hippocrates, the theme of the present and the next chapters, was, whether knowingly or not, an elaboration of the Galenic “New Hippocrates”, and the eventual distancing of Hippocratic medicine from the Galenic influence and in favor of Aristotle meant the reaffirmation of the theory of the four humors as Galen presented it.
The Aphorisms and the Construction of a Teaching Canon

The seventh-century Alexandrian physician Stephanus of Athens wrote in his commentary to the Hippocratic *Aphorisms*,

[Aphorisms’] place [in the curriculum] can be determined in two ways, either from the natural or from the logical point of view. Following the natural arrangement we read On the Nature of Man first of the Hippocratic writings; next comes On the Nature of the Child, because in it we learn about the immediate material of our formation and about the shaping of our own bodies; then, in the third place, the present book [of Aphorisms] is read. The logical order prescribes that we read the Aphorisms first because of the universal, summary and concise character of its content. It is good, though, for those who are introduced to Hippocratic medicine, to memorize the Oath and the Law first of all.\(^{181}\)

Here, Stephanus presents a specific order in which Hippocratic treatises must be read to follow a curriculum. He offers two possibilities: a natural order (an organization based on specific characteristics of the human body), or a logical order (a reading from general laws to specific concepts). The distinction implies a specific Hippocratic curriculum was already present by the seventh century, and its organization was subject to debates. In the same line, Meletius, an eight century monk and medical practitioner living in the Holy Trinity Monastery in Tiberiopolis, Asia Minor, repeats a similar *Ordo Legendi* (the order of reading) in his commentary to *Aphorisms*: “However, it is good that anyone who is being introduced to medicine must read the Oath and the Law before all other works.”\(^{182}\)

Meletius follows what Stephanus presented as the logical order. According to Stephanus


\(^{182}\) Bonum autem est ut qui ad Hippocratis medicinam introductur ante omnia Regulam et Legem discant. Meletius ivi, II, 243, as cited by F. R. Dietz, *Scholia in Hippocratem et Galenum* II (Regimonti Prussorum, apud fratres Borntraeger, 1834), 242-44.
and Meletius, *Aphorisms* is relevant because it offers a connection between texts like the *Law* and the *Oath* (both containing the governing principles of medicine and the guidelines for the physician’s behavior) and the practical texts that tell us about the constituents of the human body and the treatment of disease. This makes *Aphorisms* a kind of hybrid text between theory and practice.

While Galen’s commentary to *On the Nature of Humankind* had transformed that text into a strong theoretical work, this reading of *Aphorisms* had produced a text that was both theory and practice. Stephanus and Meletius are important because a) they offer a window into this double nature of *Aphorisms*, and b) they followed a specific method of analysis for this and all medical texts inherited by the West through translations made in the city of Ravenna between the sixth and the eight centuries. There are Latin editions and commentaries of ancient medical Greek texts in the West since at least the sixth century. This tradition was limited to specific works and authors, and it originated in the Italian city of Ravenna and surrounding areas, under Byzantine influence. Some of these texts are the Hippocratic *Aphorisms*, *Prognostics*—alongside Galen’s commentaries to both texts—the *Oath*, and *Airs, Waters Places*; a series of works attributed to Oribasius; and Galen’s *Art of Medicine*, *Therapeutics to Glaucon*, and *On Sects*.¹⁸³ Although copies of these texts existed by themselves separate from each other,¹⁸⁴ frequently many of these


¹⁸⁴ For example, there is already a pocket version of the *Aphorisms* from the eight-century, and several large size manuscript versions from the eighth century on to the twelfth century. Beccaria, “Sulle tracce” (1961), 5-7.
works were copied together.\textsuperscript{185} The earliest extant copies come from Central and Northern Italy and from Southern and Central France, between the eight and the ninth centuries.\textsuperscript{186} The Hippocratic \textit{Aphorisms} and \textit{Prognostics} represent the most widespread tradition, \textit{Aphorisms} being the more prevalent one.\textsuperscript{187}

The section in which Stephanus and Meletius introduced biographical information about Hippocrates was known as the \textit{accessus ad auctores} (access to the author), and it consisted of eight points of analysis. This section was intended to provide information about a given author and his work, and to better understand his texts and the order in which they should be read. The points in question were: 1. the introduction to the author; 2. the usefulness of the text; 3. the demonstration of its authenticity; 4. the title of the work; 5. the order in which it must be read relative to the other works of the same author, in Latin this is know as the \textit{Ordo Legendi}; 6. its subdivision in different parts; 7. its place in a specific branch of medicine (theoretical or practical); 8. its form of presentation, accompanied with a definition of aphorism.\textsuperscript{188} With occasional variations in the order, this represented a method of analysis that was used in Alexandria since at least the sixth century, and is also present in the commentaries to Galen’s works attributed to the iatrophist Agnellus and his student Simplicio from the eight or ninth centuries.\textsuperscript{189}

\textsuperscript{185} Beccaria, “Sulle tracce” (1961), 5-8, 30-34, 65-68.

\textsuperscript{186} Beccaria, “Sulle tracce” (1959), 1-56 and (1961), 1-75.


\textsuperscript{188} Stephanus of Athens \textit{In Hippocratis Aphorismos commentaria I-II}, 29-33.

Similarly, an eighth-century commentary to *Aphorisms*, translated in Ravenna and often attributed to the fourth-century physician Oribasius, follows this model and was probably following Stephanus’ commentary or Stephanus was based on it,\(^{190}\) the *Ordo Legendi* in it states,

On the order [*Aphorisms* should be read]. Beginners must read it in third place; doctors [should read it] last. Let us see why those who want to learn medicine, because they are fastidious (*fastidiosi*)\(^{191}\), must first read the *Oath* by Hippocrates, and after the *Oath*, the the *Iuditium*, which I call the *Tractate*, and in third place this book [of *Aphorisms*], which contains a consideration of the entire [medical] art.\(^{192}\)

The organization of Hippocratic texts in this document seems counter-intuitive, because it offers an organization for students and a different one for physicians. However, at the end it seems to recommend a standard reading. Known as *The Old Latin*

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\(^{190}\) The commentator identifies Pelops, Galen’s teacher, as the earlier translator of the text. Beccaria rejects the direct connection with Stephanus, although admits a connection through the Ravenna translations. Kibre calls attention to the fact that this connection is in fact possible, as there is a possibility this commentary may be truly Oribasius’, or at least based on a commentary by Oribasius. Beccaria, “Sulle tracce” (1961), 41 ff., 49 ff., 57 ff; Kibre, *Hippocrates Latinus*, 31.

\(^{191}\) The corresponding *Ordo Legendi* in the commentary to the Galenic *On Pulses* attributed to Meletius the Monk also utilizes “fastidiosi” to refer to novices first studying medicine. (cod. Ambrosiano G. 108. In (c. 92v), as cited by Beccaria, “Sulle tracce” (1961), 40.

\(^{192}\) *Ordo Legendi*. Si quantum ad introducendos, tertio loco legi debet; si enim quantum ad doctos, in ultimo. Videamus quare qui voluerint legere medicinam, quia et fastidiosi sunt, primitus legant Sacramentum ipsius Yppocratis, post Sacramentum Iuditium, quod et Tractatum dicimus, et tertio loco librum hunc, in quo totius artis speculatio continetur. Later versions like that of Stephanus of Athens change this for *The Law*. Beccaria, “Sulle tracce” (1961), 40, 74-75; Temkin, “Studies in late Alexandrian medicine”, 418-421. Beccaria unfolds a wide spread tradition of manuscripts which he is able to trace back to the *Old Latin Commentary on Aphorisms*. Beccaria, “Sulle tracce” (1959), 1-56 and (1961), 1-75. Beccaria has traced both the Latin translations of *Aphorisms* and the Latin translation/production of commentaries to *Aphorisms* to its origins in Ravenna and the tradition of the Alexandrian School. Meletius’ work, alongside the *Old Latin Commentary* have been well documented by Beccaria in the West, both works widely diffused through many versions and adaptations in many different manuscripts. Pearl Kibre presents a very detailed version of the different manuscripts from the eighth century up to the fourteenth century. Kibre, *Hippocrates Latinus*, 29-89.
Commentary, this text was disseminated all over Western Europe and seems to have been held in high esteem by the Salernitan Masters of the eleventh and twelfth century.¹⁹³

What we can see from all these documents is that elaborate practices of textual division and exposition lie at the center of the Alexandrian model and the corresponding Latin tradition until at least the twelfth century, when the model was expanded in ways I describe below. Creating a program of specific Hippocratic works and defining the characteristics of the works listed in it as well as their function within the pedagogy of medicine, became a common practice for medieval commentaries of medical texts.¹⁹⁴ The primary function of the commentaries was to offer a schema for lecturing in class and to introduce specific concepts and method to the students and beginners. This model survived over many centuries, copied and re-copied in many manuscripts across Europe, granting a stable corpus of knowledge that came to be considered the core of medical learning. The Hippocratic legacy, transformed into a scholastic tradition, was then a common good for a cross-cultural, cross-temporal elite of medical learned men educated within the tradition of the commentaries. They could claim exclusive access to a certain kind of knowledge about nature generally (since the scholastic model inserted medicine into a universalizing natural philosophy based on Aristotle), and the human body specifically, that traced its origins within the creation of medical scientia—a logically organized, supposedly certain knowledge about the natural world—and covered the


entirety of the medical art. An eleventh-century manuscript asserts this concept when introducing Hippocrates as “our teacher Hippocrates, who knew the entire body of medicine, since he is irreproachable, [and] worked [on it] for a very long time”. 195

So, if we follow the various *ordines legendi*, *Aphorisms* seems to have been part of some form of Latin medical curriculum as early as the sixth century, probably accompanied by the *Prognostics* and some of Galen’s works. While the presence of this curriculum may have extended up to the twelfth century, there is no evidence of the existence of formal institutions of medical instruction in the West until the thirteenth century. 196 However, and as I have mentioned above, commentaries to ancient medical texts had a long tradition and make reference to a certain organization or canon of Hippocratic texts for the purpose of teaching medicine, and thus we can assume there was some form of informal organization of teaching at this time.

Studied in Paris, Naples, and Salerno, 197 this canon was known in France as the *Ars Medicine* (“The Medical Art”), in Southern Italy and Germany as the *Ars


196 The earliest surviving copy of medical curricula comes from the University of Bologna, from 1405. However, there is enough evidence that suggest the curricula was extant before that, and several universities in northern Italy modeled themselves after Bologna, including Padua and Florence. Francesco the Younger da Carrara, lord of Padua, sent Lorenzo of Angelo Sassoli alongside Dino of Florence to Bologna in 1400 to conform the statues of the University of Padua with those of Bologna. Montpellier, Paris, and Oxford also seemed to have shared similar curricula. Furthermore, we know that the university of Vienna also followed a program based on the northern Italian universities; Marsilio of Santasofia’s commentaries to the *Articella*, particularly the second version of his work on *Aphorisms*, transcribed in German by students around the year 1393, were most likely used as a handbook of questions. Tiziana Pesenti, *Marsilio Santasofia tra corti e università. La carriera di un “monarcha medicinae” nel Trecento*, (Treviso: Antilia, 2003), 188-205; Katharine Park, *Doctors and Medicine in Early Renaissance Florence* (Princeton, NJ: Princeton University Press, 1985), Appendix II; Lynn Thorndike, *University Records and Life in the Middle Ages* (New York, NY: Columbia University Press, 1944), 280-81, 374-76; Nancy Siraisi, *Medicine and the Italian Universities, 1250-1600* (Leiden; Boston: Brill 2001), 63, 144-46; Taddeo Alderotti and His Pupils, 25-71.

197 Kristeller, “The School of Salerno”, 158.
Commentata (“The Commented [Medical] Art”), and later in Northern Italy as the Articella (“Little Art”). Commentaries made by medical learned men in Salerno and elsewhere were centered on the specific texts that make the canon; these specific texts remained unchanged from the early twelfth century until the sixteenth century, making it a stable collection. The canon comprised the Hippocratic Aphorisms and Prognostics; two Byzantine texts thought to be Hippocratic or Galenic in origin, On Urines by Theophilus Protospatario and On the Pulse by Philaretus; and the Isagoge, an Arabic synopsis of Galen’s Art of Medicine.

Even if most of the texts included in the Articella existed in widespread Latin translations from early on, the canon followed an interesting evolution alongside different translations. New Latin translations of these texts were produced from Arabic sources during the eleventh and twelfth centuries in Salerno and Montecassino. The person believed to be more responsible for these translations is Constantinus Africanus (died in 1087), a monk and medical practitioner at the abbey of Montecassino who, most famously, worked on the Pantegni (meaning “encompassing the entire art”), a tenth-century Arabic synthesis of ancient Greek medicine. From the time of these new versions the canon seems to have been first

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organized around a text known as the *Isagoge*. An introductory text, made from a collection of brief summaries of key Galenic concepts, it was probably written around the ninth century by the Nestorian translator of medical texts for Arabic and Syrian audiences Hunayn ibn Ishaq. Later, Constantinus Africanus most likely rendered the *Isagoge* into Latin.\textsuperscript{202} Although the early twelfth century version of this canon included the earlier Hippocratic and Galenic Ravenna translations, by the mid-twelfth century these versions had been amended with the Arabo-Latin texts. During this time the canon also experienced some additions: the inclusion of Galen’s commentaries to the *Aphorisms* and *Prognostics*, also translated from Arabic in Montecassino and Salerno; of Galen’s *Tegni* (an Arabic synthesis of the *Art of Medicine*); and, by the end of the twelfth century, of the Hippocratic *Regimen in Acute Diseases* with the respective Galenic commentary.\textsuperscript{203} Other twelfth century translations direct from Greek were also produced, like those of Burgundio of Pisa on the *Aphorisms*, highly praised in the subsequent centuries.\textsuperscript{204} The first commentary of the twelfth century on the texts that made the informal curriculum, part of an effort to ground it in a theoretical frame, comes from a certain Bartholomaeus, later quoted by Magister Cardinalis. Unfortunately, Bartholomaeus’ commentary to *Aphorisms* does not survive, but other examples of medical men from the School of Salerno and their commentaries on the *Aphorisms* as the basic Hippocratic text for medical theory included Magister Urso and Maurus of Salerno.\textsuperscript{205}

\textsuperscript{202} There exists controversy about the authorship of the *Isagoge*. This controversy, as well as the status of the text within the *Articella* has been summarized by Jordan, “Medicine as Science”, 121-145.


\textsuperscript{204} Kibre, *Hippocrates Latinus*, 32.

\textsuperscript{205} Kristeller, “The School of Salerno”, 157. The earliest commentaries to what was to become the *Articella* come from the mid-twelfth century, and have been named *The Chartres* and *The Digby Commentaries* by
It is important to note here that most specialists today do not believe that there was a “school” at Salerno this early in the sense of a formal institution. Salerno was, no doubt, a center where old Latin texts (either from the ancient Greek tradition or composed in the West over the large span of the Middle Ages) fused with newly translated Arabic works, with an extensive empirical tradition, and with the development of textual commentaries that sought to reconcile and explain the different medical traditions. The reputation of Salerno quickly extended beyond the Alps, and men and a few women from all over Western Europe came here to study medicine and receive medical treatment. The city of Salerno was the center of a vast web of commercial trade with Sicily and Muslim North Africa, and had developed economically and culturally over the centuries. The Lombard and later Normand monarchies, alongside local ecclesiastic governments (it was an Archiepiscopal See since the end of the tenth century) favored the city and the medical studies. With wealth and trade came the exchange of ideas and the supplies for potions and medicaments. However the “School of Salerno”, as referred by twelfth century writers, was a loose, informal community of students and masters with some degree of medical teaching and study. There is no evidence of a physical school in Salerno or an equivalent legal entity before the thirteenth century. An increasing degree of organization came after the work of Masters like Gariopontus and the Archbishop Alfanus, a sponsor of Constantinus, but the status of the school remained

unclear until much later.\footnote{See Monica Green (trans. and ed.), Introduction to \textit{The Trotula: A Medieval Compendium of Women's Medicine} (Philadelphia, PA: University of Pennsylvania Press, 2001).} This contrasts with the highly organized and sophisticated universities that existed from the thirteenth century forward all across Western Europe, where medical learned men organized as a group, received support and concessions of local governments, and created specific curricula for the teaching of medicine. This will be discussed further in the next section.

If we take the Alexandrian model of textual analysis as point of departure, it appears that as early as the twelfth century, authors of the medical canon in Salerno took a step further from this model. First, they took the systematic program of Hippocratic and Galenic readings towards a model of dynamic discussion. They restored to a multiplicity of sources, often with opposing views (Galen versus Aristotle, for example). Their purpose was the reconciliation of contradictions by means of textual analysis, debates organized in the context of the university or studium (Italian universities were generally referred to as \textit{studia} in this period). The commentaries included presentations of the contradictions between authorities in different ways: through the \textit{quaestio}, an open question and answer format introduced in class; the \textit{quaestio disputata}, a listing of contradicting opinions to be confronted in class; and the \textit{dubia}, lists of opinions and considerations on topics that the teacher considered relevant for the class. Second, when framing the practical medical art (\textit{ars}) in the context of a theoretical science (\textit{scientia}), i.e. natural philosophy, they restored to an ever-increasing scholastic model\footnote{By “scholastic model” I refer to a series of intellectual practices like the hermeneutical analysis of sources, pedagogical practices centered in textual analysis, and the efforts to reunite and, when necessary, reconcile different authorities to produce a unified body of knowledge about the world (natural philosophy, theology, etc.).} to make sense
of the physical world. Aristotelian philosophy became the frame for theoretical medicine, as I will describe in the next section. As the *Articella* evolved, the scholastic program altered the medical canon in significant ways.²⁰⁸

In northern Italy the canon or *Articella* underwent its own changes, which later on would influence the rest of Western Europe. The incorporation of the *Isagoge* was random and the text was eventually excluded from the canon; *On Urines* and *On Pulses* were also omitted.²⁰⁹ The *Articella* was essentially a canon of four works: *Aphorisms* with Galen’s commentary, the *Tegni* with the *Commentum Haly*, a commentary originally written in Arabic and translated into Latin by Constantine, the *Prognostics*, and *Regimen on Acute Diseases* with Galen’s commentary. By the late fourteenth or early fifteenth century this was known in northern Italy as the *Articella Completa* (the Complete Little Art).²¹⁰

This canon of teaching texts was consolidated by the mid-thirteenth century by the medical learned men responsible for the creation of Faculties of Arts and Medicine in northern Italy, who also were the main commentators to the texts in the *Articella*.²¹¹ Petrus Hispanus (Pope John XXI, died in 1277) was most likely responsible for


²¹⁰ Pesenti, “The Articella Commentaries by Marsilio of Santasofia”, 2-6. Pesenti has explored a significant number of manuscripts, all dating from the late fourteenth and early fifteenth centuries that correspond to this canon of four texts and are often referred to as the *Articella Completa*. See also Pesenti, *Marsilio Santasofia tra corti e università*, particularly 137 ff.

²¹¹ These men represent a close group of learned physicians from different generations, teachers and students of each other, a lineage of academic practitioners connected and invested on similar problems and with similar goals. One of the most influential men of this group was Taddeo Alderotti, who lived from 1210 to 1295. Contemporaries like Petrus Hispanus, Bartolomeo da Varignana were also influential physicians. Some of Taddeo’s students were Dino del Garbo, Gentile da Foligno, and Mondino de’ Liuzzi. Mondino will be presented with detail in my next chapter, as part of this lineage of physicians that included Marsilio de Santasofia, the center of the final chapter.
introducing the canon in Northern Italy. Petrus studied medicine in Sicily and in Paris and later became a teacher of medicine at Siena.\textsuperscript{212} The constant migrations and intellectual exchanges between Bologna and other northern Italian centers of higher learning like Padua, Arezzo, Florence, and Perugia can also explain the wide spread of the \textit{Articella}. Famous learned physicians like Dino del Garbo and Gentile da Foligno, students of the celebrated Taddeo Alderotti and commentators to the \textit{Articella}, taught in several different Italian universities in close contact with each other.\textsuperscript{213} In fact, the reputation of learned medical men like Taddeo Alderotti rested on their work as Hippocratic commentators, and Bologna was in fact recognized as one of the main centers for the study of Hippocratic medicine.\textsuperscript{214}

According to Pearl Kibre, partial and complete manuscript copies of the Hippocratic \textit{On Regimen in Acute Diseases} and \textit{Aphorisms} greatly exceed in quantity those of all other known Latin manuscripts combined.\textsuperscript{215} Augusto Beccaria counts one hundred and forty Greek copies, about two hundred and thirty Latin versions, seventy Arabic versions, and forty Hebrew translations.\textsuperscript{216} The northern Italian name of \textit{Articella} seems to be an abbreviation or some form of reference to the title \textit{Ars Hippocratis} or \textit{Articula Hippocratis}. By the fourteenth century, inventories of libraries reveal that

\begin{itemize}
\item \textsuperscript{212} Nancy Siraisi, \textit{Taddeo Alderotti and His Pupils}, 18-23, 98-99.
\item \textsuperscript{213} Nancy Siraisi, \textit{Arts and Sciences at Padua: the Studium of Padua before 1350} (Toronto, Canada: Pontifical Institute of Medieval Studies, 1973), 145-47. The use of the \textit{Articella} both in Bologna and Padua can be attested since at least 1235. Pesenti, \textit{Marsilio Santasofia tra corti e università}, 156.
\item \textsuperscript{214} Siraisi, \textit{Taddeo Alderotti and His Pupils}, 3.
\item \textsuperscript{215} Kibre, \textit{Hippocrates Latinus}, 29-90.
\item \textsuperscript{216} Beccaria, “Sulle tracce” (1961), 2.
\end{itemize}
Aphorism was described by either of both names.  

Aphorisms opened the collection, and within the text, the aphorism I, 1, which Pearle Kibre has described as arguably the most commented upon medical piece of work in the Middle Ages, was understood by the late medieval readers as the introduction to both the Hippocratic text and the Articella itself. According to the twelfth century commentator Maurus of Salerno,

Life is short and so forth. In the manner of those who write correctly Hippocrates sets forth a short state in place of a preface, in which, refuting a certain opinion of the Methodists and Empirics, he invites the logical doctor into this art through the contemplation of universals and particulars, hands down in the following introduction such phrase where he puts together a logical medical statement about theories and practices which the medical art invites through the contemplation of universal and particular [things].

The actual first aphorism says “Life is short, the Art is long; the crisis fleeting; experience perilous, and decision difficult. The physician must be prepared not only to do

\footnote{217 Pesenti, “The Articella Commentaries by Marsilio of Santasofia”, 2-4.}

\footnote{218 Manuscripts ranging from the nine to the twelfth centuries containing a compendia of different medical texts already use Aphorisms as either an introduction to their diverse materia medica or as a guide to their content. This is also a trend that continues during the thirteenth and fourteenth centuries. Beccaria, “Sulle tracce” (1961), 5.}


\footnote{220 Ventura, “Experimentum vero fallax”, 364.}

\footnote{221 Vita brevis etc. More recte scribentium ypocrates premittit quandam versiculum vice proemii in quo methyocorum et empiricorum confutando sententiam, medicum logicum ad hanc artem invitat per contemplationem universalium et particularium. Maurus of Salerno, Commentary to Aphorisms, in De Renzi, Collectio Salernitana IV (Naples: 1856), 515.}
what is right himself, but also to make the patient, the attendants, and externals cooperate.” The text of the aphorism is ambiguous, and the interpretation made by the learned medieval medical men was complex. For men like Maurus, as well as later commentators, the text divides medical science and introduces both practice and theory when it states “experience [which they saw as related to practice] is perilous”, and “decision [which they saw as related to theory] difficult”; thus both must supplement each other if any success is expected. According to these commentators the text also referred to the teaching of medicine: the section of the text that read, “to make the patient, the attendants, and externals cooperate,” was interpreted as relating to advice on instruction for students. Since the text was short and aphoristic in nature, it was understood that the details had to be provided by the commentator to expound the full meaning of the sentence. Much like Galen and his “clarifying” method, aphorism I, 1 (and by implication the totality of the text of Aphorisms) gave the learned medieval medical men plenty of room to insert their own interpretation of the text, making aphorism I, 1 and the Aphorisms as a whole plastic and suitable for any interpretation. Dividing medicine into practical and theoretical parts allowed a highly Aristotelian reading of the text, because medicine could be classified under categories in relation with natural philosophy. By placing medicine under natural philosophy it was possible to give the medical art a link to scientific theory, which meant medicine could go far beyond practical knowledge and into the universal truths of the physical world as described by natural philosophy. One of the consequences of the plasticity of the text and its resulting interpretations was the influence and popularity of the Aphorisms; the amount of literature produced on these topics after this text was extremely abundant.222 This division into theory and practice survived across the Middle

222 See Jole Agrimi and Chiara Crisciani, Edocere medicos: medicina scolastica nei secoli XIII-XV (Milan
Ages, and the *accessus ad auctores* served as the point of entry where biographical information of the writer of a given text would be reunited with the classification of the text and its place in the large scheme of natural philosophy.

As Cornelius O’Boyle has argued when talking about Paris, this process meant that the exegesis of the *Articella* that evolved over the centuries included not only an analysis of *Aphorisms*, but also of the commentaries to the *Aphorisms* themselves. A kind of circular exercise, this process reaffirmed the centrality of the *Aphorisms*, and because of the themes within the commentaries to the text, such as the division of medicine into practical and theoretical, it reinforced the notion that aphorism I, 1 was an attestation of the double nature of medicine. Once this took root, the commentaries to the text became a common place where all sort of aspects of the medical practice and theory could be expanded upon and discussed.223

Across the late Middle Ages *Aphorisms* kept its place as the quintessential Hippocratic text where most medical theories and practical approaches had taken root. In this sense the *Articella* had become a Hippocratic corpus,224 and in fact by the end of the fourteenth and the beginning of the fifteenth centuries the title *Articella* returned to earlier forms: *Ars Hippocratis, Articula Hippocratis, Artisella Hippocratis, Ars Hippocratis, Artisella Hippocratis*.225 Once the *Articella* was no longer copied in the

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224 A. Maierù, “Methods of teaching logic during the period of the Universities”, in *University training in medieval Europe*, by A. Maierù (Leiden; New York, NY: Köln 1993), 120.

sixteenth century *Aphorisms* became independent once again. The text was used as part of medical education until the nineteenth century when it was called *The Physicians’ Bible*, and was invoked as the origin of medicine in the West. As late as 1970s many scholars, like Wesley Smith, still presented *Aphorisms* as the one text that could be identified as written by Hippocrates himself.\(^{226}\)

Important questions arise after the construction of this canon: what is the value of Hippocrates, what is the place of Galen, and what is the role of those who follow the canon? The physicians of the *Articella* approached these issues from the perspective of discovery and continuity. Thus Hippocrates was identified from at least the thirteenth century forward as the “first finder of medicinal science.”\(^{227}\) This tradition continued at least until the end of the fifteenth century, when Giovanni Matteo Ferrari da Grado repeated the motif: “Since human infirmities had become so many, God Almighty, driven by mercy to mankind wasted by such diverse diseases, brought Hippocrates to light.”\(^{228}\)

As Chiara Crisciani has pointed out, Christian anthropology had given medicine a history that extended far back to the Fall, when humankind began suffering pain, illness, decay and death. In response to these terrible ailments God gave man the ability to heal and the knowledge of medicine in hidden truths to be discovered by humankind. There was then a time when medicine was nothing but a collection of scattered events and the

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mindless repetition of specific but poorly understood remedies often interrupted by divine events like The Flood. But then a time came when medicine became science: the time of Hippocrates. In the history of medicine as described by medical learned men from the thirteenth century forward, Hippocrates represented the moment when medicine moved from art without specific rules to *scientia*.\(^{229}\) This Hippocratic *scientia* was at the center of the mastery of practical medicine (practical medicine made sense because it has a theoretical basis) and, by opposition, those that followed him were essentially interpreters of the Hippocratic legacy.\(^{230}\) To be a learned physician was to be Hippocratic: Hippocrates was the founder of an uninterrupted tradition inherited and continued by the late medieval physicians. Their time was that of further understanding, developing and transmitting the *scientia* of medicine. And so Galen acquired a different role, opposing that of Hippocrates: the physician of Pergamum was the teacher of Hippocratic medicine and its faithful commentator, while the physician of Kos was the discoverer and finder.\(^{231}\) The work of the medieval commentator was to recover the truths of medicine, rendered opaque by the transit of history, and thus “Written *scientia* that is not irradiated with explanation does not perfect the understanding.”\(^{232}\) The commentators continued the tradition by rescuing, revealing, and giving a current and clear interpretation of it.

**Aristotle, the University, and the Medical Curriculum**

\(^{229}\) Crisciani, “History, Novelty, and Progress”, 123.


\(^{231}\) Crisciani, “History, Novelty, and Progress”, 125.

\(^{232}\) Taddeo Alderotti. *Expositiones in arduum Aphorismorum Ipocratis* ... (Venice, 1527), fol. 1ra.
Aristotelian concepts began to reach the West at the end of the eleventh century.\textsuperscript{233} We know that a certain exposure to Aristotelian concepts, probably through translation of medical texts from Arabic to Latin made in Southern Italy—mainly the towns of Salerno and Montecassino—at the end of the twelfth century, came in the hands of Constantinus. Works such as Galen’s Tegni, the Isagoge, and the Pantegni influenced the writings of Salernitan Masters like Magister Urso.\textsuperscript{234} It is interesting to note that during this period Constantinus only translated or summarized three or four Galenic treatises, while he translated many more Arabic medical texts. The reasons for this limited amount are still unknown, but Constantinus himself expressed discomfort with the works of Galen.\textsuperscript{235} A few decades later, Gerard of Cremona working in the Spanish city of Toledo translated from Arabic into Latin the Canon, a work written by a Persian physician known in the West as Avicenna. The Canon is a medical encyclopedia in five books that organizes Galenic and Hippocratic concepts around a strong Aristotelian frame, and refers to Aristotle’s biological works. If we follow the contents of book one of the Canon, the Aristotelian influence becomes clearer, as it is possible to see how health and disease are explained based on Aristotle’s causes:

1. The Material Causes  
2. The Elements

\textsuperscript{233} See Fernand Van Steenberghen, \textit{Aristotle in the West. The Origins of Latin Aristotelianism} (Louvain: Nauwelaerts, 1970).

\textsuperscript{234} Kristeller, “The School of Salerno”, 161-62.

3. The Humors
4. The Variability of the Humors
5. The Temperaments
6. The Psychic Faculties
7. The Vital Force
8. The Organs
9. The Efficient Causes
10. The Formal Causes
11. The Vital Faculties
12. The Final Causes

The *Canon* however spread slowly, so the first Latin medical text that shows any substantial influence from it is Ricardus Anglicus’ *Anatomia vivorum*, written some time around 1225. Nevertheless, by the end of the thirteenth century the *Canon* was the main textbook in the medical curricula of most western faculties of medicine.  

During the first half of the twelfth century a cleric named James (Jacobus Venetus Grecus), who seems to have become acquainted with the *Aristotelian Corpus* in Constantinople, carried out a significant amount of translations from Greek into Latin in the southern Italian city of Calabria. He translated Aristotle's works of logic, the *Physics* and *Metaphysics*, treatises on natural history such as *On the Soul*, and most of Aristotle’s smaller texts, the *Parva naturalia: On Memory, On Breath, On Length and Shortness of life*, etc. The *Parva naturalia* was a later, Arabic compilation elaborated by Averroes, a famous twelfth century Andalusian Islamic philosopher who became known as the ultimate commentator of Aristotle in the West.

As the influence of heavenly bodies became an essential theme of medieval medicine during the thirteenth century, and as specific natural and biological treatises from

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237 García-Ballester, “The construction of a New Form of Learning”, 81-82.
Aristotle became accessible from the mid-thirteenth century on, learned medical men resorted frequently to the Aristotelian *De celo* and *Meteorologica*, doubtless connected to the Hippocratic *Airs, waters, places*. Furthermore, Aristotle’s *De generatione et corruptione* developed into an essential treatise on the balance of human “complexions” and its relation to the elements, and *De plantis* became relevant to physicians restoring to herbal treatments. A well-known treatise attributed to Hippocrates during the Middle Ages, called *Astronomia Hippocratis* (the astronomy of Hippocrates), offers variations in treatment according to the movements of the moon through the signs of the zodiac. Several manuscripts still existed and circulated during the thirteenth and fourteenth centuries. The tradition inherited through Avicenna’s *Canon* and Averroes’ works also served to emphasize Aristotelian physiology over that of Galen, including the central role of the heart, and often influenced the views of learned medical men of the time.

This introduction of Aristotelian ideas through Latin translations of Arabic medical works meant that the content of medical knowledge was organized around Aristotelian ideas, and also meant that the methods of inquiry and pedagogy themselves were transformed: commentaries became the quintessential place for intellectual exchange, the rise of universities as places for the creation and dissemination of knowledge, and a system of medical care associated with the institution of the university. As Luis García-Ballester has pointed out, the entire functioning of the natural world became then explained in terms of this new model: the *Pantegni* explained living beings through

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238 Siraisi, *Taddeo Alderotti and His Pupils*, 238-42.


Galenic concepts transformed to fit an Aristotelian model (elements, qualities, complexions), and the Isagoge explained health and disease ("natural things", "pathological things", "non-natural things"). This transformation of medical knowledge by Aristotelian thought only increased over time.

Although Aristotle never wrote any medical works, his writings provided the West with a complex scientific vocabulary, particularly concerning physiology, biology, and nature. In the thirteenth century, the Dominican monk William of Moerbeke (Guillelmus de Morbeka, 1215-1286?) translated from Greek into Latin all the Corpus Aristotelicum. This brought to light what was known as the “new” Aristotle (a set of previously unknown Aristotelian treatises) that had great impact in the curricula of many studium and centers for teaching: the Libri Naturales (previously proscribed under religious censorship), the Metaphysics, and the complete translation of the Nicomachean Ethics.

As early as the later twelfth century, Magister Urso’s works already contain a solid foundation grounded on Aristotelian doctrines and vocabulary for the division of medicine between a practical ars and a theoretical scientia. Thus, following Aristotle’s

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241 García-Ballester, “The construction of a New Form of Learning”, 75-102, 78.

242 See the section on “Natural Philosophy”, containing articles by James Weisheipel, Edward Grant, Edith Dudley Sylla, and John Murdoch, in The Cambridge history of later medieval philosophy: from the rediscovery of Aristotle to the disintegration of scholasticism, 1100-1600 (Cambridge, UK: Cambridge University Press, 1988).


classification of the sciences, medicine was subalternated to *philosophia naturalis* or natural philosophy. This would ultimately mean that a university physician had to be well versed in natural philosophy (Aristotle) in order to properly practice medicine. This was manifested in the content of the knowledge that was expected to be mastered by a student of medicine (the biological workings of nature as presented in Aristotle’s biological works), and also in the reasoning that was expected from any university educated intellectual (Aristotle’s logical works). As put forward by Thomas Aquinas’ commentary to Aristotle’s *Parva naturalia* (specifically *De sensu et sensato*)

It is the task of the natural philosopher to investigate the primary and universal principles that govern health and illness; it is for the physician to put these principles into practice, in keeping with the idea that he is the maker of health *[artifex factivus sanitatis]*. . . . The physician should not limit himself to making use of medicines, but he should also be able to reflect upon the causes (of health and illness). To this purpose, the good physician begins his training (with the study of) natural philosophy.  

Joel Agrimi and Chiara Crisciani had argue that, in fact, physicians of the thirteenth century like Taddeo Alderotti, Pietro d’Abano, and Arnaldo da Villanova in Valencia, restored to this model of subalternation of medicine to natural philosophy, and to the internal division of medicine between theoretical and practical, to reconcile

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246 Thomas Aquinas, *Opera omnia. Sententia libri de sensu et sensato*, vol. 45, 2 (Rome: Commissio Leonina, 1985), 8-9, as cited in Garcia-Ballester, “The Construction of a New Form of Learning”, 92. In his commentary to the *Isagoge*, Taddeo Alderotti explicitly argues that the concept of “element” can be approached differently, from the perspective of a natural philosopher or a physician. Siraisi, *Taddeo Alderotti and His Pupils*, 157 Pietro d’Abano writes in his *Conciliator* specifically to address this apparent contradiction in vocabulary between natural philosophy and medicine, and specifies in his section *exposition terminorum* his criteria to address such differences. He goes as far as to argue that often a distinction between usages and criteria has to be made between a physician speaking in practical terms and a one referring to theory (the domain of natural philosophy).
disparities between Aristotelian and Galenic doctrine. The ultimate argument was that natural philosophy was able to reach a complete, perfect understanding of nature and its universal truths, while medicine had to restore to a speculative kind of knowledge, based on particular truths obtained through practice. Medicine was ultimately capable of reaching truth by studying authoritative authors (ancient and contemporary alike), assimilate them through an Aristotelian frame into commentaries, and transmit the content of this canonical texts through teaching in a studium or university. Operative truths, the domain of medicine, could be then framed in the context of larger, universal truths, the domain of natural science, and the claims of learned medical men for legitimacy over other, non-university-educated practitioners. This division also served as a way to delineate and grant authority to learned medicine as a legitimate way of knowing, useful in itself as operative _scientia_ and practical _ars_, whose theoretical knowledge rests on the possibility of operative truths based in the accumulation of knowledge through practice, which brings medicine closer to the truth and obtains successful results. In this sense, and following the traditional reading of aphorism I, 1 that divided medicine into theory and practice, Taddeo Alderotti argues that it is possible to obtain a complete and perfect acquisition of medical knowledge in spite of its intrinsically limited characteristics. As practical _ars_, medicine can only reach operative, partial truths, but by exhorting the student to a disciplined and rigorous study and the teacher to record its knowledge and to write books accessible to students and community.

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248 Agrimi and Crisciani, _Edocere medicos_, 102-104.

249 Agrimi and Crisciani, _Edocere medicos_, 75-79.
alike (the *ars* is long, and life is short), medicine can accumulate a solid foundation of operative truths, that can then be validated by natural philosophy.

An additional consequence of Aristotelian philosophy in the medical learned tradition must be taken into account. As I have mentioned previously, there was an effort to reconcile authorities like Galen and Aristotle, and often this resulted in preference for Aristotle over Galen. Furthermore, natural philosophy and the Aristotelian, scholastic model were the defining characteristics in the definition of knowledge and the ways of textual and conceptual analysis. It is possible to argue then that these two elements gave primacy to an Aristotelian theory over Galenic theory, displacing many of the Galenic forms of analysis and concepts in favor of Aristotle. The scholastic Hippocrates was more Aristotelian than Galenic (I will develop this further in the next chapter). Thus all of Aristotle’s books on natural sciences (including the pseudo-Aristotelian treatises) became of common use at the Faculties of Medicine and Arts, but also at the Faculty of Theology.

The creation of the Faculty of Medicine in most Italian, French, and English universities often fostered the development of a Faculty of Arts. The association with the nascent Faculty of Arts went as far as to foster the exchange of teachers and subjects to be studied through disciplines. Early on, in northern European universities for example, a student who wished to enter the Faculty of Medicine had to become a Bachelor in Arts first, which already implied up to eight years in the study of the *Trivium* and

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250 Taddeo Alderotti, *In Aphorismos Hippocratis Expositio*, f.2rb.

In most Italian universities this relationship went a step further: professors of the Faculty of Medicine often taught in the Faculty of Arts, on the subject of Natural Philosophy, Logic, and Astrology (even hold both a doctorate in philosophy and a doctorate in medicine),\textsuperscript{253} and also Arts and medicine were studied in the same faculty, the Faculty of Arts and Medicine.\textsuperscript{254} This intimate relationship was part of the Aristotelian definition of the arts and sciences, including the place medicine occupied as scientia in the hierarchy of knowledge.

But what was the actual medical curriculum of the Italian universities? Alessandro Gherardi has published the 1387 statutes of the studium of Florence, and it seems that the Florentine medical curriculum followed that of Bologna: theoretical medicine was taught in the mornings, surgery was taught in the afternoons, and practical medicine was taught in the evenings. Furthermore, the curriculum should include a set repertoire of different books for each year given ahead of time, to be approved by the rector of the studium.\textsuperscript{255} Teachers at the Florentine studium were supposed to teach on anatomy, and the city of Florence was supposed to provide them with two corpses per

\textsuperscript{252} The Liberal Arts were the different disciplines taught at the Faculty of Arts for those who were interested in obtaining a Bachelors degree either with the intention to attend a higher Faculty (Law, Medicine, Theology) or to gain easier access to bureaucratic jobs within the church or different courts all over Europe. These Liberal Arts were divided in two groups, the Trivium, composed of grammar, philosophy (physics, metaphysics, ethics), and rhetoric, and the Quadrivium, composed of arithmetic, geometry, music, and astronomy/astrology. See Ann M. Blair, “Organizations of Knowledge”, in Cambridge Companion to Renaissance Philosophy, edited by James Hankins (Cambridge, UK: Cambridge University Press, 2007), 288-90.

\textsuperscript{253} Unfortunately, no statutes from any Italian Faculty of Medicine before 1387 survive. However, often the names of those involved in the creation of them can be identified, and their interests and libraries connected with previous generations of Masters of Medicine. Parallels thus can be drawn. Malagola, Statuti, 425, 448.

\textsuperscript{254} Siraisi, Arts and Sciences at Padua, 23-24, Taddeo Alderotti and His Pupils, 23.

\textsuperscript{255} Alessandro Gherardi, Statuti della Università e studio fiorentino dell'anno MCCCLXXXVII seguiti da un'appendice di documenti dall'MCCCXX al MCCCLXXII (Florence: M. Cellini, 1881), 50-51, 63.
year (one male, one female), preferably of delinquents who were not born in the city and of lower social standing. The dissections with teaching purposes were carried in two yearly sessions, and they may have lasted up to four days each so that they could accommodate a good number of students and colleagues. The practice of teaching anatomy by dissection is well documented in Bologna and many other Italian cities, such as Padua. I will discuss the relevance of anatomy in the early fourteenth century in Bologna in my next chapter. What seems clear is that the study of anatomy took place all across the different Italian universities. In the Florentine case, the statutes go as far as to give specifics on how much “good” wine should be given to the professors performing the dissection as well as the proper libations during recess. In this sense, the earliest surviving medical statutes providing the names of specific texts and the organized schedule of lectures date from 1405, from the university of Bologna. Since the Northern Italian universities were in close contact with each other (faculty often taught in different universities at different times, and students trained in one university would then teach in another), there are reasons to believe the status of many universities, like Bologna and Florence, were closely related. Furthermore, since different earlier physicians mention specific texts to have been taught in their classes or as part of previous medical curricula, it is possible to believe that the 1405 statutes were the formalization or the continuation of previous ones. An example of this last case is given by the status of medicine of the

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256 Gherardi, Statuti della Università e studio fiorentino, 74 ff.

257 Gherardi, Statuti della Università e studio fiorentino, 28.

258 Siraisi, Taddeo Alderotti and His Pupils, 71. For the relationship between the 1405 Bolognese statutes and those at the university of Padua see also Pesenti, “Le articelle di Daniele di Marsilio of Santasofia”, 62-63.
University of Padua. The earliest known status of the college of Arts and Medicine survive only on a revision dated from 1407. The duration of education for a medical degree was four years. As Katharine Park mentions, the curriculum seems very ambitious and possibly not all books listed were read each year. Classes were divided in morning, afternoon, and evening sessions. The morning and the afternoon were dedicated to theoretical medicine and, every other year, to surgery. Evening sessions were dedicated to practical medicine. Here is what the curriculum looked like:

**THEORETICAL MEDICINE**

**First Year**

**Morning**

First Lecture
Avicenna, *Canon*, I (excluding chapters on anatomy in fen 1 and chapters on the seasons in fen 2; including only chapters in fen 3 on the necessity of death, diseases of infants, regimen of eating and drinking, regimen of water and wine, and sleep and waling.

Second Lecture
Galen, *De differentiis febrium*
Galen, *De complexionibus*
Galen, *De mala complexione*
Galen, *De simplicibus medicines* (excluding book VI)
Galen, *De diebus criticis*, I

**Afternoon**

Avicenna, *De diebus Criticis*, I
Avicenna, *Canon*, IV, fen 2 (on prognostication) and II (on medicines)
Galen, *De interioribus* (excluding book II)
Galen, *De regimine sanitatis*, VI
Galen, *De diebus criticis*, II

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259 Siraisi, *Arts and Sciences at Padua*, 25 and n. 57.

260 Park, *Doctors and Medicine in Early Renaissance Florence*, 245.

261 The curriculum that follows is copied from Park, *Doctors and Medicine in Early Renaissance Florence*, Appendix II.
Hippocrates, *Aphorismata* (excluding part 7)

**Second Year**

**Morning**

First Lecture  
Galen, *Tegni*

Hippocrates, *Prognostica* (without commentary)  
Hippocrates, *De morbis acutis* (without commentary and Excluding book IV)  
Avicenna, *De viribus cordis* (to “postquam locuti sumus”)

Second Lecture  
Galen, *De accidenti et morbo*  
Galen, *De crisi*  
Galen, *De diebus criticis*  
Galen, *De februbis ad Glaucionem*, I  
Galen, *De tabe*  
Galen, *De utilitate respirationis*

**Afternoon**

First Lecture  
Avicenna, *Canon*, IV, fen 2  
Galen, *De mala complexione*  
Galen, *De simplicibus medicinis* (excluding book VI)  
Galen, *De diebus criticis*, I

**Third Year**

**Morning**

First Lecture  
Hippocrates *Aphorismata* (excluding part 7)

Second Lecture  
Galen, *Therapeutica*, VII-XII  
Averroës, *Colliget*, poremium; 1, 2; II; V (up To section on simple medicines and  
From last section to end)  
Galen, *De virtutibus naturalibus*, I (to chapter 7); III  
Galen, *De diebus criticis*, II

**Afternoon**

First Lecture  
(as in morning of second year, first lecture)  
Galen, *Tegni*

Hippocrates, *Prognostica* (without commentary)  
Hippocrates, *De morbis acutis* (without commentary and Excluding book IV)
Avicenna, *De viribus cordis* (to “postquam locuti sumus”)

Second Lecture
Galen, *De accidenti et morbo*
Galen, *De crisi*
Galen, *De diebus criticis*, III
Galen, *De complexionibus*
Galen, *De febribus ad Galuconem*, I

**Fourth Year**

**Morning**
First Lecture
(as in morning of lecture of first year)
Avicenna, *Canon*, I (excluding chapters on anatomy in fen 1 and chapters on the seasons in fen 2; including only chapters in fen 3 on the necessity of death, diseases of infants, regimen of eating and drinking, regimen of water and wine, and sleep and waling.

Second Lecture
Avicenna, *Canon*, IV, fen 1 (on fevers); II, canones
Galen, *De interioribus* (excluding book II)
Galen, *Regimen Sanitatis*
Hippocrates, *De natura*

**Afternoon**
First Lecture
Hippocrates, *Aphorismata* (excluding part 7)
Second Lecture
Galen, *Therapeutica*, VII-XII
Averroës, *Colliget*, (as in morning of third year) proemium; 1, 2; II; V (up To section on simple medicines and From last section to end)
Galen, *De virtutibus naturalibus*, I, 1-12; III

**PRACTICAL MEDICINE**

**First Year**
Avicenna, *Canon*, III, 1-3 (on the anatomy, physiology, and diseases of the brain and eye; excluding the ears, nose, mouth, tongue, teeth, and gums)

**Second Year**
Avicenna, *Canon*, III, 9-12 (throat, chest, and lungs, breasts)
Third Year
Avicenna, *Canon*, III, 13-16 (stomach, liver, spleen, intestines)

Fourth Year
Avicenna, *Canon*, III, 18-21 (kidneys, bladder, genitals—including conception and birth; omit anus, extremities)
Other sections of the *Canon*, III, to be read in a second lecture
Or otherwise, at the discretion of the rector of the university.

**SURGERY**
(All classes held in the afternoon)

First Lecture
Bruno da Longoburgo, *Chirurgia*
Galen, *Chirurgia*

Second Lecture
Avicenna, *Chirurgia* (apostemata, fractures and dislocations, Wounds, bruises, ulcers)
Rhazes, *Ad almansorem*, VII

(Surgery lectures were given on a year-cycle, and the same readings were repeated from year to year)

Several relevant points must be highlighted here. First, the three Hippocratic texts listed in the *Articella* (*Aphorisms*, *Prognostics*, and *Regimen in Acute Diseases*) are taught as part of theoretical medicine, and they are sometimes taught without the Galenic commentary. A Hippocratic *On Nature* is added in the fourth year. Furthermore no Hippocratic text is taught as part of practical medicine. I believe there is an important consequence of this theoretical emphasis on Hippocrates in the curriculum and how it relates to my thesis of an emphasis on a practical Hippocrates. The context of these two different approaches to Hippocrates tells it all: the Hippocrates taught at the university is

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262 This is *On the Nature of Humankind*. 106
part of the general, theoretical structure of medicine (*Aphorisms* was a bridge text for both, theory and practice), while the Hippocrates that I will discuss later was an expanded Hippocrates that moved into the practice of medicine. They are not mutually exclusive, but they reflect two different contexts that can be understood as complementary: *Aphorisms*, and after it *Prognostics* and *Regimen in Acute Diseases* are understood as including the whole art of medicine in an abbreviated, interconnected form. As such they also contain the essential Hippocratic medicine. This means that any teaching in theory must include these texts. Galen, the ultimate commentator to Hippocrates, would then provide the context for these texts, and specific Galenic works would also inform practice. The fact that *Aphorisms*, and after it *Prognostics* and *Regimen in Acute Diseases*, contains the whole art of medicine also means that any practical use of the Hippocratic legacy would have to include these texts because they bridge theory and practice.

Furthermore, and as I will discuss in my next chapter, the organization of different Hippocratic works of practical nature around *Aphorisms*, specifically in the hands of certain practitioners, can be see as an expansion on the nature of the Hippocratic legacy towards practice. The texts included in the different *Ordo Legendi* that I will analyze in my next chapter, as well as their organization within an Aristotelian frame, reflect this new emphasis. Hippocrates is the Hippocratic theory, but he is theory that builds up on practice (and that is why texts written in aphoristic ways that give examples and brief advice on specific cases, like *Aphorisms*, *Prognostics*, and *Regimen in Acute Diseases*, can be used to discern theory). Finally, there is an important element to consider, which I will discuss shortly: the texts included in the different *Ordo Legendi* seem to be an ideological choice: most of the texts in question do not appear frequently in
the manuscript tradition or in the famous catalogues of libraries I have consulted. These texts are intended to expand the tradition of Hippocrates into a practical model as part of a movement of expansion of Hippocrates and his legacy, thus the different lists of Hippocratic works and their organizations are a way to complement Hippocratic medicine and further develop its practical uses. When it comes down to Galen, most of his texts that are taught both as part of theoretical and practical medicine were not included in the *Articella*. They are the frame of the Hippocratic tradition, and thus they are commentaries that discuss the implicit theory in the Hippocratic works and in the practice of medicine. As I have argued, the Hippocrates inherited by the Middle Ages was the “New Hippocrates” of Galen, and Hippocratic medicine made little sense without him. The difference of course comes down when practice is involved: the knowledge of practical Hippocratic medicine, different from the teaching of Hippocratic medicine in the context of the university, could be separated from the Galenic theoretical frame.

Another relevant point concerning the curriculum has to do with the place occupied by the teaching of the Hippocratic texts. They are all part of the morning lecture, which was the most prestigious and the one usually taught by the most famous and influential physicians. The lecturers who taught in the morning lecture were traditionally paid larger salaries than those paid in the afternoon and evenings. Katharine Park has collected a good deal of information regarding the studium of Florence, and Bologna must have had similar structure of compensation and organization of lectures. In average, a reader of Fisica (which included theoretical internal medicine, practice or Practica, and surgery) who taught during the morning lecture received a third more in

salary than those teaching in the afternoon or evenings, followed by those who taught in the afternoon and, in the lower spectrum of the salaries, those who taught in the evening. The subjects taught in the morning were also considered *ordinarie*, that is the central subjects of study, while those teaching in the afternoon and evening were often considered *extraordinarie*, or secondary subjects.²⁶⁴

An additional relevant point about the curriculum involves the rest of the texts used in the curriculum. Avicenna’s *Canon* was taught across theoretical and practical medicine and was the text more often used. In fact, the *Canon* is the only text used for the teaching of practical medicine. Of the texts of Arabic origin, Avicenna’s *Chirurgia* is also taught as part of surgery, alongside Rhazes’ *Ad Almansorem*, VII, and Averroës *Colliget*. The 1405 Bolognese curriculum has three implications. First, it reaffirms the place of the Hippocratic texts as the center of the *Articella* because the more stable and frequent texts included in the *Articella* are those by Hippocrates, without including Galenic texts other than his commentaries. Galen is used to teach theory, but it is not used as the canon of the *Articella*. Furthermore, when it comes down to teaching practical medicine, it is the Arabic compendia and synthesis that take first place, moving this tradition away from Galen as his work in this area is only seen through the Arabic tradition. This means that the texts in the *Articella* were the canon of Hippocratic medicine, and thus could be used to cover both theory and practice. Second, the Galenic texts included in the curriculum are for the most part not included in the *Articella*. Third, the influence of the Arabic encyclopedias is particularly strong. As mentioned earlier, many of the texts included in the curricula were not taught every year, perhaps those

included in the canon are the most frequently taught (which would explain in part the reason not to add more texts to the Articella), although this is my speculation. What is clear is that the canon was referential, and although the Hippocratic texts included in it were used as part of the curriculum, the rest of the texts may have been only used as required by specific teachers during particular times.

I would like also to call attention to the commentaries written by the Italian learned medical men of the time, from the thirteenth century and up to the fifteenth. If we keep in mind that commentaries, designed to guide a lecture, were the main pedagogical tool of the time, we can infer the interests of the learned physicians as well as the most important and frequent texts used for lecture from the texts most commonly commented on. It seems that the most popular texts around the circle of Taddeo Alderotti were the Hippocratic Aphorisms, Prognostics, and Regimen in Acute Diseases. The Arabic synthesis like Avicenna’s Canon and Averröes’ Colliget, and Rhazes’ Almansor were also very common. The Tegni and the Isagoge were the main source of Galenic information. A similar picture can be drawn for later periods, extending as far as the mid fifteenth century all over Northern Italy.265

The Articella then becomes an interesting case, a staple of medical libraries all over northern Italy (and possibly all over Western Europe), and a testament to the power of Hippocratic medicine as a source for the teaching and practicing of medicine and as cultural reference, since it was the center of a canon that was fairly stable but did not comprise the whole of the texts taught at the university. It is important to note that Galen’s texts listed in the curriculum are practical in nature. The most influential

265 Siraisi, Taddeo Alderotti, 305-308. See also Tiziana Pesenti, Professori e Promotori di medicine nello Studio di Padova dal 1405 al 1509: repertorio bio-bibliografico (Trieste: Lint, 1984).
theoretical texts are not included, like *On the Method of Healing* or *The Elements*. Certainly, this can be attributed to the fact that books like *On the Method of Healing* were larger in size, thus more expensive to copy and to carry. Additionally, it is important to consider that Arabic summaries effectively replaced the large Galenic works: *De Usu Partium* was replaced by *De Juvamentis Membrorum, De Locis Affectis* by *De Interioribus*. The implications of this will be discussed in the next chapter. Another point that must be highlighted is the heavy influence of Avicenna’s *Canon*, a text that reinforces the connection between Aristotelian theory, medicine, and the university, and the centrality of Aristotle and the Arabic digests as part of reading Galen (as mentioned earlier, the *Canon* was a comprised, expounded version of *On the Method of Healing* with a practical emphasis).

However, what were the physicians reading? Although we do not possess large numbers of their original manuscripts--often these no longer exist or the collections have been broken down—we can sometimes reconstruct their reading or their libraries through inventories produced for various purposes or through mentions in diaries and other texts. In Florence, physicians often declared their books in their returns for the city’s *catasto* (a record of property for the purpose of taxation), and book collections were also often catalogued for inheritance purposes. Different examples of manuscripts of the *Articella* from catalogues of the libraries of several physicians in northern Italy show the absence of most of the Galenic texts present in the curricula. Niccolo Cesi da Mignagola, who died in Treviso in 1407 has an *Articella* with the standard Galenic and Hippocratic texts. A certain Romelio da Briesca who died in 1408 in Bologna seems to have owned

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266 L. Gargan, *Cultura e arte nel Veneto al tempo del Petrarca* (Padova: 1978), 204-205
the standard Hippocratic and Galenic texts of the canon, in addition to most of the
Hippocratic texts available at the time and the Anatomy of Mondino Liuzzi and the
Consilia of Taddeo Alderotti.  

Daniele de Santasofia who, in 1410, inherited the library of his father, Marsilio, in Padua, had at least two different versions of the Articella (one designed as “completa” in the cover, the other one as “incompleta”), one only with the Hippocratic texts of the collection, the other with the Tegni.  

It is important to highlight that in none of these cases the Articella included the Galenic texts from the curriculum Bolognese, with the exception of the Tegni and sometimes the Galenic commentaries to the Hippocratic works.

Books were expensive and only wealthy doctors could own them. In most cases it seems they owned a copy (complete or not) of the Articella plus some of the Arabic encyclopedias, like Avicenna’s Canon or Averroës Colliget.  

Katharine Park cites a certain contemporary and admirer of Niccolo Falcucci, a very prestigious Florentine physician of the fourteenth century, who said: “While at the studio, every doctor studies Avicenna, Galen, Hippocrates, and many worthy medical authors. But then they abandon all such writers, pawn their books, and take with them only the Practica of Maestro Niccolò, which explains all remedies to perfection.”

The Formation of Guilds and the Institutional Context


269 Park, Doctors and Medicine in Early Renaissance Florence, 194, 197.

270 Park, Doctors and Medicine in Early Renaissance Florence, 194-195.
The later Middle Ages are characterized by a growing variety of large and wealthy institutions such as hospitals, monasteries, and confraternities. In this context learned medical men became a commodity for the growing class of patrician families and princely dynasties characteristic of the Italian urban landscape of the fourteenth and fifteenth century.\textsuperscript{271} The growth of the urban centers of Italy during the thirteenth century and later across Western Europe explains the need for trained, learned physicians with a more or less standardized medical knowledge seen as authoritative and efficacious. This growing need, the social support that came from it, and the possibility of constructing a body of theoretical knowledge while also constructing a flexible body of practice is what, all together, was responsible for the success of learned medicine.\textsuperscript{272}

In his commentary to the \textit{Isagoge}, Taddeo Alderotti defines \textit{practica} as an operative science (\textit{scientia operativa}) that teaches how and why theory is to be put into operation manually and sensibly: if fever is caused by heat, the learned physician knows through \textit{practica} to cure by opposites, and so he prescribes cold water for the patient, a manual operation.\textsuperscript{273} Later on, in his commentary to the \textit{Aphorisms}, Taddeo argued that Hippocrates ultimately had defined science as an art rather than a science, and went on to say that art and science are as different as “to be made” and “to be”. He uses the example of a carpenter to define art as a skill in the soul: the art in the soul of a carpenter is the


\begin{flushright}272\end{flushright} McVaugh, \textit{Medicine before the plague: practitioners and their patients in the crown of Aragon, 1285-1345} (Cambridge, UK: Cambridge University Press, 1993), 241-45.

\begin{flushright}273\end{flushright} Taddeo Alderotti, \textit{Isagoge}, fol. 343v.
skill he uses to build a house; science, on its turn, is the understanding of the house as such, of wood, and of stone. Practical medicine was constructed and defended from within of theoretical commentaries.

Marsilio Santasofia’s Divisio is an expression of these medico-social changes: originally passed along a line of teachers and students of learned medicine and thus produced in the context of theoretical medicine, it became, as mentioned earlier, a companion to a select group of practitioners of learned medicine in the courts of Europe. The Divisio is an example of how this duality of Aphorisms, when set against the social context of the time, made the text so central. By introducing the division between theory and practice, and then giving a set of practical tools to the learned physician, the text allowed for both claims of authority and an emphasis in practice. This is why the centrality of this Hippocratic treatise leads to the organization of a significant number of essentially practical medical texts from the Hippocratic Corpus. The Divisio reveals the complex nature of learned medicine during the fourteenth century. First, in the university setting where it was first produce, it reflects the increasing attention and interest for practical medicine against the background of philosophical, Aristotelian basis: the Divisio is part of a commentary to a text, the Aphorisms, that was used to define the double nature of medicine, practical and theoretical, and explained as the quintessential work on practical medicine since at least the early fourteenth century, as shown above. Second, the Divisio is part of a lineage of medical learned men that taught in Faculties of Medicine and also worked for princely families. In this sense, it also reflects the emphasis,

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274 Taddeo Alderotti, Aphorisms, fol. 2v.

from the arena of the university where *practica* had long been part of the curricula of northern Italian universities, to a medical practice now oriented toward successful diagnostics and therapeutics. Different tools were developed from the thirteenth century forward designed to deepen the understanding of practical medicine and to help the actual practice of medicine. They reflect, alongside the *Divisio*, an increasing interest for practice.

The university and the affirmation of power of medical learned men can only be understood though the formation of groups or guilds. Guilds and similar organizations appeared not only with the purpose of teaching and practicing medicine, but also because of shared economic and political goals. The medical marketplace was an influential motivator, and the system of the university evolved as the medical marketplace changed. In Italy, the studium and the ensuing universities were born from the organization of individuals into guilds, which negotiated some form collective agreement with the city or the state, as well as with members of other corporations. The members of the medical guild were given special concessions, like tax exemptions, salaries, and public offices. The membership to a guild as well as to a city would give a physician the possibility of access to the different communal offices and the various guild positions that could lead to higher positions in society, as well as to the administration of their cities. As guild members and organizers of the universities, physicians were also active members of the civic life. As a consequence, learned physicians formed a tight collection of individuals with strong group ties, to the extent that entire families of physicians that handed down,

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276 Park, “Natural Particulars”, 351.

277 Park, *Doctors and Medicine in Early Renaissance Florence*, 31 and n. 50.
from generation to generation, legal privileges, civic positions, and books were not uncommon. These relations included contractual financial arrangements among members of the guild that helped maintain the close tights between learned practitioners. Eventually, the guilds and organizations of physicians also served as members of licensing organizations for the practice or teaching of medicine, and the inclusion of members into the guild.

The different cities and states benefitted from the organization of physicians in guilds and the licensing of physicians. Northern Italian cities like Bologna and Padua appointed civic medical and surgical practitioners by the early thirteenth century, and physicians soon started serving as witnesses in criminal trials or in the processes of canonization of saints for local or state religious institutions. Also, civic-appointed physicians were in charge of carrying out post mortem examinations for the city in criminal cases, thus functioning as agents of the courts. Finally, the cities and the states benefitted from the organization of physicians by the establishment of standards of practice and legal recourse for any consumer of the guild.

Traditionally, the medical marketplace included non-university-educated practitioners working in a wide range of areas (surgery, gynecology/obstetrics, herbal medicine, magic, and a mix of them all). These diverse practitioners offered their services

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278 Park, Doctors and Medicine in Early Renaissance Florence, 151.

279 Katharine Park has written a detailed account of the financial relationships between members or individuals associates with the guilds in Renaissance Florence, and their contractual obligations through the study of guild’s record books and the matriculations of physicians in cities for the purpose of taxation. See Doctors and Medicine in Early Renaissance Florence, 15-46.


281 McVaugh, Medicine Before the Plague, 208-209, 217.
to a more wide scope of people than the learned physicians. By contrast, learned medical professionals were able to cater to the elites, who had originally fostered the growth of the university as a center for the study of theoretical and practical medicine.\textsuperscript{282} Ultimately, the major source of interest and benefit for the elites was the ability of physicians to practice medicine. Gianna Pomata has shown that Early Modern medical practice included oral or written contracts between patients and learned physicians.\textsuperscript{283} Since these practices were well consolidated during the fifteenth century, it is logical to think that the preceding century, perhaps even further back, had similar practices.

Physicians started developing different tools for the teaching and practice of medicine since at least the thirteenth century forward. These tools reinforced the ties among physicians, and also served as a source of medical authority. Collections of medical \textit{practicae} or compendia of diseases and treatment became increasingly common. An entire genre developed which also addressed medical problems faced by physicians, the \textit{questiones}: a pedagogical device where a teacher would ask a question (identifying a problem), then would restore to different authorities to posit possible solutions, from which he then would proceeded to give his own answer based in syllogistic reasoning. Essentially, the \textit{questiones} were an Aristotelian tool central to higher medical education. From at least the mid thirteenth century forward in northern Italy, commentaries came with entire sections for this \textit{questiones} designed for medical teaching.\textsuperscript{284} Of the \textit{questiones} from the circle of Taddeo Alderotti, edited by Nancy Siraisi, at least two thirds

\begin{itemize}
  \item \textsuperscript{282} Park, \textit{Doctors and Medicine in Early Renaissance Florence}, 85-116.
  \item \textsuperscript{283} Gianna Pomata, \textit{Contracting a Cure: Patients, Healers, and the Law in Early Modern Bologna} (Baltimore, MD: Johns Hopkins University Press, 1998).
  \item \textsuperscript{284} Siraisi, \textit{Taddeo Alderotti and His Pupils}, 152.
\end{itemize}
of the questions are concerned with the causes, nature, symptoms, course, and treatment of specific diseases and injuries. According to Siraisi herself, the commentaries made by these lineage of physicians on Hippocratic works (accompanied most frequently by the practical questiones) contain large bodies of material practica and “demonstrate the extent to which the continued study of the Hippocratic works, lacking as these were in a theoretical superstructure such as that of Aristotelian biology and psychology or Galenic physiology and complexion theory, perpetuated a tradition that was essentially practical.”

Sickness and injury were at the center of these medical learned men’s concerns, and thus, in the context of the university, practical medicine was grounded in the authority of ancient and Arabic writers, and organized in a scholastic, Aristotelian fashion for the purpose of teaching and discussion—this produced an scholastic Hippocrates. Marsilio Santasofia, following this tradition, seems to have restored to questiones with the purpose of introducing the different texts of the Articella to his students, and in fact engaged in the customary disputations of such questiones with his students at the University of Padua. Specific questiones seem to be present across different texts of the canon: the Tegni, the De regimine acutorum, Aphorisms, and Prognostics. Marsilio’s questiones are focused on practical issues and, for example, discuss the possible imbalances of temperature in the human body and how to treat them.

A different genre, the consilium, was also a feature among the leading physicians

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285 Siraisi’s work covered the large majority of the questiones examined by all the different members of Taddeo Alderotti’s circle; Taddeo Alderotti and His Pupils, 304-410.

286 Siraisi, Taddeo Alderotti and His Pupils, 250.

287 Pesenti, Marsilio Santasofia tra corti e università, 146-49.
in Northern Italy during the late thirteenth and the fourteenth centuries.\textsuperscript{288} The \textit{consilium} was most commonly the description of a particular case and the treatments used therein. Collections of \textit{consilia} were created not only because in some cases the patients were well known patricians, but also because of their medical interest. In this sense, these collections were mainly intended for the use of physicians and for students of medicine.\textsuperscript{289} The significant amount of surviving manuscripts of \textit{consilia} emphasizes the fact that such compendia were important in the context of teaching—and some of them may have in fact originated as written records of oral teaching at a patient’s bedside.\textsuperscript{290} In this sense, Padua’s university was known by the mid fourteenth century as a center of practical medicine—Petrarch himself, an intermittent resident of the city well acquainted with physicians of the Paduan school, criticized this.\textsuperscript{291} There was thus a long tradition of works of reference (medical dictionaries, herbals, collections of medical recipes, \textit{consilia}) at Padua. A Pupil of Pietro d’Abano and the father of Marsilio, Nicolo di Santa Sofia, was author of a famous collection of medical recipes called the \textit{Receptae} used both by student and practicing physicians alike.\textsuperscript{292}

Academic physicians maintained strong ties with theory in their practical writings, but more and more learned practitioners outside of the university milieu left behind traditional authorities and moved completely over practice. Medical students

\textsuperscript{288} Siraisi, \textit{Taddeo Alderotti and His Pupils}, 271-273.

\textsuperscript{289} Siraisi, \textit{Arts and Sciences at Padua}, 159-61.

\textsuperscript{290} Siraisi, \textit{Taddeo Alderotti and His Pupils}, 272.

\textsuperscript{291} Siraisi, \textit{Arts and Sciences at Padua}, 162.

\textsuperscript{292} Siraisi, \textit{Arts and Sciences at Padua}, 161.
became increasingly oriented towards developing a very sophisticated and theoretically founded approach to practice, which would allow them to make claims for their validity and superiority as practitioners in a diversified medical marketplace. However, it was the institutional milieu that granted learned medical men with a web of intellectual support that could be attractive to the elites, a point from which private practice would benefit. Therapeutic literature increased significantly over time, and the organization of topics was much more varied than those included in theoretical discussions. Successful and influential physicians composed these texts as part of their stronghold of influence and power: medical learned men were able to claim exclusive access to a specific body of knowledge derived from their organization as a group with similar standards and organization. Because they came from the university context they could claim access to a specific form of knowledge that, consequently, affirmed their leading position in the medical marketplace and granted them with access to a more influential clientele. Practice then was the mark of competency. This made for an interesting circular development. The elites supported the university because learned practitioners could claim for a precise and effective medical knowledge. Success and reputation were an essential part of the career of a physician. In turn, the learned practitioners treated the elites, reinforcing this relation and the cycle of support.

Corpus Divisionum

In fact the practice of medicine is very well by Hippocrates compared to a combat, and farce played by three characters: the sick, the doctor, and the disease. Rabelais, “Epistle to Odet, Cardinal de Chatillon.”

The present chapter follows the same model of three sections, arranged in chronological order, as in the previous chapters. Much like chapter two, it introduces the developments that came in the hands of the main actors around which my dissertation is ultimately centered. In it, I follow a genealogy of three distinctive teachers/practitioners of medicine in northern Italy: Mondino de’ Liuzzi (1270-1326), Niccolò Bertucci (died on 1347), and Marsilio Santasofia (died in 1405), all teachers at northern Italian universities, the first two in Bologna and the last one in Padua. Mondino taught Niccolò, who taught Marsilio; all were heirs of the new medical curriculum established by Mondino’s teacher Taddeo Alderotti (died in 1295), who also taught at the university of Bologna and was the founder of what Nancy G. Siraisi has called “the new medicine of the thirteenth century—a tightly organized, secular profession whose members (mostly, in Italy at least, married laymen like Taddeo himself) studied their discipline within a university faculty of ‘arts and medicine’.”

The chapter will center on their respective commentaries to the Hippocratic Aphorisms, which followed the scholastic model based on the old Alexandrian program I described in chapter three. I will particularly focus on

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295 Also known as Niccolò Bertruccio or Niccolò Bertuccio.

296 Siraisi, Taddeo Alderotti and His Pupils, xv.
Marsilio’s *Divisio librorum Ypocratis* (The Division of Hippocrates’ Books), in his 1393 commentary to *Aphorisms*. *Divisio* is what Marsilio calls his *Ordo Legendi*, traditionally present in the *Old Latin Commentary*.

The first section will introduce Mondino de’ Liuzzi as the first medical commentator to include an *Ordo Legendi* in the tradition of commentaries to Hippocrates since the *Old Latin Commentary* on the *Aphorisms*, in the eighth century, which I outlined in the preceding chapter. Mondino, a well-known anatomist and a committed Galenist, elaborated a nine-text list of Hippocratic works, together with the order in which they should be read, which resembles that of Stephanus of Athens; the list, naturally, goes beyond the texts present in the *Articella*. However, Mondino includes this in his commentary on the *Prognostics*, instead of *Aphorisms*. The first section will also discuss Mondino’s student Niccolò Bertucci (a student of Taddeo Alderotti as well and teacher of the famous surgeon Guy de Chauliac), who had interests in both anatomy and practical medicine. Niccolò extended Mondino’s list to include a total of nineteen Hippocratic works, also centered on *Aphorisms*, and seems to have done so in a commentary on *Aphorisms* that, interestingly enough, only survives in a manuscript in which it follows Mondino’s commentary to *Prognostics*. The second section of the chapter will introduce Marsilio de Santasofia, who in his own commentary on the *Aphorisms* retained Niccolò’s nineteen-work list but elaborated it a step further, with a more complex textual analysis. Marsilio modified and produced various drafts of this commentary over a span of thirty years, and these form the focus of the third section. Marsilio’s commentaries became very influential, and the nineteen-work list seems to have traveled to Austria, France, and England in the hands of influential physicians and
surgeons. What is particularly revealing about this list is that it places a strong emphasis on practical medicine, and this, I will argue, reflects the notable expansion of the medical market for the services of university-educated physicians in late medieval urban settings, which I discussed in Chapter Three. I will end by discussing the fate of the *Divisio* in the hands of Martin de Saint-Gille, a surgeon who studied medicine and theology in Paris and who, during his stay at the papal court of Avignon, composed a French version of the *Ordo Legendi* present in Niccolò and Marsilio, together with his commentary on the *Aphorisms* into the vernacular for a fellow surgeon.

The present chapter will thus explore the elaboration of the Hippocratic tradition on the part of a select and influential group of learned medical men. I contend that the resulting transformation of this collection of Hippocratic works took learned medicine, particularly practical medicine, beyond Galen and resulted in an effort to distinguish the Hippocratic legacy from that of the physician of Pergamum, to the apparent detriment of Galen. Certainly, Galen was not forgotten (it would take one hundred and fifty years for his work to begin to be openly discredited, as opposed to respectfully critiqued), but an effort to construct a specifically Hippocratic practice of medicine was certainly at the center of the concerns of the learned medical men of the time, considerably before the emergence of the more familiar Hippocratic movement of the sixteenth century.

**The Anatomists**

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Mondino de’ Liuzzi, professor of practical medicine at the university of Bologna and a student of Taddeo Alderotti, seems to have written his famous *Anatomy*, intended as a textbook that followed the dissection of a cadaver, over a number of years in the second decade of the fourteenth century; this text was used by many of his colleagues and successors, and it remained in use for at least two hundred years.\(^298\) While his text on anatomy had an interesting Aristotelian frame,\(^299\) it introduced many of Galen’s own discussions on different parts of the human body. Mondino followed Galen heavily when discussing, for example, the anatomy of the heart. At the same time, his work was also very influenced by the Arabic tradition, as in, for example, his detailed anatomical discussion of and treatments for the eyes and their diseases. Among the Galenic texts that seem to have been used by Mondino in this work are *The Method of Healing; On the Use of the Members* (*De juvamentis membrorum*), an abbreviated Arabic version of *On the Usefulness of the Parts of the Human Body;* the *Book of Sects; On the Internal Parts* (*De interioribus*), a medieval summary of Galen’s *On the Affected Parts;* and the pseudo-Galenic *On Vivisection* (*De anatomia vivorum*). A theme that Mondino picks up from Galen and uses quite frequently is the idea that Nature is an artificer that has created the forms and functions of the human body with both beauty and functionality in mind.\(^300\)

It is clear from his *Anatomy* that Mondino was well versed in Galenic theory and

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\(^298\) Siraisi, *Taddeo Alderotti and His Pupils*, 111.

\(^299\) It was common during Mondino’s time, as is the case with his teacher Taddeo Alderotti and his own students like Niccolò Niccolo, to compare any anatomical description found in Galen with the concepts of the different *Libri Naturales* of Aristotle, a collection of the different Aristotelian texts on nature, including animal motion, physiology, psychology, and anatomy.

literature, and was comfortable using Galenic descriptions of organs in the context of dissection. Nevertheless, it is worth noting that Galen’s major anatomical treatise, *On Anatomical Procedures*, was still untranslated, while Niccolò da Reggio’s contemporary Latin translation of *On the Use of Parts* had almost no circulation. Thus, as Owsei Temkin has pointed out, much of the anatomical knowledge of this period rested on spurious Galenic treatises, like the *De Anatomia Vivorum*.

Also characteristic of the time was a strong association between anatomical dissection and learned medical texts. The purpose of dissection was anatomical pedagogy, and the practice was intended to supplement and illustrate medical knowledge as presented in the texts. So, Mondino’s *Anatomy* was typical of a tradition that emphasized the relationship between academic training and medical practice, a program shared by his own teacher Taddeo Alderotti. Mondino believed that medicine and surgery could and should be learned from a combination of books and experience, including the experience of dissection. Michael McVaugh described a nascent tradition in this period that associated surgery and surgical treatment with learned medicine and medical treatment. As a consequence, anatomy became an essential part of medical training, and it was part of learned medicine, both surgery and physic, in the context of the university. Surgeons adopted the practice of dissection as a means to establish space for themselves within learned medicine, and they employed the same ancient Greek and Arabic texts that learned physicians did to find surgical treatments for a wide range of diseases. Thus it

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301 Temkin, *Galenism*, 116. The text, formerly ascribed to Ricardus Anglicus, has been dated to some time between 1210 and 1240, with some likelihood to 1225. See Siraisi, *Taddeo Alderotti and His Pupils*, 153.

is not surprising that Mondino’s *Anatomy* gives the reader a good number of examples of surgical treatments, as in the case of eye care, which drew most of its materials from the Arabic tradition. Over the course of the fourteenth century, surgery and dissection became an integral part of the academic curricula of Italian universities; as the 1387 Florentine statutes said, “no one can be a good or well trained doctor unless he is familiar with the anatomy of the human body.”

Anatomy also served to explain physiology. When discussing the outer parts of the heart Mondino explains, “The fat is found in the other surface of the heart, near the extremity rather than in the active part: for fat is formed by cold or diminished heat, and since the heart is very warm it is generated there in order that the heart may not be dried up owing to his clear and constant movement.” Mondino here is describing the belief that the heart had two different parts: an active one and a different section that was colder and had less mobility, thus it would accumulate fat (considered cold) as a way to cool down the active, hotter part of the heart. Opening a body and explaining the structures within was a confirmation of the textual medical tradition associated with Galen and Hippocrates.

Although the opening of corpses played an active role in various cultural and medical practices of the late thirteenth and early fourteenth centuries, Mondino’s *Anatomy* is the first work to describe the complete dissection of a human body with explicitly pedagogical aims (to explain the functions and laws governing the body). Of

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course, the pedagogical context of human dissection is different from the arena of animal dissection for the purpose of research, characteristic of Galen in second century Rome. First, it is unclear whether Galen had access to a human cadaver when studying medicine in Alexandria (there are contradictory accounts on the subject, and the ancients held strong religious taboos about human dissection). However, and as mentioned earlier, animal dissection and vivisection was consistently used for research during the time of Galen and before. This meant that there was a strong sense of similarity between animal anatomy and physiology and human anatomy and physiology, enough so that research on animals could be used as basis for human models. This departs from the notion that human anatomy and physiology should be observed directly in human bodies, characteristic of the time of Mondino.

Second, an additional element of performance was integral to medical debate and discussion of the time of Galen—the Second Sophistic. As argued in the second chapter, much of Galen’s career was made in the public arena of the intellectual exchanges of the Second Sophistic. By contrast, in the early fourteenth century Bolognese environment, the purpose of dissection was mainly that of “an extension of anatomical illustration”, an exemplary model with pedagogical value; that is not an area to further research in medical knowledge, but rather a way to illustrate and help doctors and students understand the medical knowledge contained in the texts of the learned tradition. Furthermore, the 1405 statutes of the university of Bologna only allowed twenty students to be present in the dissection of a male and thirty for that of a female. This was far from a public arena, even distinctly different from the small, but diverse and frequent,

intellectual discussions of the elites of ancient Rome. The pedagogical context of fourteenth-century Bologna was illustrative for a specific audience of medical students. In a sense, Galen built up his career in anatomical debates, whether public or textual, and displayed anatomical knowledge as means to justify his reading of the Hippocratic tradition and attack his enemies. As I mentioned in chapter two, Galen used anatomy as a criteria to judge as legitimate or spurious different Hippocratic texts, and reconcile modern physiological and anatomical research with the Hippocratic tradition. Dissection and anatomy were at the center of medical science of the time, and texts were measured according to their accuracy in anatomical terms. This is the exact opposite of Mondino and his cultural experience with dissection and anatomy. The Hippocratic texts were never submitted to a criterion of legitimacy or illegitimacy based on anatomy and physiology. Their value as established, canonical documents was used to explain physiology and anatomy, not the other way around. Ultimately, anatomy and dissection in the time of Mondino served to sanction established, textual knowledge with very little room for debate.

Finally, there is, however, something to consider when it comes down to anatomy and Mondino: any work on anatomy based on a textual, Hippocratic/Galenic tradition had to be based on Galen. As I have argued in chapter two, no Hippocratic texts offered any systematic, coherent, precise anatomical model. The physician of Pergamum had to construct such model from the ground up through a series of textual connections and the inclusion of his own work on anatomy disguised as a sort of Hippocratic coded message. I called this the method of “clarification”. This meant that ancient Greek anatomy based on “Hippocrates” had to be Galenic, and ultimately gave little room for debate of the
Hippocratic texts. This is more evident if we consider that the Hippocratic texts that made it into the *Articella* (*Prognostics, Regimen in Acute Diseases, and Aphorisms*) offered very little traces of anatomy. In fact, the additional Hippocratic texts that were part of Mondino’s intellectual surroundings, which I will list and explain in a moment, only included practical interventions on wounds, dislocations, and fractures. As I have mentioned earlier, the Hippocrates inherited by the Middle Ages was the “New Hippocrates” of Galen. Thus, if Mondino wanted to be an anatomist he had to be a Galenist.

In addition to his work as an anatomist, Mondino was also a well-known commentator on the Hippocratic *Prognostics* and *Regimen in Acute Diseases*,\(^{306}\) both texts on which he lectured, and he also was the author of at least eighteen *consilia*, which Siraisi describes as “professional advice written down in response to and individual request for counsel,”\(^ {307}\) as well as the author of several brief tractates on fevers and medical dosage. Furthermore, he maintained a respected private practice. It is worth noting that Mondino, reflecting the civic role of learned medical men described in the previous chapter, also held political positions of importance, serving as an ambassador, together with his uncle, to Giovanni, son of Robert of Sicily.

A significant aspect of Mondino’s career was that he appears to have been responsible, alongside Taddeo Alderotti, for the introduction of a program of assigned

\(^{306}\) See Siraisi, *Taddeo Alderotti and His Pupils* for an extensive discussion of Mondino’s life and works.

\(^{307}\) Siraisi, *Taddeo Alderotti and His Pupils*, 270. The practice of composing *consilia* was particularly popular among the circle of Taddeo Alderotti.
reading, a medical curriculum, at the university of Bologna, and for many of the regulations governing its nascent faculty of arts and medicine. Nancy Siraisi suggests that this curriculum influenced curricula all over Western Europe. Like earlier curricula dating back to the twelfth century if not earlier, it seems to have been centered on the Articella, which included the Hippocratic texts Prognostics, Regimen in Acute Diseases, and Aphorisms. In contrast to the curriculum embodied in the Articella, however, Mondino called for the study of additional Hippocratic works. In his commentary to Prognostics, written in 1317, he included an Ordo Legendi, which followed the same program as Stephanus of Athens and Meletius:

the order of this book [of Prognostics] in relation to the other books of Hippocrates will become apparent. For among the books of Hippocrates the first one is On the Law, after which is the book On the Nature of Humankind, after which is the book On the Nature of the Child, after which is this book, that is the Prognostics, after which is the book Regimen in Acute Diseases, after which is the book Aphorisms, after which is the book Aphorisms, which according to a better way [of organizing Hippocrates’ works] will precede all other [books] except the book On the Law, after which is the book On Epidemics, after which is the book Airs, Waters, Places, and to this it is possible to add the book On Potions.

While Mondino’s organization of these nine Hippocratic works seems a bit

308 Siraisi, Taddeo Alderotti and His Pupils, 97-98.

309 Et ex his apparet ordo huius libri ad alios libros Ypocratis. Nam inter libros Ypocratis primus est liber De lege, post quem est liber De natura humana, post quem est liber De natura puerorum, post quem est liber iste, scilicet Pronosticorum, post quem est liber Regiminis acutorum, post quem est liber Afforismorum, qui secundum quidam alium modum perfectiorem omnes alios precedet preter libros De lege, post quem est liber Epidimiarm, post quem est liber de Aere aqua et regionibus, et his potest annexus liber De farmaciis. Commentary on Hippocrates’ Prognostica, proem, BAV, MS Vat lat. 4466, fol. 1ra, transcribed in Siraisi, Taddeo Alderotti and His Pupils, 411. According to Siraisi, Mondino included this same list in his commentary to Regimen in Acute Diseases, BAV, MS Vat. Lat. 4466, fol. 37r.
confusing, he apparently places *Aphorisms* as second on the list of books to be read, presumably by students. The ambiguity in fact comes from Stephanus of Athens, who presents both a “natural” arrangement of Hippocratic books where he places *On the Nature of Humankind* second, and *Aphorisms* fourth; and a “logical” version where *Aphorisms* is placed second.\(^{310}\) This program, as I have argued earlier, was part of a model that sought to frame medicine according to scholastic philosophy, and thus placed the medical *ars* under the scope of natural philosophy or *scientia*—a program to which Mondino also subscribed. These similarities establish a clear connection between Mondino and the tradition of Stephanus and the *Old Latin Commentary*. In this sense, the program offered by Mondino is part of a long hermeneutical tradition of critically commenting texts, following the model inherited through Alexandria and Ravenna, and passed down from Salerno to the rest of Western Europe. This succession of commentaries and commentators represents a chain of transmission where certain ideas and themes were elaborated and re-elaborated constantly. However, it is also important to note that by the 1320s there was in existence in both Padua and in Bologna a list of the titles of twenty-seven Hippocratic texts.\(^{311}\) The list was present in the pseudo-Walter Burley, an early fourteenth century text of Italian origin called *Liber de Vita et Moribus Philosophorum*. The *Vita et Moribus* was a compendium of a series of florilegium on the lives of different ancient authors. It is possible to trace this tradition to a Spanish text

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\(^{310}\) The tradition of Stephanus of Athens survived in the West well into the Middle Ages, and there are versions copied during the time of Mondino, Niccolo, and Marsilio. The commentary survives also in printed form. L.G. Westerink, *Stephanus of Athens: Commentary on Hippocrates’ Aphorisms*, Corpus Medicorum Graecorum XI 1,3,2 (Berlin: 1992), 13-18.

\(^{311}\) Mario Grignaschi lists the titles of these works in his “Il catalogo delle opere di Ippocrate e Galeno nel ‘De vita et moribus philosophorum,’” *Medioevo* 16 (1990): 355-396.
called *Bocados de Oro*, a text in turn based on the work of an Arabic philosopher Mubāṣṣir b. Fatīk who lived in Egypt and died in 1063. The author of the *Vita et Moribus* seems to have had some interest in ancient medicine, since included some biographical elements about both Galen and Hippocrates as well as a list of their extant works. Therefore we can assume the *Ordo Legendi* described by Mondino was not intended as an exhaustive bibliography of the works of Hippocrates, but rather as an indicative one, signaling the texts that were most relevant for the pedagogical program of medicine.

However, there is no trace of any program or *Ordo Legendi* of Hippocratic works between the *Old Latic Commentary* and the time of Mondino. Mondino’s teacher Taddeo Alderotti, himself a well-known commentator on Hippocrates, did not produce an *Ordo Legendi* in any of his commentaries to Hippocrates. What, then, encouraged Mondino to resurrect this eighth-century model? I believe his interests in practical medicine and anatomy had something to do with his decision. The Hippocratic program, as I have argued before, introduces a body of knowledge that extends from general Hippocratic principles to the specifics of treatment, including wounds and acute diseases. In fact, the early program of nine texts already put forward by Mondino had an emphasis on medication, wounds, treatment of diseases, and the anatomy of the human body, including as it does *Regimen on Acute Diseases* and *Epidemics*, both texts focused in practical intervention to restore health; *Airs, Waters, Places*, a work that offers guidelines to restore and maintain health according to environmental conditions; and *On the Nature*

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312 The *Bocados de oro* was composed in the thirteenth century, and was later translated into Latin as *Liber philosophorum moralium antiquorum*. This text was extremely popular and was translated into French as *Dits moraux des philosophes* by Guillaume de Tignoville sometime before 1405. This French version was also very popular. Carlos Alvar, *Traducciones y traductores: materiales para una historia de la traducción en Castilla durante la Edad Media* (Alcalá de Henares: Centro de estudios cervantinos, 2010), 69, 88-89. For the *Vita et Moribus Philosophorum* see Grignaschi, “Lo pseudo Walter Burley e il ’Liber de vita et moribus philosophorum’”, *Medioevo: Rivista di storia della filosofia medievale* 16 (1990): 131-190.
of the Child, a relevant text in a time when infant illness and death was so prevalent.

Niccolò, who taught surgery and practical medicine in Bologna to students who included the famous French surgeon Guy de Chauliac, followed the practical inclinations of his teacher Mondino. (Guy will become an important connection with the Ordo Legendi in Aphorisms in the next section.) Niccolò developed his own, more extensive nineteen-book Ordo Legendi, transcribed and translated in Appendix I, moving it to the introduction to his commentary to Aphorisms. Here he does away with the ambiguity of Mondino’s list and clearly places Aphorisms as second on the list of Hippocratic works to be read. This establishes a direct connection between the earlier medieval program of readings and the main text (Aphorisms) that, as I pointed out in the previous chapter, traditionally reunited practice and theory. This move suggests strongly that Niccolò understood Aphorisms as central to the study of medicine, and this motivated him to move his ordo into his commentary on Aphorisms itself rather than placing it, following his teacher Mondino, in a commentary on Prognostics. I believe the change also indicates the perceived centrality of Aphorisms within the Hippocratic works and the Articella itself. After all, this was a comprehensive program for the purpose of teaching and practicing Hippocratic medicine.

Niccolò also made significant changes to the structure of Mondino’s Ordo Legendi beyond the expansion of the list of Hippocratic works to be read from nine to nineteen. He moved texts into different places; for example, On the Nature of Humankind, second in Mondino’s admittedly confused ordering, is relegated to sixth place. He places this text under the heading of “distant causes”, an Aristotelian concept that frames On the

313 Siraisi, Taddeo Alderotti and His Pupils, 69, 111.
Nature of Humankind as a work that explains the basic components of the human body—the humors, the elements, and so forth—with the purpose of understanding the nature and composition of the body itself. In turn, this type of knowledge could be used to diagnose and treat diseases based on the structure of the body. The Aristotelian frame then makes On the Nature of Humankind closer to practice. The underlying reading of the text has changed, and instead of being considered as a work that offers general principles (as was the case in the ambiguous organization in Stephanus of Athens and Mondino), On the Nature of Humankind is placed under the texts that offers specific instances for the general principles, like Aphorisms, and thus is understood as closer to practical applications of Hippocratic medicine. This is far from the highly theoretical reading that Galen had put forward when discussing the text.

Furthermore, the fact that On the Nature of Humankind is now understood as presenting the basic components of the human body with practical applications means that it is also associated, through Niccolò’s reorganization of the Ordo Legendi according to Aristotelian causes, with anatomy and the other components of the human body (members and humors). What is interesting is the upward spiral that Galen had put forward, going from the basic components of the human body up to the seasons of the year, seems significantly altered here: On the Nature of Humankind, the text that gives the basic components, is read in sixth place, well after other texts that discuss the members of the body and the humors. In accordance with the new anatomical view pioneered by Mondino, Niccolò subordinates the underlying, non-sensible structures of the body to what can be observed first and clearly described following anatomical descriptions. This transforms On the Nature of Humankind into a text that, rather than
describing the basic components of the body for the purpose of theory, uses this
description to teach a basic lesson in practical medicine: what can be treated by means of
the composition of members and humors.

This is what Niccolò says about the order in which the Hippocratic texts should be
read:

The adequacy and range of Hippocrates’ books must be summed up in the
following manner. [Firstly], in his books of medicine Hippocrates transmits
knowledge about how to learn the science [of medicine], showing in the book On
the Law how many and what are the conditions necessary for those who want to
teach it properly. [Secondly.] [Hippocrates] transmits the knowledge of knowable
[things in the science of medicine] in two ways. The first is all together and in a
general way, as in the book of the Aphorisms. Since he transmits the knowledge
of knowable things in the science of medicine in this book in a general way, this
book is more general than his other books, and is thus prior to them [in the list
after the laws], because general things ought to be [studied] first.314

In stressing the foundational nature of Aphorisms, noting that it gives the general
principles of medicine, Niccolo is most likely reflecting the reigning interpretation of this
work, as I have argued in the previous chapter, as bridging theory and practice and giving
the physician theoretical principles and practical applications.

This is the complete schema of Niccolò’s Ordo Legendi of nineteen Hippocratic
works:

314 Sufficiencia et distinctio librorum Ypocratis per hunc modum insummenda est. Ypocrates enim in suis
libris medicine aut tradidit cognitionem de modo adiscendi hanc scientiam, ostendendo quot et que sunt
conditiones quibus oportet esse fulcitum eum qui vult perfecte hanc scientiam edoceri, et sic est liber de
lege, aut tradidit cognitionem s[c]ibilium medicine et tunc duplex, quia aut hanc cognitionem tradidit
coniunctim et in communi, et sic est liber afforismorum, et quia in hoc libro tradidit cognitionem scibillum
medicine in communi, ideo iste liber est communior alis libris eius, et ideo etiam est prior, cum communia
etiam sint priora. Reportationes super libro Prognosticorum (Hippocratis) sub mag. Mundino per mag.
Bertutium (Bertrutium) in scientia practifvafamosum. Galeni de crisi libri II cum commento. MS.
Bayerische, StaatsBibliothek: Clm 13054. For the full transcription and English translation, see my
Appendix I.
I. Knowledge on how to learn the science of medicine: [1] ON THE LAW

II. Knowledge of all knowable things [in the science of medicine]
   • Knowledge [of all knowable things in the science of medicine]
     transmitted all together in a general way: [2] APHORISMS
   • Knowledge [of all knowable things in the science of medicine]
     transmitted all separately in a particular way

Operative and considerative art [of medicine]

1. Knowledge of the subject [of medicine, i.e. the human body]
   • Parts of the subject [the human body]: [3] ON ANATOMY

   • Causes of the subject [the human body]
     o Material [cause]
       ▪ Immediate [cause]: members of the human body: no book other than [4] ON ANATOMY
     ▪ Intermediate [cause]: the humors: [5] ON THE HUMORS
     ▪ Distant [cause]: the elements: [6] ON THE NATURE OF HUMANKIND

     o Formal [cause]: no book

     o Efficient [cause]
       ▪ Extrinsic: [7] ON HOT AND COLD [ON THE CAUSES]
       ▪ Intrinsic: [8] ON THE NATURE OF THE FETUS

     o Final [cause]: no book

   • Dispositions of the subject [the human body]
     o Health: no book

     o Illness
       ▪ Particular: endemic [illness]: [10] AIRS, WATERS, PLACES
         ▪ General to both sexes: [11] ON JOINTS

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315 The text here is corrupted, so that it is not clear if Niccolò actually meant nineteen texts (although the symbol seems most likely to be a nine); if one gives On Anatomy a different number every time it is listed, this makes a list of nineteen works.
CONCATENATIONIBUS\textsuperscript{316}  

• Specific to one sex, i.e., the female sex: \textit{ON DISEASES OF WOMEN}

• Signs of the disposition [of the human body]  
  o Demonstrative: no book [no utility for the physician]  
  o Rememorative: no book [no utility for the physician]  
  o Prognosticative  
    ▪ Acquired through theory: \textit{PROGNOSTICS}  
    ▪ Acquired through practice: \textit{ON SECRETS}

2. Goals to be introduced in the subject  

• Preservation of health: no book  

• Treatment of illness  
  o In a general way: \textit{REGIMEN IN ACUTE DISEASES}  
  o In a particular way: \textit{HEALING OF WOUNDS [ON FISTULAE]}  
  o In an even more particular way: \textit{SKULL FRACTURES}

3. Instruments of the science [of medicine]  

• Diet: \textit{ON FOOD STUFFS}  

• Potions: \textit{ON SIMPLE MEDICAMENTS}  

• Surgery: no book.

As mentioned earlier, the single surviving manuscript containing Niccolò’s commentary to \textit{Aphorisms}, Bayerische Staatsbibliothek Clm 13054, also includes his teacher Mondino’s commentary to \textit{Prognostics}, including his \textit{Ordo Legendi}. The

\textsuperscript{316} Niccolò cites \textit{De concatenationibus}, which I assume to be \textit{On Joints}. That is what Galen also cites in his actual commentary to \textit{Aphorisms} book six, aphorism 46. Marsilio Santasofia, however, cites \textit{De vulneribus}, which I assume to be \textit{On Ulcers}. Niccolò cites what I believe is \textit{On Ulcers} as \textsuperscript{16} in his \textit{divisio} (he calls it \textit{Healing of Wounds}). Galen uses the same title (\textit{Healing of Wounds}) to refer to \textit{On Ulcers} in his book four of the \textit{Therapeutic Method}, which is the reference cited by Niccolò.
We thus know that whoever produced the manuscript (perhaps even Niccolò himself?) understood these two commentaries to be connected. It is interesting to note, however, that Niccolò moved away from the ambiguity of Mondino’s organization. Additionally, I believe that Niccolò was already more inclined to a practical model than his teacher. That would explain why he moves from the ambiguous double classification of Mondino, including both a “natural” and a “logical” organization of Hippocratic works, straight to the “logical” organization where *Aphorisms* is the master text. The ambiguity of Mondino’s commentary, which places *Aphorisms*, at least conditionally, in second place may suggest this text is a form of transitional organization, between the predominantly theoretical emphasis before Mondino and the practical emphasis of Niccolò and his successors. Also, it is important to note that Niccolò’s *Ordo Legendi* cites Galen’s works or commentaries on Hippocratic texts to identify those texts (the content of most Hippocratic texts in the list is supported by citing Galen’s references to it). Of course Galen maintains authority, but his works are used to fill the holes in the Hippocratic tradition by reporting on missing texts or the possible uses of known texts. In the *Ordo Legendi* Galen is confined to this supporting role, while the scholastic tradition that emphasizes *Aphorisms* and the organization of texts with an emphasis on practice takes center stage.

Finally, I would like to highlight the fact that the nineteen titles of Hippocratic works in Niccolò’s *Ordo Legendi* seem to have been received without major changes by some of the most prominent physicians and surgeons of the next generation. Niccolò’s student Marsilio de Santasofia lectured on this *Ordo Legendi* in the faculty of arts and

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317 München, Bayerische Staatsbibliothek, Clm 13054 (14th c.), fol. 30va.
medicine at the university of Bologna, while Guy de Chauliac, who also studied with Niccolò, appears to have transported it from Italy to France, where it came into the hands of Martin de Saint-Gille, physician of Jeanne of Bourbon, the mother of the future Charles V of France, during the 1360s. In the next century a copy of this list also traveled from France to England, around 1430, in the hands of the French surgeon Jean Tourtier, who was then under the service of the Duke of Bedford. In Italy, Matteolo Mattioli worked with the Ordo Legendi as late as 1466. Thus Niccolo’s text appears to have had a long-lasting influence on both university lecturers of medicine and elite learned practitioners.

**Marsilio’s Divisio Librorum Ypocratis**

The Divisio (the name Marsilio gave to his Ordo Legendi) of Hippocratic works proposed by Niccolò’s student Marsilio of Santa Sophia, a well-known member of Padua’s faculty of arts and medicine, builds on Niccolò’s list. At the same time, its textual history is complicated, evolving over the course of successive iterations. Three different versions of Marsilio’s commentary on the Aphorisms survive, and although his organization of Hippocratic works is clearly related to Niccolò’s, each successive version differs increasingly from his teacher’s. In this way, Marsilio’s commentary to Aphorisms signals the relevance of the text within the Articella, which required it to be continually updated, while also revealing the consequences of this focus on Aphorisms.

The chronology of Marsilio’s Divisio is as follows: he composed an early,
incomplete version of the commentary around 1378-82, found in MS vat. lat. 2483. He then produced a second, complete version before 1393, found in MS Codices Ampolani or Erfordiensis; an abbreviated version of this is also documented in the form of notes by students based on it, which was produced in Vienna in 1393 and is found in MS Guelpherbitanus. A third version by Marsilio, written after the MS. Erfordiensis was copied during the first half of the fifteenth century, is found in MS Volterra.\(^{319}\) My discussion will focus on the c. 1393 MS Erfordiensis (E) and the later MS Volterra (V).

Marsilio was the first member of the University of Padua to write a commentary on several of the Hippocratic and Galenic works of the Articella (Prognostics, Aphorisms, and the Tegni). He focused much of his career on producing commentaries on the Articella, presumably in the course of his teaching, and his commentary on the Aphorisms seems to have been influential during his time.\(^{320}\) The faculty of arts and medicine at Padua had been closely connected with the University of Bologna since its establishment in 1261, a long-lived connection reflected in the constant exchange of students and professors across the two universities.\(^{321}\) Marsilio himself had studied with Niccolò at Bologna, placing him in the chain of students and teachers that originated with Taddeo Alderotti in the late thirteenth century and that also included Mondino and

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\(^{319}\) Three different manuscripts are extant: the early incomplete one written between 1378-82 (Vatican City: Vaticanus Latinus, 2483), the complete version written before 1393 (Erfurt, Stadt- und Regionalbibliothek: Codices Ampolani, 4° 232), and the abbreviated form compressing this complete version, written by students in Vienna (Wolfenbüttel, Herzog August Bibliothek: Guelpherbitanus 17. 2 Aug. 2°). The MS Volterra (Volterra, Biblioteca Comunale Guarnacci: LVII. 8. 2. (6363)), copied around the first half of the fifteenth century in part by Heinricus Streck of Herbstein, seems to be a later, also incomplete version of Marsilio’s commentary to Aphorisms. A version was printed in Venice in 1527. Pesenti, *Marsilio Santasofia tra corti e università*, 152-153, 194-201, 439-443.


Niccolò. Thus it is no surprise that he seems to have modeled his commentary on *Aphorisms* after that of Taddeo Alderotti, who used *dubia*, or disputed questions, as a mechanism to organize the text for the purpose of teaching. While Marsilio employs this same model, his *dubia* are fewer and more focused on physiology and pathology—itself a testimony to the growing relevance of anatomy and the practical emphasis of *Aphorisms*.

Marsilio followed the model of Mondino and Niccolò, prefacing his discussion of the *Aphorisms* with an *accessus* that contained information about Hippocrates’ works, parsed according to the traditional eight or so points. These included an *Ordo Legendi*, which Marsilio called *Divisio librorum Ypocratis* (The classification of Hippocrates’ works). Within the context of its sources—Niccolò’s nineteen works selected out of the list of at least twenty-six present in the *Vita et Moribus Philosophorum*—the *Ordo Legendi* reveals the information on Hippocrates that was available to most learned medical men of the time and its use. There was, at this time, at least both in Padua and in Bologna, a catalogue of Hippocratic works that contained twenty-six titles, produced around the 1320s. This information was mostly limited to the books in circulation or the references to texts made by others (mostly Galen). In this sense, much of the information available to them was limited to what they could find in Galen’s works: within the list of Hippocratic texts Galen serves as corroborating evidence of their authenticity and content. By the end of the fourteenth century this meant having recourse to the very scattered and unsystematic pieces of information present in Galen’s commentaries to both the *Aphorisms* and *On Prognostics*, which were already included in

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most editions of the *Articella*, and the references to Hippocrates that appeared in the *Tegni* and Avicenna’s *Canon*.\(^{324}\) It seems that Marsilio—like both Mondino and Niccolò—did not know of any of the biographical works on Hippocrates (*vitae Hippocratis*) that had circulated in the West beginning in the eleventh century.\(^{325}\) These biographical works were mostly based in the *Life of Hippocrates* by Soranus, which I mentioned in Chapters One and Two. Thus Marsilio writes “Quis autem Ypocras fuit, non bene habemus” (who Hippocrates was, however, we don’t know well). The text is as follows:

The second [point] is what the efficient cause of that [book of * Aphorisms*] should be, which is Hippocrates of Kos, as Galen points out in his [commentary to the] first book of the *Regimen in Acute Diseases*. However who Hippocrates was, we don’t know well, although Galen says about him, in the seventh book of the *Therapeutic* [On the method of healing], that [Hippocrates] passed down to us the seeds of medicine, which require a good farmer who would plant those seeds, as concerns their explanation and increase them as concerns their perfect completion and as concerns the proper way of writing about them.\(^{326}\)

Marsilio’s description of Hippocrates as the first “farmer” to plant the “seeds” of medicine expresses the notion that Hippocrates was the original founder of medicine, from whom the art grew after his work. At the same time, however, as I already noted in


\(^{325}\) Pearl Kibre cites seven surviving manuscripts from the eleventh through fifteenth centuries, most of them produced in Italy and northern Europe. Kibre, *Hippocrates Latinus*, 233.

\(^{326}\) 2\(^{\text{nm}}\) est que sit causa efficiens ipsius, quia Ypocras Chous, secundum ponit Galienus primo Regimini acutorum. Quis autem Ypocras fuit, non bene habemus, sed tamen dicit de ipso Galienus, 7\(^{\text{a}}\) Terapeutice, quod ipse nobis semina tradidit medicine, que indigent bono agricola qui ea seminat quantum ad eorum explanacionem et augeat quantum ad ipsorum perfectam consumacionem et quantum ad convenientem modum tractandi ipsorum. Ms. Erfurt, Stadt- und Regionalbibliothek: Codices Ampolani, 4\(^{\text{o}}\) 232, f. 2\(\text{-v}\): 211. Transcribed in Pesenti, *Marsilio Santasofia tra corti e università*, 484.
Chapter Three, while he was described as the “first inventor of medical science”, as well as a “gift from God to mankind,” Hippocrates was an obscure figure about whom very little else was known. The physician of Kos was the author of whatever text was deemed as Hippocratic, mostly based on Galen’s references.

What to include in the *Divisio*, then? Marsilio’s *Divisio* and Niccolò’s *Ordo Legendi* are very similar, with one significant difference: Marsilio adds the *Letter to the King of Antioch* to fill one of the lacunae noted by Niccolò, who indicated that no Hippocratic book on the preservation health was known, thus rounding out his teacher’s list for a full coverage of all aspects of practical medicine, with the exception of surgery. Thus the physician following Marsilio’s program of reading would have a complete range of practical training. The *Letter to the King of Antioch* is an alleged exchange between the philosopher Democritus of Abdera and Antigonus, which discusses the relationship between the body and the various quaternaries that underpinned the natural order: four winds, four seasons, four elements, four ages and humors of man. It also presents advice and discusses dietetics. This work had been around in the Latin West for quite some time: Bede (673-735) already cites it as source of medical knowledge. Closer to the time of Mondino, Niccolò and Marsilio, there exist a number of thirteenth- and fourteenth-century manuscript copies of the work, although neither Mondino nor Niccolò mentions the text.

Marsilio provides only one piece of biographical information about Hippocrates

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327 One example would be chapter thirty, “De Aequinoctiis et Solstitiis” of his *De temporum ratione*.

328 See for example Florence, Fla Strozzi: 73 (thirteenth century); Vatican City, VA: 2392 (thirteenth century); London, BMh: 912; Florence, FL Strozzi: 70 (fourteenth century); Paris, BN: 7418 (fourteenth century); Breslau: R 548 (fifteenth century); Vatican City, VA: 5219 (fifteenth century); Kibre, *Hippocrates Latinus*, 145-152.
in his *Divisio*. It reads:

Regarding the fourth point [of the name of the author], we reply that the name of the author is Hippocrates, who was called of Kos after the island of Kos in Greece, son of Heraclides, whence [it follows] that the text of the nineteenth comment of the first book of [Galen’s commentary to] the *Regimen in Acute Diseases* is corrupted, reading Euclid, where it should read Heraclides; for Rabymoyses [Maimonides] asserts [in the prologue to his commentary to the aforementioned *Aphorisms* that] this book [of the *Aphorisms*] was [Hippocrates’].

What is interesting about this passage is that it includes an indirect reference to what seems to have been a common tradition about the identity of Hippocrates (as the son of “Euclid”) that is otherwise not recorded. It also points out the imprecise and general nature of the available information on the biography of the physician of Kos at the time. While the *Letter to the King of Antioch* had been long known in the Latin West, as I have already mentioned, Marsilio seems to have been the first to include the text in his list of Hippocratic works. This indicates that Marsilio was re-working the *Ordo Legendi* he had inherited from his teachers, rather than simply repeating it. In this sense, an interesting aspect of Marsilio’s *Divisio* is that it organizes different Hippocratic texts to fill holes when the practitioners see the need for a certain topic that is not present in any Hippocratic texts, as in the case of *Letter to the King of Antioch*.

Like Niccolò, Marsilio was clear about the reasons for his organization of the selected Hippocratic works around the *Aphorisms*. It is a hierarchical order, descending from the

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329 There is no mention of Euclid in such text.

330 Quantum ad 2° respondendum quod nomen auctoris est Ypocras, qui appellatur Chous de Choo insula Grecie, qui fuit filius Eraclidis, unde litera primi Regiminis acutorum, comento 19°, que dicit Euclidis, corrupta est, nam debet dicere Eraclidis; hunc autem librum tuisse suum asserit Rabymoyses loco preallegato. MS Volterra, MS. Volterra, Biblioteca Comunale Guarnacci: LVII. 8. 2. (6363), f. 1va. For a full English translation see Appendix III
general, guiding principles of medical science (*scientia medicine*) to the particulars of practice. As the founder of medical science, Hippocrates cannot bring such *scientia* to its full completion, and is limited to focusing on particulars. In this connection, Marsilio cites Galen’s *On the Elements according to Hippocrates*. “‘Certainly, there exists great admiration for the brevity in words in the discussions of the ancients.’” “However, this follows,” he continues: “the reason for admiration is because their comprehension is easy, nevertheless they are difficult to explain… Yet, if we look at what Hippocrates says in this book [of the *Aphorisms*] it is possible to discern the totality of the science of medicine, although he doesn’t explain the underlying order.”331 The commentators, on the other hand, bring order and perfect it. Galen, of course, is praised as the first commentator to set the tradition in order, but Bolognese and Paduan medical masters like Giovanni Alessandrino, Taddeo Alderotti, Pietro d’Abano, Dino del Garbo, and Marsilio also assume this role.332

Within this order, *Aphorisms* is unique, as a treatise that combines theoretical principles with a practical emphasis. The text is understood as having a double nature: the theoretical content of the opening aphorisms, and the practical content of the rest of the text. That makes it possible for *Aphorisms* to encompass the entire *Hippocratic Corpus* in which so many texts are of a practical nature, thus serving as a microcosm of Hippocratic principles. If *Aphorisms* offers a guide to the double nature of medicine, the theoretical *scientia* and the practical *ars*, the text certainly is heavily weighted towards practical content, as it is the *Divisio* and the texts it enlists.

331 Erfurt, Stadt- und Regionalbibliothek: Codices Ampolani, 4° 232, f. 2r. For a full English translation see Appendix II.

332 Salmon, “Technologies of Authority in the Medical Classroom”. 
The fact that the *Ordo Legendi* seems to have been lost from the time of the Salernitan commentators until the time of Mondino is telling. In this sense, it is important to point out that Taddeo Alderotti, who already had a reputation as Hippocratic commentator, did not include an *Ordo Legendi* in his commentaries. Learned medical men like Mondino and Niccolò, focused on the teaching of practical medicine, incorporating it into their commentaries to the *Articella*. Marsilio, focused on an *Articella* centered on the practical texts of the Hippocratic tradition, continued this movement. This also explains why the model of the *Ordo Legendi* travels in the hands of learned surgeons, such as Martin de Saint-Gille and, most likely, Guy de Chauliac, later medical practitioners in princely courts.

Ultimately the *Divisio* reflects the new institutional environment of the medieval university: an increasingly complex and standardized curriculum; the development of a stable ideology and methodology organized around an intellectual, continuous lineage of medical authorities; the identification of Hippocrates as the founder of this tradition, as reflected in an uninterrupted tradition of commentaries on his works; and the possibility of medical practice academically supported by natural philosophy while significantly distanced from theory and focused on practical aspects supported by the new Aristotle and the authority of *Aphorisms*.

Thus, what makes tradition of the Hippocratic *Ordo Legendi* and *Divisio* so important is the fact that it follows a model similar to the one in the Alexandrian tradition, but it expands the number of texts in the teaching canon and reorganizes the texts within it. Its format was not particularly innovative. As I have discussed before, bio- and

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333 After the catalog of Hippocratic works that contained twenty-six titles mentioned above and produced around the 1320s. See Grignaschi, “Lo pseudo Walter Burley”, 131-90. For a recent edition of Marsilio’s
bibliographical sections were increasingly common in commentaries of the time, and the construction of an instructional program of Hippocratic and Galenic works went back to at least Alexandria. What makes Mondino, Niccolò, and Marsilio innovative is that they actually broke away from a very particular way to read *Aphorisms* and the Hippocratic tradition, switching it towards a practical emphasis. Much like the author of the *Old Latin Commentary*, they placed *Aphorisms* at the center of medical pedagogy and practice. This model also departs from the Galenic organization of Hippocratic texts; I believe it is the consolidation of a slow, long lasting effort to move away from Galen and the Galen-based reading of Hippocrates, including the hierarchy of specific texts. The *Ordo Legendi* introduces a series of new texts, establishes new relationship between this new texts and old texts. Additionally, it reveals the scholastic mechanisms to alter canonical authorities.

The *Ordo Legendi* follows a model with a long history. This makes the program standard, and thus accessible to contemporary readers, maintaining a sense of stability. At the same time, it adds texts to the model, alters the relations between old texts, and connects the program to medical practice. It essentially keeps the hermeneutical tradition that had divided medicine into practical and theoretical, while it actually makes the Hippocratic tradition a practical model.

Furthermore, by making *Aphorisms* the center of the *Articella* and placing practice at the core of the program, the *Ordo Legendi* signals a new social context. Learned physicians were looking for ways to respond to and take advantage of the increasingly diverse marketplace for medical services that characterized northern Italian cities. They needed a model of medical learning that simultaneously reinforced their commentary on the *Aphorisms* see Pesenti, *Marsilio Santasofia tra corti e università.*
authority while also giving students the tools they needed to succeed in practical venues that ranged from hospitals for the sick poor to princely courts. At the same time, they needed to maintain a connection with the scholastic program and the hermeneutical practices in it. The theoretical frame given by the university served as a professional calling card and licensing qualification, while the practical knowledge guaranteed claims to efficacy. Success in treatment depends on social agreements on what it means to be ill, the logic of specific medical knowledge, and the expectations of health. The new program presented in the *Ordo Legendi* targets these three aspects, and reflects what I call Medical Neoclassicism: it follows “classical models”, giving the appearance of continuity with the “original” medical tradition. It also adds elements to this, transforming the underlying criteria that make those “classical models” without breaking the sense of continuity. These different elements give the medical learned men responsible for the new program direct connection with the redefined classical tradition, and allows them to claim superiority over past and present practitioners.

Learned practitioners had always included private practice as part of their work, regardless of whether or not they served as teachers of medicine. The new private practitioner maintained strong connections with the university context. This process also served to consolidate learned medicine as the most effective form of medical practice, as more and more influence was acquired. The long tradition of framing medical practice within a theoretical natural philosophy, thereby delimitating a specific body of knowledge acquired through the university, ultimately resulted in the social success of learned physicians. Finally, this presents an interesting duality. While medical theory was the cornerstone of university pedagogy, when learned medical men practiced medicine
they left theory behind. They practice out of a body of knowledge contained in *Aphorisms* and the program in the *Divisio* of Marsilio Santasofia, and increasingly transmitted in works of practical medicine by contemporary learned physicians. They preferred Aristotle (the books of zoology and astronomy) to Galen;\(^3\) they organized Hippocratic practical texts around *Aphorisms*, emphasizing the practical quality of the text. At the same time, *Aphorisms* had been used to organize the relation between practical and theoretical medicine, maintaining the link between the theory learned in the university and the practical tradition that was essential to the success of practicing physicians and learned surgeons. Ultimately what is interesting about the *Divisio* is that it had evolved into a guide on the order and importance of certain Hippocratic works and specific ways of practicing medicine.\(^4\)

**Evolution of a Tradition**

There is a different path apparently followed by Niccolò’s *Ordo Legendi*. As mentioned earlier, the tradition extended far into the fifteenth century and traveled outside of Italy. One of these stories takes the *Ordo Legendi* into France and into the vernacular: the French surgeon Martin de Saint-Gille is the next figure to contribute to the chain of commentaries on Hippocrates’ *Aphorisms* discussed in this chapter. Martin

\(^3\) As we will see in the following section of the chapter, when discussing *On the Nature of Humankind* in the *Divisio* Marsilio places this book in fourth place and explicitly reads it according to the Aristotelian *Ethics*.

\(^4\) The *Divisio* was not exclusively present in commentaries to Hippocratic works. There is an early fourteenth century *Divisio* elaborated by Bartolomeo da Varignana as part of his l’*Enumeratio librorum Galieni* in his commentary to Galen’s *Tegni*. Pesenti, “Le ‘Divisiones Librorum Ypocratis’”, 423-28.
was active during the second half of the fourteenth century. He worked in the papal court in Avignon, studied medicine and theology, was a professor in the faculty of Arts and Medicine in Paris, and worked in the court of Jeanne of Burbon. Martin was a student of Pierre Chauchat, Jean de Coucy, and Guy de Chauliac in Paris, and had also, like Marsilio, studied under Niccolò at Bologna. Martin was responsible for a French composition of a commentary to *Aphorisms* written between 1362-1363, which he dedicated to his fellow surgeon Roberto da Senigallia. Martin’s commentary shares much of Niccolò’s, so it is possible he used it as a reference. The exchange of ideas and, perhaps, of texts between Niccolò and Martin could have resulted from their direct link or through Guy de Chauliac. Enhancing this link is the fact that Martin’s commentary and Marsilio’s seem to depend on a common source other than Niccolò, which suggests a common intellectual milieu, as I will explain shortly.

Like those before him, Martin understood *Aphorisms* as the treatise containing “all of the medical art in brief words.” He also saw Hippocrates as the first founder of medicine and a gift from God: “the first who found this [medical] science lost and forgotten for more than 5 hundred years. And because of that I can call him clear and shining star, illuminating the world with this very noble and excellent science [of medicine].” What we can see from this paragraph is the continuation of a tradition that makes Hippocrates the origin of medical science and thus is understood as divine creation (“shining star”). Furthermore, because Martin’s version of *Aphorisms* also takes the form

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337 According to Danielle Jacquart this is a reference to Adam and Eve and the idea that the chain of knowledge of medicine given by God to Adam had been broken.

of hermeneutical exposition based on a program following the model of the *Old Latin Commentary*, it represents one of the first examples of scholastic commentary in the vernacular.  

Consequently, Martin includes an *Ordo Legendi*, where he introduces *Aphorisms* as second text in a list of Hippocratic treatises, right after *On the Law*. *On the Nature of Humankind* is fourth, and is read with what seems an Aristotelian frame.

Much like Niccolò’s *Ordo Legendi* Martin lists *On the Law* first and then *Aphorisms* second, but he does not duplicate *On Anatomy* as both Niccolò and Marsilio do to cover two different categories (“knowledge of the subject” and “causes of the subject”); rather he places *On the Nature of Humankind* directly after *On Anatomy*. Unfortunately, Martin drops the entire scholastic language after *On Anatomy* (which he places in the category of “knowledge of the subject”), leaving us with a list that resembles Niccolò’s *Ordo Legendi* only in the enumeration of books. Also, he uses *On the Use of Liquids* as number ten and instead of the *Letter to the King of Antioch*, absent from Niccolò’s commentary but present in Marsilio’s. Without the specific enumeration of Aristotelian categories it is difficult to be precise about Martin’s reasoning, although an educated guess is possible. *On the Nature of Humankind* seems to be part of the section that in Niccolò’s *ordo* would relate to material causes, which implies an Aristotelian, practical use of the text much like that in Niccolò’s and Marsilio’s commentaries. The addition of *On the Use of Liquids* (it is not in either Niccolò or Marsilio) would also suggest an emphasis on texts of practical nature. The text is focused on the treatment of ulcers, fistulae, hemorrhoids and other wounds that produce some form of fluid or are related to the accumulation of fluids.

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340 For an full English version of Martin’s commentary see Appendix IV.
These changes would emphasize the practical nature of the *Ordo Legendi*, and it is interesting to consider the fact that the list reached Martin, a surgeon, probably in the hands of Guy de Chauliac, also a surgeon. Perhaps these changes were made with the particular intent to include more practical texts. Furthermore, it is Martin’s *Ordo Legendi* that travels to England during the 1430s in the hands of Jean Tourtier, who translates it for the Duke of Bedford. Martin’s *Ordo Legendi* follows Niccolò’s on all other aspects, including the format of the commentary itself, which would reinforce this link.\(^{341}\)

Additionally, Martin’s text poses an interesting puzzle: there is a particular element present in both Martin’s and Marsilio’s commentaries relating to Hippocrates’ biography, which is absent from previous commentaries. When stating who Hippocrates was, they both mention that there is a mistaken tradition that confuses Hippocrates of Kos, the physician, with a certain Hippocrates the geometer, son of Euclid. Much like Marsilio in the quote before, Martin writes in his *Le Livre des Amphorismes*,

But what was the efficient cause [of *Aphorisms*]? I answer you that it was Hippocrates, as I have told you at the beginning, of whose lineage and science I have written according to what is mentioned and said in the book *Livre des gestes ou dis de philozophes*. And it is necessary to know that there were two Hippocrates in one time and in one place, that is to say in Greece, and the name of one was Hippocrates son of Euclid, who was master of geometry, and of whom we know nothing today. The other one was Hippocrates of Kos of the lineage of Asclepius king of Greece, and this is the one I have mentioned earlier, who was the inventor and maker of this science [of medicine], as it is said by Galen in the VII\(^{th}\) book *De ingenio sanitatis*.\(^{342}\)

\(^{341}\) See Martin de Saint-Gille *Le Livre des Amphorismes*, in Danielle Jacquart, “Hippocrate en français”;
For Niccolò’s commentary see *Reportationes super libro Prognosticorum (Hippocratis) sub mag. Mundino per mag. Bertutium (Bertrutium) in scientia practica famosum. Galeni de crisi libri II cum commento*. München, Bayerische StaatsBibliothek: Clm 13054.

\(^{342}\) Jacquart, “Hippocrate en français”, 310.
What we can see in this paragraph is the mention to the tradition that mistakenly places Hippocrates as son of Euclid. This reference, which unites both texts, is absent from both Mondino and Niccolò. This is extremely interesting since, according to Tiziana Pesenti and Danielle Jacquart, Marsilio was working on the first version of his commentary to *Aphorisms* a few years later than Martin was working on his French version of the commentary to *Aphorisms*. From the quotations of Marsilio and Martin we can find what I believe to be a potential common source that Martin calls the *Livre des gestes ou dis de philozophes*. This can potentially be identified as part of the tradition of the *Bocados de Oro* previously mentioned, and connected with the *Vita et Moribum Philosophorum* present in Italy as early as the 1320s. This text would certainly have been accessible to Marsilio. I currently have not been able to locate a copy of the *Vita et Moribum* or a direct mention of the text in Marsilio, so this represents an speculation. Although this seems the most probable to me, there is always the option that perhaps Martin received a draft of Marsilio’s work through Guy, although overall the commentary made by the French surgeon resembles Niccolò’s more directly, except for its inclusion of the reference to the mistaken biographical tradition on Hippocrates.

Ultimately, a common thread undoubtedly connects Marsilio and Martin. The fact that neither Mondino nor Niccolò mention the biographical mistake about the origin of Hippocrates may suggest that Marsilio was using a similar source than that used by Martin. Still, we are left wondering what was the connection between Martin and Marsilio and why this reference is absent from Mondino and Niccolò. This may also suggest that perhaps Martin and Marsilio were more aware of each other than what the evidence we have proves.
A final possibility for this connection also established an interesting link. The *Letter to the King of Antioch*, with a long, widespread tradition of Latin manuscripts,\(^{343}\) includes some of the biographical references made by Martin, although the specific mention of the mistaken biographical information about Hippocrates is not in this text and Martin does not include the work in his *Ordo Legendi*.\(^{344}\) If anything else, this shows the interconnectedness of texts and exchange of ideas between practitioners, and the new social fluidity that made it possible for learned medical men to practice both in university settings and private courts. If we think about learned practitioners from later generations, the fact that Martin de Saint-Gille wrote a vernacular version of the commentary to *Aphorisms* with its *Ordo Legendi* is also relevant. It testifies to an important aspect of contemporary medicine: as mentioned earlier, surgery was part of learned medical education and some (though not all) surgeons also learned from texts. As mentioned in the first section of the chapter, Mondino already taught anatomy and surgery by using a combination of practical dissection and written texts. This tradition clearly continues and extends far beyond northern Italy. As Lynn Thorndike pointed out in his famous book *Science and Thought in the Fifteenth Century*, and as the example given by Martin, in many cases this education included education in Latin.\(^{345}\) Martin’s work, dedicated to a fellow surgeon, suggests that *Aphorisms* was considered relevant for the practice of surgery and the learning of the Latin tradition for those only speaking the vernacular. If

\(^{343}\) Kibre *Hippocrates Latinus*, 145-150.


we consider that, as mentioned before, *Aphorisms* was already understood as a “bridge”
text that gave entry to both practice and theory, unifying the Hippocratic tradition under a
particular text, and we consider the learning of theory for the purpose of surgery, any
surgeon trained in the Learned tradition would also consider *Aphorisms* as the ultimate
Hippocratic text. The fact that Martin saw the need to write in French a commentary on
this text in the vernacular would emphasize the power of *Aphorisms*: even a surgeon who
did not speak Latin should learn the content of the Hippocratic text and its connection to
the practical tradition of other Hippocratic works. *Aphorisms* was a powerful text that had
gained immense authority.

About fifty years later two famous learned physicians from Italy elaborated
commentaries to *Aphorisms* that include an *Ordo Legendi* like Marsilio’s. Ugo Benzi
(died 1439), working in Florence, and Matteolo da Perugia (died 1480?), working in
Padua in the second half of the fifteenth century. They clearly were learned physicians
who saw the need to include *Aphorisms* as part of their learning. Matteolo in fact
mentions Marsilio Santasofia in connection with his own commentary, which brings the
tradition of the *Divisio* to the following generations.\(^{346}\) Ugo and Matteolo are also prime
examples of the association between private practice in wealthy and prestigious settings,
since they both worked at a certain time as physicians in princely courts, and the
university (both taught in the Faculty of Arst and Medicine of their respective cities).

However, what were the consequences of this increasing influence of *Aphorisms* over
the Galenic legacy? As I pointed out in the previous chapter, The Galenic texts included
in different versions of the *Articella* were the Arabic synthesis: the *Tegni*, the *Haly*

\(^{346}\) Jacquart, “Hippocrate en français”, 255.
commentary, and the Isagoge. This already implied a distance between the original Galen and the texts of Galenic influence in the Articella. If we add the fact that over time Articella versions of the fourteenth and fifteenth century stopped including these texts. Also, there the more detailed, complex Galenic treatises on physiology and disease (De Locis Affectis, De Accidenti et Morbo, De Facultatibus naturalibus) were not the subject of commentaries until the circle of Taddeo Alderotti around the mid-thirteenth –century, and even then they were texts not so readily available. Consequently, if Galen was included, the Articella was to do only with the briefer, general Arabic reviews of Galenic medicine.

An additional fact must be considered when analyzing the influence of the Galenic tradition over the medieval Hippocrates. If we consider the different versions of the Ordo Legendi sketched in this chapter, one important fact becomes visible: Galen’s Commentary to On the Nature of Humankind, which marked the Galenic reading of the Hippocratic tradition, was never used in connection with the Articella. The Hippocratic On the Nature of Humankind, known in Latin medieval translations as De humana natura, was translated sometime between the fifth and sixth century in Ravenna. The text appears in many different manuscripts. The accompanying Galenic commentary, however, appears quite late in the tradition, and survives mostly in printed versions of the sixteenth century. As pointed out earlier, the Hippocratic On the Nature of Humankind, was not included in the Articella by the Salernitan compilers or later generations of learned

347 Lynn Thorndike, A Catalogue of Incipits of Mediaeval Scientific Writings in Latin, Rev. and augm. ed. (Cambridge, MA: Mediaeval Academy of America, 1963). Indeed, Thorndike does not register many, if any, manuscripts or commentaries devoted to such Galenic works until Taddeo and his students start working on them.

348 Kibre, Hippocrates Latinus, 193-195.
medical men. The Articella remained centered around Aphorisms, Prognostics, and Regimen in Acute Diseases, and the practical content of these texts made them easy to remember and gave information on the humoral system that was part of the general medical tradition, making them a source for future practice beyond the context of the university, either in private practice, in princely courts, or both. Furthermore, the double nature of Aphorisms as a bridge text between theory and practice would bring the sense of connection to learned medicine as taught in the University. As I have mentioned earlier, often physicians attended the University and maintained ties with it, whether as a permanent association or as a simple reference to their education, as a way to participate in the scholastic model, and partake of the authority given by learned medicine and Aristotelian theory.

It is important to note that as more Galenic documents became available, the canon was not modified to introduce more of Galen’s works, and what was included to the canon were the Galenic commentaries to Aphorisms and Prognostics.\textsuperscript{349} The Galenic commentaries were canonical, but, as mentioned in the previous chapter, they were also commentaries, and placed Galen as one in the long line of commentators to the Hippocratic tradition, a chain that included the editors of the Articella and that separated Galen from the “first inventor of medical science”. It is important to consider how much the fact that medieval commentators included their own works within the canon placed them closer to Galen, who was thus more accessible to criticism that Hippocrates. The Galenic texts, placed as companions to the original Hippocratic treatises, were basically

\textsuperscript{349} Michael Frampton, Embodiments of Will: Anatomical and Physiological Theories of Voluntary Animal Motion from Greek Antiquity to the Latin Middle Ages, 400 B.C.-A.D. 1300 (Saarbrücken: VDM Verlag Dr. Müller, 2008), 329-333.
that, commentaries. They were Galen’s interpretation of the original Hippocratic texts.\textsuperscript{350}

Taddeo Alderotti, for example, would frequently express his disagreement with Galen’s reading of Hippocratic texts, including those in the \textit{Articella}. In his commentary to \textit{Regimen in Acute Diseases}, Taddeo elaborates on a concept expressed in the Hippocratic texts where the author argues that not everything written in medical treatises is relevant for the art of medicine. This concept was part of Galen’s reading of \textit{Regimen in Acute Diseases}, and Galen argues that this is true because patients constantly overwhelm the physician with petty, useless information about what troubles them. Taddeo openly contradicts Galen and says he’s wrong on both his interpretation of the Hippocratic text and his position on the subject. Taddeo argues that such information, even if it has to be evaluated by the physician to distinguish what’s useful from what is not, is a valuable source of information for diagnostics. Taddeo then interprets the Hippocratic concept as qualifying negatively those physicians who solely rely on the information given by patients.\textsuperscript{351} Disagreeing with Galen when it came down to his reading of Hippocratic texts was frequent, and the same tone can also be found in most learned medical men since the eleventh century and up to the sixteenth century. Agreement, of course, was also common. Galen was the first commentator. My point is that disagreement was possible, expressed freely, and it signals the fact that Galen was a commentator part of the same chain that associated learned scholastic medicine with the Hippocratic tradition.

Two important factors in the transmission of Galen’s work ultimately worked

\textsuperscript{350} Siraisi, \textit{Taddeo Alderotti and His Pupils}, 103-107.

\textsuperscript{351} Taddeo Alderotti. \textit{Commentarius Hippocrates Regimen acutorum}. fol. 247v, as cited in Siraisi, \textit{Taddeo Alderotti and His Pupils}, 125.
against Galenism. First, the massive scope of Galen’s works made it impossible for a single individual to master them, while the core Hippocratic texts in the Articella, as well as those organized around Aphorisms in the different versions of the Ordo Legendi, gave a sense of reach for the total basic concepts of Hippocratic medicine. The translation and transmission process of the Galenic Corpus meant not only that at any given time only some Galenic works were accessible, but also meant that the nuances, complexities, and technical achievements of Galen were not accessible as a whole. Furthermore, as more complex, larger texts became available, like Galen’s original On the Method of Healing, the magnitude of these works made them extremely difficult and expensive to translate and copy, more so to own or carry around. As the catalogues of libraries described in the previous chapter shows, when present, these texts were mostly the property of Universities and extremely wealthy physicians, mostly professors in a university. The consequence was the reduction of Galen to summaries, selections, guides, and encyclopedic synthesis that became doctrinaire, theoretical texts. Galen was to be learned in the context of the university, but was not an easy tool for practical medicine. As pointed out earlier, the presence of Aristotelian biological works quickly disseminated and easily accessible, even in the vernacular, favored the scholastic interpretation of Galen and Hippocrates, making Galen more accessible to criticism. As mentioned in the first chapter, the Hippocratic texts Aphorisms, Prognostics, and Regimen in Acute Diseases, were easy to accommodate to the scholastic interpretations because of their imprecise, plastic, and general nature, making them more solid and stable.

Of course, significant efforts to obtain and translate more of the works of Galen took place since at least the thirteenth century: learned medical men like Taddeo
Alderotti and his pupils engaged on a serious effort to determine the scope of the *Galenic Corpus*, to try and obtain more of its works, and to comment on as many Galenic treatises as possible. Bartolomeo da Varignana, Taddeo’s colleague, wrote a bibliography of theoretical works of medicine. The list is heavily oriented towards Galen’s works (thirty out of thirty-nine), although some known only by name. Another example comes from Gentile da Foligno, one of Taddeo’s students who produced a text, much like the *Ordo Legendi*, intended to be a biography of Galen and a systematic list of his works. This tradition existed certainly up to the time of Marsilio de Santasofia and beyond. Other disciples of Taddeo like Pietro d’Abano, who taught at Padua towards the end of the thirteenth century, and Niccolò da Reggio, active during the first half of the fourteenth century, were the initiators of a new wave of Galenic translations. Niccolò da Reggio in fact was responsible for the first translation of the massive *De usu partium* (although this translation seems to have had little impact in at the time). It is worth noting that the translation and use of much of Galen’s more detailed and complex texts on physiology and disease (*De locis affectis*, *De accidenti et morbo*, *De virtutibus naturalibus*) is the work of these Bolognese physicians. Before them, it seems there were very few or no commentaries on such Galenic commentaries whatsoever and physicians, like Mondino as indicated in the second section of this chapter when introducing his *Anatomy*, rather

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353 BAV, MS Vat. Lat. 4452, fols. 83v-84r. Nancy Siraisi identifies this as Bartolomeo da Varignana’s work in Siraisi, *Taddeo Alderotti and His Pupils*, 125, n. 14.

read and used syntheses of these works.\textsuperscript{355}

This, however, bring me to the second factor of the transmission of Galenic texts that seems to have contributed to the eventual demise of the physician of Pergamum has to do with the physiology in the Galenic legacy. The first full Latin translation of the \textit{Galenic Corpus} was made in Venice by Giovanni Battista Rasario in 1563, which meant that all of Galen’s works became available (also more readers could read ancient Greek and go to the original sources). This brought about an interesting consequence: as Vivian Nutton has pointed out, by the sixteenth century the culmination of these efforts to rediscover Galen ultimately worked against the physician of Pergamum because anatomists all over Europe, including the famous Andrea Vesalius (1514-1564) and Harvey (1578-1657), followed Galen’s methods and experiments, thus overthrowing his conclusions.\textsuperscript{356} No doubt this was in part the result of the accumulation of a mass of knowledge that ultimately made Galen fully accessible. Hippocrates, however, was to survive a similar process and become increasingly a practical Hippocrates. The model of clinical case histories, which many like Girolamo Mercuriale and Marsilio Cagnati would expand, was modeled after the Hippocratic \textit{Epidemics}, often in connection with the \textit{Aphorisms}. Although Galen’s \textit{Art of Medicine} offered an alternative source of scattered clinical case histories, after Galen’s physiology was discredited, this text became displaced.\textsuperscript{357}

\textsuperscript{355} Siraisi, \textit{Taddeo Alderotti and His Pupils}, 101.


\textsuperscript{357} Nancy Siraisi, \textit{History, Medicine, and the Traditions of Renaissance Learning} (Ann Arbor, MI:
What is revealing in the commentaries on Galenic works, or in Galen’s commentaries within the *Articella*, is a trend and a continued effort to distinguish between the Galenic opinion and the Hippocratic text. This of course was problematic on at least two levels. First, as I have argued above, the amount of biographical and bibliographical information about both Galen and Hippocrates was limited. In this sense, the knowledge about Hippocrates was even more limited, and it often relied on what learned men could find in Galen. Second, it was (and to a large extent it still is) impossible to distinguish between the theoretical frame Galen gives to the Hippocratic tradition and the actual content of the different Hippocratic works. Medieval medical scholars inherited the “New Hippocrates” of Galen, and they had to work with it. The very diverse and often asystematic medical knowledge present in the Hippocratic texts had been unified, ultimately, by Galen’s model of the four elements, the four humors, the temperaments, and the natural cycles. The Hippocratic works included in the *Articella* were accompanied by Galen’s respective commentaries because the model of theoretical medicine and systematic knowledge inherited by the late medieval authors was Galenic, and modeled so that they necessitated to link medicine and natural philosophy. It actually makes sense to think that as more and more efforts to read Hippocrates and Galen separately came about, the nature of the Hippocratic works that had become central for the late medieval authors (the *Aphorisms*, the *Prognostics*, and *Regimen in acute diseases*) characterized the Hippocratic Tradition as practical in its core.

Conclusion

On the other hand, we do possess the Corpus, of which several books are in the true sense great achievements, with consistent doctrines inspired by all that is best in the scientific spirit. The Hippocratic problem, like the Homeric problem, cannot take from us our heritage. Willian Jones, The Medical Writings of Anonymus Londinensis.\(^{358}\)

In a tradition so heavily shaped by hermeneutical analysis and interpretation, learned physicians could make any and all claims to be the heirs of Hippocrates of Kos. The texts attributed to the physician of Kos, as disparate and diverse as they were, gave plenty of room for multiple claims of Hippocratic authority. The medieval physicians, in the sense of reinterpreting and reinventing, were, just like Galen, true Hippocratic physicians.

Following on what Katherine Park implies when she asks “what does it mean to know our bodies?”,\(^{359}\) to know Hippocrates meant a subjective, personal connection with a body of knowledge that shaped our own physical world. This personal form of knowledge also became institutionalized, even “globalized” if I may use the anachronistic term, making it a cultural phenomenon across time and place. The Hippocratic physicians of second century Rome and the Hippocratic physicians of the Articella, were part of a collective web of knowledge that transcended time and geographical borders. But this remained a personal relationship. Even when the frame of Alexandrian commentaries were used by Galen or by the physicians of the Articella they organized the content of this Hippocratic tradition according to their own needs. To be Hippocratic, much like

\(^{358}\) Anonymus Londinensis, 20.

being Neoclassical, is a self-definition. There was, of course, the Alexandrian format, used by both Galen and Marsilio de Santasofia. However, in spite of the continuity of this tradition it was not the same. What makes these similarities interesting is how superficial they were. In essence these two groups of people read the *Hippocratic Corpus*. They both used an Alexandrian model, they both restored to a theoretical frame. But every single one of these tools meant a completely different thing for each group. And yet the fact that they were superficially similar (and that they claim to be similar) gave a sense of unbroken continuity. To be a Hippocratic physician in second century Rome or in fourteenth century Padua meant be connected to Hippocrates in very different ways.

It is this apparent connection that has fascinated medical practitioners and historians of medicine alike. They were Neoclassical physicians, they claimed to be part of the same “classical” tradition. However, Neoclassical is valuable because it signals how drastic differences are, hidden under a thin layer of similarities. There are far more difference than similarities in the arguments that “[Hippocrates] has a divine nature, and he has brought forth the healing science from minor, idiosyncratic activities to great scientific ones.”360 “God, mercifully caring for mankind, may have created Hippocrates as someone without flaws to perfect medical knowledge.”361 Essentially, history has gotten in the middle of these two different Hippocratic traditions. And we know that History has a way of ruining similarities.

Galen sought after a Hippocrates that reunites the major philosophical schools of his time, including the theory of a tripartite soul, elemental theory, and humoral medicine.

360 “Paius to the great king Artaxerxes”, in Smith, *Pseudepigraphic Writings*, 49.

361 Pietro d'Abano, *Conciliator, differentia* 1, fol. 3ABa.
To do so he expounded the *Hippocratic Corpus* and produced the first edition of the collection from a medical perspective. He was defending a controversial point of view based on four distinct humors, phlegm, blood, yellow bile, and black bile. *On the Nature of Humankind* gave him the opportunity to present his argument, and using the theories he rooted in this particular text he determined which texts of the *Corpus* were original by Hippocrates and which were spurious, solidifying his position. Galen established a solid link between theory and practice in medicine, which seems to have been contested by during his time. His own version of Hippocrates was controversial, and it appears that previous Hippocratic physicians like Erasistratus understood the Hippocratic tradition differently than Galen. We know the physician of Pergamum ultimately was successful to a point that Hippocrates could not be without Galen, and medicine was forever divided between theory and practice. Hippocrates was not the legendary physician he became until after Galen. The Roman Hippocrates was the teacher of four elements, four humors, four ages of man, and four seasons. Hippocratic medicine was the privilege of Galen and those who practiced his version of Hippocratism.

The learned medical men of Ravenna focused on specific texts written by the ancient Greek and Roman physicians, and produced a small number of Latin manuscripts of their works. Of this Latin tradition, *Aphorisms* soon emerged as the most popular and widespread treatise, essentially becoming the most successful medical text in history. Their tradition was at the same time Greek, Roman, Alexandrian, and Medieval, and scholasticism came out from this intricate mix.

A thousand years after Galen this tradition began a process of revision. The Galenic model was matched to that of Aristotle, and Aristotle was ultimately successful.
The controversies between Galenic theory and other ancient authorities remained imbedded in the *Hippocratic Corpus*, and tensions had to be resolved. Ultimately it was the same hierarchy that placed medicine under natural philosophy what resolved these contradictions. Galen was forced into the Aristotelian model because of the same division of medicine between a practical *ars* and a theoretical *scientia*. Natural philosophy had the last word. This tension also favored a division between the actual practice of the medieval learned physician and his theoretical training. *Aphorisms* ultimately favored practice, while still keeping a sense of connection with theory. The *Divisio Librorum Ypocratis* is the expression of the importance of *Aphorisms* in the scholastic Hippocrates, and the rising importance of practice in a changing medical marketplace. The scholastic mentality that prevailed in theology and saw the *Book of Prayers*, with its aphoristic ways, as central to religious experience and practices also prevailed in medicine and saw *Aphorisms* as central to medical pedagogy and practice.

During the late Middle Ages, *Aphorisms* opened the door for a new arrangement of Hippocratic texts, transforming the understanding of the Hippocratic tradition. Even if theory remained central to the medieval medical mentality, the association between theory and practice marked by *Aphorisms* in general and aphorism I, 1 introduced a *suigeneris* perspective on the value of Hippocratic texts. Soon, a diversified medical practice, legitimized under the umbrella of a single medical theory, favored the need for practical medicine. Galen was never the same and the accumulation of Galenic materials eventually led to the demise of Galen. He had become a scholastic commentator, but Hippocrates had remained *divine*. 

166
Appendix I

Proemium to Niccolò Bertucci Commentary on Aphorisms

München, Bayerische Staatsbibliothek: Clm 13054 (14th c.), fol. 30va.

The adequacy and range of Hippocrates’ books must be summed up in the following manner. [Firstly], in his books of medicine Hippocrates transmits knowledge about how to learn the science [of medicine], showing in the book on the law how many and what are the conditions necessary for those who want to teach it properly. [Secondly,] [Hippocrates] transmits the knowledge of knowable [things in the science of medicine] in two ways. The first is all together and in a general way, as in the book of the aphorisms. Since he transmits the knowledge of knowable things in the science of medicine in this book in a general way, this book is more general than his other books, and is thus prior to them [in the list after the laws], because general things ought to be [studied] first. The other way in which he transmits [the knowledge of things to be known in the science of medicine] relates to particular topics.

[Now] any primarily operative art [like the science of medicine] will consider three [different things]: First, its subject [that is the human body]. Secondly, the goal to be introduced into the subject [that is health]. Finally, the instruments by which this is to be introduced into the subject, [that is diet, potions, and medicaments], as Averroes establishes in the first book, second chapter, of his colliget. Hence, the science transmitted in the books of Hippocrates will consider either its subject, or the goal to be introduced into its subject, or its instruments.

If it considers the subject [that is the human body], four things must be examined:
the parts of the subject, its causes, its dispositions, and the signs by which the dispositions are known.

[Hippocrates] considered the parts of the subject in his book on anatomy, which Hippocrates wrote according to Galen in his commentary on the aphorism of the fifth book [aphorism forty-eight] [that begins as follows]: “Fetuses in the right side [of the womb] are male,” etc. He [also] considered the causes of the subject, which are four, that is material [causes], formal [causes], efficient [causes], and final [causes]. We do not have a book from him about the formal or the final causes. [However, we do have books from him] about the material and efficient causes, considered as follows.

The material [causes] [are] threefold: the immediate [material cause], or the members [of the human body]; the distant [material] cause, or the elements; and the intermediate [material cause], or the humors. [Hippocrates did not write] a book about the immediate [material] causes other than the aforementioned book on anatomy, but he did about the other types [of material cause]. Now, such a science [of medicine] will consider the elements and the humors together. These are studied in the book on human nature, in which Hippocrates analyzes how many and which are the primary elements of the human body, and how many and which are its secondary elements, which are the humors. If, however, [this science] considers the humors by themselves, such is the book on the humors, which Hippocrates wrote according to Galen in his commentary to the aphorism in book one [of the aphorisms] [aphorism twenty] [that begins as follows], "Those things of which there is a crisis," etc.

If [the science of medicine transmitted in the books of Hippocrates] considers the efficient causes [of the subject of medicine], these are twofold: intrinsic and extrinsic.
The extrinsic causes are studied in the book on hot and cold [on the use of liquids], which Hippocrates wrote according to Galen in his commentary on the aphorism in [book] five [of the aphorisms] [aphorism sixteenth] [that begins as follows]: “Heat harms those using it frequently," etc. The intrinsic causes, which are the sperm of the man and the menses of the woman, are studied in the book on the nature of the fetus.

[If] [the science transmitted in the books of Hippocrates] considers the dispositions [of its subject], these are twofold, health and disease. Hippocrates did not write a book on health, but [he did write a book] on disease. In turn, [the disposition of] disease is twofold, general and particular.

The general [disposition of disease] is twofold. It may be epidemic, which is caused by the general disposition of the air, as in a pestilential disease, and this is explained in the book of the epidemics, or it may be endemic, which is caused by the action of those things that are close our body, such as food, medicaments, potions, airs, and the like. [Endemic disease] is considered in the book on air, water, and places. The particular [disposition of] disease is also twofold. It may be common to both sexes, that is to say the male and female, which is explained [by Hippocrates] in his book on joints, which Hippocrates wrote according to Galen in his book on the use of liquids and in his commentary to the aphorism in book six [of aphorisms] [aphorism forty-six] [that begins as follows]: “People who become hump-backed,” etc. Or [particular endemic disease] may relate to only one [of the sexes], specifically the female sex, and such is the book on the passions of women, which Hippocrates wrote according to Galen in his commentary to the aphorism in book five [aphorism forty-five] [that begins as follows]: “[Women] who have a temperate body.”
[The science transmitted in the books of Hippocrates] may also consider the signs
[of the dispositions of the body], and [these] are three in kind: demonstrative [signs],
rememorative [signs], and prognostic [signs]. Hippocrates did not write a book on the
[first two], because [they are] of little utility [for the physician]. He did, however, write
on prognostic signs. The knowledge of prognostic signs is twofold: what we acquire
through reason, which is transmitted in the book on prognostics, and what we acquire
through experience, which is transmitted in the book on secrets. 362

If however the science [of medicine] transmitted in the books of Hippocrates
considers the goal to be introduced in the subject, that goal is twofold: that is, the
preservation of health and the treatment of disease. Hippocrates did not write a book on
the preservation of health, but [he did] on the treatment of disease. This science [of
medicine] considers the way to cure disease in either a general way, or a particular way,
or a more particular way. The first [general] way is discussed in the book on regimen in
acute diseases. The second [particular] way is discussed in the book on the healing of
wounds [on ulcers], which Hippocrates wrote according to Galen in the fourth book of
his method of healing, [Finally,] the third [more particular] way is discussed in the book
on skull fractures, which Hippocrates wrote according to Galen in his commentary on the
aphorism in book six [of aphorisms] [aphorism fifty-one], and also in his book on the
healing of wounds, which Hippocrates wrote according to Galen in his comment on the
aphorism of the sixth book [of the aphorisms] that begins, "Quorum empici....," [?] etc.

Finally, if the science in the books of Hippocrates considers its instruments [these

362 On secrets or The signs of health and death. Spurious book that circulated during the Middle Ages under
the name of Hippocrates apparently reflecting a series of Hippocratic notions. Kibre, Hippocrates Latinus,
165.
are] threefold: diet, potions, and surgery. Hippocrates made a book on diet that is called the book on foodstuffs, which Galen says Hippocrates wrote in his commentary to the aphorism of book two of aphorisms [aphorism eleven] [that begins as follows]: "it is easier to replenish a body with potion than with food". About the instrument of potion [Hippocrates] wrote a book that is called on simple medicaments. [Hippocrates] did not write a book about the instrument of surgery.

And thus is made apparent the number and adequacy of the books of Hippocrates. These books are nineteen in number, in which the aphorisms must be place second, that is first after the book on the law, and this is, etc.
LIFE IS SHORT, THE ART IS LONG. “There is [great] admiration for the ancients’ brevity of expression.” This is what Galen says in the first book of on the elements [according to Hippocrates], chapter nine, where he shows that the ancients’ brevity of expression is worthy of admiration/wonder. This is [Galen’s] reasoning: a thing should be admired at when its understanding is easy, although its discussion is difficult. The ancients’ brevity of expression is easy to understand because it is short in words. However the discussion [of the ancients’ brevity of expression] is difficult, because of its numerous thoughts, for which it should be greatly admired. Since the brevity of its sentences is easy to understand, it makes its students easy to teach and good-natured, but since its discussion is difficult, it makes them careful and attentive.

Therefore our venerable author Hippocrates considered the brevity of expression in the science of medicine to be greatly admired, because it is easy to understand, which makes its students teachable and good-natured, and because its discussion is difficult, which renders its students attentive. Therefore Hippocrates was compelled to write books about the science of medicine [which are] brief in expression. Among other books [Hippocrates] wrote this book [of the aphorisms], in which he transmitted to us all in one place the knowledge of knowable things [in the science of medicine]. However [readers] should note that although Hippocrates explains all the knowledge of knowable things in this book, he does not explain them in order. The reason [for this] is because, as Galen
points out in his commentary [to aphorisms] and in the second book of on the natural powers [faculties], it is impossible to start and finish [all knowledge of knowable things in the science of medicine]. Therefore since Hippocrates was the first inventor of this science [of medicine], and although he started it, he was not able to perfect it. Therefore John of Alexandria, who is the commentator to Hippocrates’ book of epidemics, says that the chapter concerning the order and the organization of the book is missing. For the same reason Mesue, in his on antidotes, calls this book [of the aphorisms] a book of disorganized individual teachings. This is how the science of this book differs from the science of the first book of Avicenna’s canon and from the science of the tegni, for the knowledge of all knowable things in the science of medicine is transmitted in those books in order, but in this book [of the aphorisms] without order. It also differs in another way, since those books transmit such knowledge [of all knowable things in the science of medicine] in a general way, while this one does so in a general and a particular way, and those books [transmit such knowledge] in order and completely, while this one does so in an unordered and incomplete way and because Hippocrates transmits the knowledge of all knowable things in the science of medicine without order in the book [of the aphorisms], consequently the science of this book is neither definitive nor resolutive nor compositive nor does it observe the modum ad quem of ordinary teaching, which is discussed in the first book of the tegni.

Three points will become immediately apparent from these. First what the material cause or the subject of this book [of the aphorisms] should be, and because all the knowledge of all knowable things in the science of medicine is discussed in that book, therefore the subject of this book [of the aphorisms] would be the same as the subject of
the whole science of medicine, that is either the human body healthy or ill [insofar as we can treat it], or, according to others, the human body insofar as it can be healed or made sick, considered in an aphoristic way.

The second [point] is what the efficient cause of that [book of aphorisms] should be, which is Hippocrates of Kos, as Galen points out in his [commentary to the] first book of the Regimen in acute diseases. However who Hippocrates was, we don’t know well, although Galen says about him, in the seventh book of the therapeutic [on the method of healing], that [Hippocrates] passed down to us the seeds of medicine, which require a good farmer who would plant those seeds in as much as he would increase their explanations and increase them with respect to their perfect completion and with respect to the proper way of writing about them.

The third [point] is what would be the formal cause, which is twofold, that is to say the form of writing and the form of the text. The form of writing in this book [of the aphorisms] is brief and aphoristic. Hippocrates in fact, as the above-mentioned Commentator [John of Alexandria] said about the book of epidemics, uses three types of doctrine in his books, that is to say aphoristic, as in this book [of the aphorisms]; narrative, as in the book regimen of acute [diseases]; and a mixed way from both, as in the book of the epidemics. But in this book he uses only the aphoristic way. According to others the aphorism is a brief statement about a thing presented [whole], but not explicitly, conveying meaning.\textsuperscript{363} Or this: [an aphorism] is a brief statement about the whole thing presented, comprehends the opinion to the intellect. Or this: an aphorism is a brief statement with few words, rich in meaning. Or according to Mondino: an aphorism

\textsuperscript{363} “denuncians intellectum” Similar concept is present in Isidore of Seville, \textit{Etymologies}, IV, 10.1.
is a thought in which the words are few, but the power or the truth of its meaning is great. And the word [“aphorism”] comes from “a”, which means “without”, and “orismus”, [which means] “definition”, as in a statement without definition, since because no definitions are given in the book of aphorisms. However the form of the treatise is its division into the small parts which are contained in it, although without order.

The final cause is twofold, that is to say the [cause of the] work and of the author. And the cause of the work is twofold, that is the immediate [cause], which is the knowledge of all knowable things in the science of medicine determined in an aphoristic way; and the intermediate [cause], which is so that using the known things that are determined in this book, we can preserve health in the human body and recover it once it is lost. In addition the [cause of the] author is twofold, that is to say the immediate [cause], which is the exercise of his own understanding; and the intermediate [cause], which is the knowledge of all knowable things in the science of medicine with a brevity of expression that is easy to understand and difficult to explain, so as to make its students/followers good, easy to teach, and attentive. And so much for the causes.

The title of the book is: Thus begins the book of the Aphorisms of Hippocrates, in which two elements are explained, that is the formal cause, which is the so called aphoristic way transmitted through it, and the efficient cause, that is to say what is placed under Hippocrates.

Regarding the branch of philosophy to which it belongs: it is said that [it belongs to] natural philosophy, as Averroes points out in the second book chapter two of his

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364 Discussed by both Mondinu de Liuzzi and Mondino de Foroiiulio commentaries on Aphorisms.
However we are unable to know the relationship of this book to the other books of Hippocrates, unless we first see what the range of them is, on account of which it must be noted that Hippocrates transmitted in his medical books, handed down either the knowledge of how to learn this science [of medicine], showing how many and which are the conditions with which he who wishes to teach this science perfectly must be equipped, and that is the book on the law, or he transmitted all knowable things in the science of medicine, which is twofold, which is either this knowledge transmitted in a particular or in a general way, and this [last way] is the book aphorisms, and for this reason this book [of the aphorisms] is more general than all other Hippocratic books and is thus prior to them [in the list after the laws], because general things ought to be [studied] first, or he transmits [all knowable things in the science of medicine in a particular way] and thus, since any primarily operative art ought to be considerative, that is to say [divided by] the subject [the human body], the goals introduced in the subject [health], and the instruments introduced by the subject [diet, potions, and surgery], as Averroes signals in his first book of the Colliget second chapter, thus that [science of medicine] is transmitted in the books of Hippocrates either considering the subject or the goals introduced in the subject or the instruments.

If [the science of medicine] is to consider the subject, since the subject should be examined in four parts, that is to say the parts of the subject, the causes, the dispositions, and the signs by which the dispositions ought to be known, then [this science of

\footnote{Averroes, \textit{Colliget}, II, 2, c. (Venice: Jerome Scout, 1549), c. 50va-b.}
medicine] will consider be the parts\textsuperscript{366} of the subject, and this is the book on anatomy which Hippocrates wrote according to Galen in his commentary to the fifth part [book] of aphorism [aphorism forty-eight], “fetuses in the right side of the womb are male,” or [this science of medicine] considers the causes [of the subject] which are four, that is to say material, formal, efficient, and final. We do not have a book by Hippocrates on the formal and final causes, however Hippocrates did write a book on the material and efficient causes.

Therefore [this science of medicine] will consider either the material or the efficient cause; if it considers the material [cause], this it is threefold, that is to say the immediate [cause] or the members [of the human body], the distant [cause] or the elements, and the intermediate [cause] or the humors, Hippocrates did not write a book on the immediate [cause] other than [the aforementioned] book on anatomy, however he wrote about the other [material causes], for such science [of medicine] will either consider the elements and the humors, and this is the book on human nature, in which Hippocrates analyzes which and how many are the primary elements of the human body and which and how many are the secondary [elements of the human body]. If [the science of medicine] considers the humors by themselves, such is the book on the humors which Hippocrates wrote according to Galen in his commentary to aphorisms book one [aphorism twenty] [that begins as follows:] “those things of which there is a crisis.”

If however the [science of medicine] considers the efficient cause, the efficient cause is twofold, that is to say intrinsic and extrinsic, if [the science of medicine]

\textsuperscript{366} Pesenti, Marsilio Santasofia tra corti e università, has parcium for what I believe to be partium, because it is what makes sense and what is written in the original Bertucci text that appears to be the source for this entire sentence, word by work, has partium here.
considers the extrinsic cause this is the book on hot and cold\textsuperscript{367} which Hippocrates wrote according to Galen in his commentary to aphorisms [book] five [aphorism sixteenth],\textsuperscript{368} “heat harms those using it frequently,” or if [the science of medicine] considers the intrinsic cause, which is the sperm of the man and the menses of the woman and this is the book on the nature of the fetus.

[If] [the science of medicine] considers the dispositions [of the human body] the dispositions of the human body are twofold, that is to say health and disease, Hippocrates did not write a book on health, but he did write on disease. In turn [the disposition of] disease is twofold, that is to say general and particular. The general [disposition of] disease is twofold, that is to say epidemic, caused by the general disposition of air, as in a pestilent disease, and this is explained in the book of the epidemics, or it is endemic in nature, which is caused by the action of those things that are close to our body, such as food, medicaments, potions, airs, and the like; [endemic disease] is transmitted in the book on air, water, and places. The particular [disposition of] disease is also twofold, either common to both sexes, that is to say the male or female, and this is explained [by Hippocrates] in the book on joints, which Hippocrates wrote according to Galen in his [commentary to the book] on the use of liquids and in his commentary to aphorisms book six [aphorism forty-six], “People who become hump-backed”; or [particular endemic disease] might relate to only one [sex] that is to say the female sex, and this is the book on the passions of women [on the diseases of women, book two], which Hippocrates wrote according to Galen in his commentary to the aphorism [in book five] [aphorism

\textsuperscript{367} It appears this book is \textit{On the use of liquids.}

\textsuperscript{368} Pesenti, \textit{Marsilio Santasofia tra corti e universit\`a}, identified this as \textit{Aphroisms} book V, aphorism 17. I believe it is incorrect and it is \textit{Aphorisms} book V, aphorism 16.
forty-five] [that begins as follows:] “[Women] who have a temperate body.” When [the science of medicine] may consider the signs [of the dispositions of the body], and [these] are tree in kind, that is to say demonstrative [signs], rememorative [signs], and prognosticative [signs], Hippocrates did not write a book on the first two kind of signs, because [they are] of little utility [for the physician]. Nevertheless [he did write] on the signs of prognostics. The knowledge of prognostic signs is twofold: what we acquire through reason and this is transmitted in the book on prognostics, and what we acquire through experience and this is transmitted in the book on secrets.369

If however the science [of medicine] transmitted in the books of Hippocrates considers the goal to be introduced in the subject, that goal is twofold: that is, the preservation of health and the treatment of disease. Hippocrates did not write a book on the preservation of health, but [he did] on the treatment of disease. This science [of medicine] considers the way to cure disease in either a general way, or a particular way, or a more particular way. The first [general] way is discussed in the book on regimen in acute diseases. The second [particular] way is discussed in the book on the healing of wounds [on ulcers], which Hippocrates wrote according to Galen in the fourth book of his method of healing, [Finally,] the third [more particular] way is discussed in the book on skull fractures, which Hippocrates wrote according to Galen in his commentary on the aphorism in book six [of aphorisms] [aphorism fifty-one], and also in his book on the healing of wounds [liber de cura empimatis] [?], which Hippocrates wrote according to Galen in his comment on the aphorism of the sixth book [of the aphorisms] that begins,

369 On secrets or The signs of health and death. Spurious book that circulated during the Middle Ages under the name of Hippocrates apparently reflecting a series of Hippocratic notions. Kibre, Hippocrates Latinus, 165.
"Quorum empici...," [?] etc.

Finally, if the science in the books of Hippocrates considers its instruments [these are] threefold: diet, potions, and surgery. Hippocrates made a book on diet that is called the book on foodstuffs, which Galen says Hippocrates wrote in his commentary to the aphorism of book two of aphorisms [aphorism eleven] [that begins as follows]: "it is easier to replenish a body with potion than with food". About the instrument of potion [Hippocrates] wrote a book that is called on simple medicaments. [Hippocrates] did not write a book about the instrument of surgery.

And thus is made apparent the number and adequacy of the books of Hippocrates. These books are nineteen in number, in which the aphorisms must be place second, that is first after the book on the law, and this is, etc.³⁷⁰

Appendix III

Proemium to Marsilio of Santasofia Commentary on Aphorisms

*Volterra, Biblioteca Comunale Guarnacci: LVII. 8. 2. (6363)*

The first chapter of the libri regalis prompts, directs, and disciplines us as follows:

“It is most just to praise the almighty God in all things which men undertake and for all situations, to glorify his name, and to be grateful to him. The most just and almighty god is to be praised in all things and all situations men are undertaking, and glorify his name and [be] grateful. To the creator be the glory of the creature through the power of his generosity, to the giver through his mercy from his intellect to the servants of his excellence, and who gives them what they can use to mend the lives in this world and to gain things in the other world, that is the mind, which is the cause of all good, the key of all usefulness, and the way of all hope, by which God has privileged man over all that he has created, that is to say animals plants, amen and so forth.”

*Life is short, the art is long.* As I am about to lecture on the present book, I will briefly address certain questions taken by the ancient doctors from Haly Abbas, in the first book of his theory, third chapter, and from the Alexandrian Commentator in the proemium of his book of sects, and from Averroes in the introduction to his physics, and I will inquire what may be the usefulness of the book [of aphorisms], what may be its order, what may be its relationship to other [books of Hippocrates], the name of the author, its intention, what may be the title of the book, its kind of doctrine, to what branch of philosophy it belongs, and what would its division be.

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371 Haly Abbas, *Regalis dispositio. Theorica*, I, 1, c. 5va.
Galen indicates the usefulness of the Aphorisms in his commentary in the translation we are using, in the following authoritative statement: “for since aphorisms ought to relate briefly the view of the author, it is very useful for those wishing to learn the long art in short time.” In the other translation one finds this authoritative statement: “this way of teaching is suited to the first acquisition and memorization of those things that he has learned and to the recollection of those things that he has forgotten.” A similar idea is mentioned by Rabimoyses [Maimonides] in the introduction of his aphorisms. The same was said by Galen, in the first book of the elements [on the elements according to Hippocrates] chapter three: there are great grounds for admiration of the brevity of language of the ancients, and not undeservingly, since such statements were put together with aphoristic brevity, understood on account of their brevity, such brief aphorisms are collected because the brevity makes their many sentences easy to be understood.

As for the second point [the order of aphorisms] it should be said briefly that the order of the present book can be understood through a brief division of the books of Hippocrates, thus explaining their brief intention. For Hippocrates, as the first inventor of medicine, had to explain the necessary conditions for learning the science of medicine, and to this end he wrote the book on law, in which he states the conditions that must be attended to on the part of its students. And because in a practical art, in so far as it is practical, one must consider the subject, the goal to be introduced in the subject, the instruments and so forth by which the goals are introduced, as shown in the first [book] of the colliget, first chapter after the introduction, Hippocrates, since he was considering practical things in a general way and briefly collected, when this practical [art of medicine] considers [these things] and its examination is general and stated briefly, to
this end wrote his book of aphorisms. If however the examination [of this practical art of medicine] is less general, then if it is about the subject or about the parts of the subject, that is about the parts of the human body, explaining how they are connected and their functions, to this end [Hippocrates] wrote the book on anatomy, as stated [by Galen] in the fifth [book] of the aphorisms, commentary forty-eight: “fetuses in the right side [of the womb] are male, however fetuses in the left side [of the womb] are female.” However, as a physician [Hippocrates] did not write a book about the formal and final causes: for the goal [of human life], happiness, is considered in the first and the tenth book of [Aristotle’s] ethics, and the form of mankind, the soul, pertains more to natural philosophy. However, regarding the immediate material [causes], the members [of the human body], [Hippocrates] wrote the said book on anatomy. He wrote the book on the nature of the fetus [transcription mistake, nature of the humankind] about the remote and intermediate [causes], the humors and the elements. However, he [also] wrote a specific book on the humors, as it is stated [by Galen] in the first book of aphorisms commentary two, and in the book on crisis. On the efficient causes that are more external [Hippocrates] wrote the book on cold and hot, as stated [by Galen] in [his] commentary to the fifth [book] of aphorisms aphorism seventeen: “Heat produces bad effects on those who use it frequently.” He wrote a special book, as I will explain, on the efficient causes that are more internal, which is the book On the nature of the fetus, discussing there male and female seed. Similarly, when Hippocrates came to consider the dispositions of the human body, he did not write a work on health and the neutral disposition, but rather on disease, with which the doctor’s practice is primarily concerned, first he wrote a book on diseases arising from the general impression of the air, which he called the book of
epidemics. Likewise he wrote the book called on airs waters and places, about diseases depending on their reason,\(^\text{372}\) which affect bodies, according to the reason of air or water or food, which are called endemic. Hippocrates also wrote a more specialized book on wounds, as stated [by Galen in his] commentary to [book] six aphorism forty-six “People who become hump-backed from asthma, and so forth,” in which he explains that [Hippocrates] also composed a book on the treatment of swellings [On fistulae?].\(^\text{373}\) The book on wounds is also alluded to in the book four of the method of healing. [Hippocrates] also wrote a book on skull fractures, as stated by Galen on the sixth book of on the method of healing.\(^\text{374}\) [Hippocrates] also composed a book concerning women and their diseases, as stated [by Galen in his commentary to] on [the fifth book of] aphorisms [aphorism forty-five]: “[Women] with a temperate body.” Hippocrates did not write a book about the demonstrative or the rememorative signs, which are not particularly useful [to the doctor], as stated at the beginning of the second book of the tegni.\(^\text{375}\) However he wrote on prognostic signs in the book of prognostics, where he makes prognostications according to reason. He composed the book of secrets,\(^\text{376}\) which talks about prognosis according to experience. [Hippocrates] did not write a book on the preservation of health, except perhaps the letter to the king of Antioch. He explained the

\(^{372}\) Marsilio’s text incorrectly has racione for regionum. Pesenti, Marsilio Santasofia tra corti e università, 520, n. 20.

\(^{373}\) There is no reference to this book in commentary 46, but in VI, 27, c. d7va.

\(^{374}\) Galen, Methodus medendi, 10 5, 424-425 K.

\(^{375}\) Galen, Tegni, translation antiqua, I, I, c. A4va.

\(^{376}\) On secrets or The signs of health and death. Spurious book that circulated during the Middle Ages under the name of Hippocrates apparently reflecting a series of Hippocratic notions. Kibre, Hippocrates Latinus, 165.
treatment of diseases in the book regimen in acute diseases. He composed a book about one of the instruments by which health comes to be, on foodstuff, as stated [by Galen in his] commentary to book two aphorism eleven: “it is easier to replenish [the body] with drink than food.” He composed a book about medicaments called on drugs. [Hippocrates] did not write a book on surgery. Because the aphorisms discusses generalities and universals, and because generalities must always precede specifics in both nature and art, as is clear from Galen’s commentary to aphorism book three, aphorism sixteenth, “consistently with the year and so forth,” following this principle [Hippocrates] wrote aphorisms to be studied first after his book on law, as will be said in the comment to be read next.

To the third point, I declare that the relationship of this book [of aphorisms] to other books by Hippocrates is like the relationship of the elements of a thing to the thing [itself], as Averroes says in the introduction [to his commentary] to [Aristotle’s] book of physics: just as a mixed body presupposes the essence of the elements, as appears in the first and second book on generation [by Aristotle], thus from the knowledge of the present book [of aphorisms] the specific knowledge of the other books is caused and acquired. Just as a mixed body presupposes the essence of the elements, so the special bodies of knowledge of the [other] books presuppose this account [of aphorisms], therefore it is possible to say what is said in the introduction to Averroes’s [commentary to] the physics, which is that this book [of the aphorisms] is the beginning and origin of the art [of medicine].

Regarding the fourth point [of the name of the author], we say the name of the author is Hippocrates, who was called of Kos after the island of Kos in Greece, son of
Heraclides, from which the passage of the first [book] in [Galen’s commentary to] the regimen in acute diseases, commentary nineteen, is corrupted, reading Euclid, but should read Heraclides; for Rabymoyses [Maimonides] asserts [in the prologue to his commentary to the aforementioned aphorisms that] this book [of the aphorisms] was [Hippocrates’].

The title of the book is: *Here begins the book of Hippocrates’ aphorisms*. Isidore explains what an aphorism is in book four of his etymologies chapter ten: “An aphorism is a brief declaration stating the complete meaning of the thing in question.” The same thing is said in the [Giovanni Balbi’s] catholicon: “An aphorism is brief declaration with full meaning about a given thing.”

The intention of Hippocrates in the book [of aphorisms] is to transmit to us the knowable things in the science of medicine in an aphoristic manner.

As for the next point I say that this book [of the aphorisms], like all [the science of] medicine, is subordinate to natural philosophy, as it is said in the introduction to the first book of the *colliget* and as it is summed up [by Aristotle] at the beginning of his book on sense and sensibilia.

As for the next point, I say that the causes of this book [of aphorisms] are four, that is to say material, formal, efficient, and final.

The material cause or the subject of this book [of aphorisms] can be said to be the complex human body, as it is said in [Galen’s] commentary on this present aphorism and

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377 There is no mention of Euclid in such text.

378 Averroes, *Colliget*, proemium, c. a2ra, et I,1, c. a3vb.

379 Aristotle, *De sensu et sensato*, I,1, 436b 8-437a 18.
in the aforementioned chapter of the colliget.\textsuperscript{380} Furthermore the rules brought together with aphoristic brevity can be said to be the matter of the entire book just as improper parts are said to be the matter of the whole in the second book [of Aristotle’s] physics.\textsuperscript{381}

The formal cause is twofold: the form of the text and the form of writing. The form of the text is the given composition and division of the book; the form of writing is the method followed by the author in the book of the aphorisms.

The efficient cause is Hippocrates.

The final cause is inferred from the said usefulness from the present book.

As for the next point I say that the way of teaching of the whole book [of aphorisms] was not ordered. Since Hippocrates was among the first inventors [of medicine], he was unable to maintain the necessary order: for it is impossible to start and finish the same thing, that is to say properly, as stated at the end of [Galen’s] second book on the natural faculties.\textsuperscript{382}

As for the last [point] my response is that this book [of the aphorisms] is divided in seven parts.

In the first part Hippocrates transmits the aphoristic knowledge about handling either diseased or neutral human bodies through evacuation or diet;

in the second part Hippocrates teaches how to make a prognosis of good or bad [outcome] of health, disease, or death through many signs;

in the third part Hippocrates determines some causes of diseases either internal or

\textsuperscript{380} Averroes, Colliget, I,1, c. a3rb-4ra.

\textsuperscript{381} Aristotle, Physica, edited by W.D. Ross (Oxonii: E Typographeo Clarendoniano, 1950), II, 4 200b 6-8.

\textsuperscript{382} Galen, De naturalibus faculatibus II, 2 141 K.
external;

in the fourth part he points out the rules to be observed in disease mostly through the goals of the art [of medicine]; furthermore he teaches how to make a prognosis during illness, from good and bad signs, about recovering or death in illnesses, including illnesses in particular parts [of the body];

in the fifth book [Hippocrates] ascertains certain accidents that can occur in the course of purging through drugs, teaching also how to predict the [outcomes] of certain illnesses; he also ascertains the operations of certain exterior causes such as hot and cold; he especially teaches how to predict outcomes/make prognostications in pregnant women, also setting down prognosis in other [kinds of] bodies;

in the sixth part he teaches again how to make a prognosis in illness about good or bad [outcomes], health or death;

in the seventh book Hippocrates recapitulates some of the things he said in the other chapters, setting down certain new prognostic signs and summarizing the rules of treatment.


The first book contains two general parts: in the first one [Hippocrates] sets out the aphorism as an existing introduction to the following ones; in the second part he goes on to teach how to regulate the body through diet and purges. This second part [starts as follows]: “in disorders of the bowels”. The first aphorism contains two principal parts:
in the first one Hippocrates explains the necessity of writing books put together with aphoristic brevity; in the second part he mentions the conditions that must be expected and that are said to be in the works [of Hippocrates]. This second part [begins as follows]: “[the physician must be prepared] not only [to do what is right].” In the first part Hippocrates tries to prove this conclusion: in medicine it is necessary to write books put together with aphoristic brevity. The conclusion is argued as follows: the life of man is short in comparison to the long medical art, therefore and so forth. The consequence holds, since if books are not written briefly, [is that] it will not be possible to grasp the whole medical art. Hippocrates [unintelligible verb] of this piece of reasoning [?], for first he set out the antecedent and second declared it. The second part [begins]: “the time [seasons] fleeting.” The first part says that the life of man is short, the art—to say medicine—is long in respect to man. In order to understand the part it must be noted that it agrees with the last chapter of book four of [Rhasis’] almansor entitled “on the criteria of the good physician.” Again, this part is taken from the aforementioned book first of the colliget in the introductory chapter and the same is said by Seneca at the beginning of the book on the brevity of life and so forth.

383 Rhasis, Liber ad Almansorem, IV, 31.
384 Averroes, Colliget, I,1.
385 Seneca, De brevitate vitae, I, 1-2.
Appendix IV

Martin de Saint-Gille Division of Hippocrates’ Works


And so nobody will ask me what is the order, or number, or the place this say book of aphorisms in relation to other books made by Hippocrates. I tell you that the first [book] is called liber de “lege sive introductorium”, that is to say the first “book of the law or introduction” where [Hippocrates] teaches the way to learn medicine and which and how many are the necessary conditions to have for those who want to have them and teach them. In the second book [Hippocrates] determines all the knowable things of medicine and it is called “aphorisms”, and it is the most common [book] after the book of the law. In the third book [Hippocrates] determines the parts of the subject of medicine, which is the human body, and this [book] is called “the anatomy”, as attested by Galen in the fifth book of aphorisms, chapter XLI^th^, as in the end is the aphorisms “fetuses in the right side [of the womb] are male.” In the fourth book [Hippocrates] determines all the elements and humors and it is called “the book of human nature”. In the fifth [book] [Hippocrates] determines only the humors and it is called “book of the humors”, as attested by Galen in the first of this book in the XX^th^ commentary “Those things of which there is a crisis.” In the sixth book [Hippocrates] determines the hot and the cold, and it is called “the book of the hot and cold”, as Galen says in the fifth book in XVII^th^
commentary “heat harms those using it frequently.” In the VIIth [book] [Hippocrates] determines on the male seed, on the female menstrual blood, and it is called “liber de natura fetus”, that is to say “the book of the fetus nature or the fruit”. In the VIIIth book [Hippocrates] determines the epidemic caused by the air’s natural disposition, and it is called “liber epidimiarum”, “the book of epidemic”. In the IXth book [Hippocrates] talks about the general diseases caused by non-corrupted air or waters, and this one is called “book of the air, the waters and the places”, in Latin “liber de aere, de aqua et de regionibus”. In the Xth book [Hippocrates] determines the diseases related to one and the other sex, that is to men and women, and this one is called “the book on the movements of liquids”, and in Latin “liber de motibus liquidis”. And in the XIth [book] [Hippocrates] determines the diseases of women and it is called in Latin “liber de passionibus mulierum”, and that Hippocrates wrote it is said by Galen in the Vth of aphorisms commentary XLVth “[Women] who have a temperate body.” And Galen also attests it in the Xth in the VIth part of this book in commentary XLIImd “people who become hump-backed.” In the XIIth [book] [Hippocrates] determines the prognostic signs by ordinary means and demonstrative; that book is called “liber pronosticorum”, “the book of prognostics”. In the XIIIth [book] [Hippocrates] determines the prognostic signs by means of experiment, and that book is called “liber de secretis Ypocratis”, “the book of secretes Ypo.”. In the XIIIth [book] [Hippocrates] determines the treatment of diseases in general, and that book is called “the book of regimen of acute”, in Latin “liber de regimine acutorum. In the XVth [book] [Hippocrates] determines properly the treatment of specific diseases, and this book is called “the book of wounds”, in Latin liber curationis vulnerum”, that Hippocrates wrote it is said by Galen in the fourth book of “de ingenio
sanitatis.” In the XVI\textsuperscript{th} [book] [Hippocrates] determines more specifically and properly the treatment of wunds, and this one is called “the book of fracture of bones and head”, in Latin “liber de fractura ossis crani”, and that Hippocrates wrote it is said by Galen in the VI\textsuperscript{th} [book of] “de ingenio sanitatis”. In the XVII\textsuperscript{th} <book>, as he also proceeds, [Hippocrates] determines properly and particularly the treatment of any one disease, and it is called “liber de cura empimatis”, that is to say “the book of the cure of empime” [?] which has as subject infectious matter in the members of the chest, that Hippocrates wrote it is said by Galen in the fifth of aphorism in XXVII\textsuperscript{th} “Those cases of empyema or dropsy”. In XVIII\textsuperscript{th} book Hippocrates determines, and also in XIX\textsuperscript{th}, the instruments in medicine: diet which is contained in the VI non-naturals, which are drink and food, sleep, excretion, work and rest, movement and inaction, air, and the accidents of the soul like joy, troublesomeness, pain, sadness, as [Hippocrates] says and is mentioned by Galen, by Johannitus, in the preface of his book, and by Galen in the II\textsuperscript{nd} [book of] tegni, and by Avicena in the second [book] of his canon, and, in brief, by all medical authors; the second part of the instruments of medicine is potion, like syrups, electuaries, opiates, unguents; the third [part of the instruments of medicine] is surgery which is nothing but manual operation. In the XVIII\textsuperscript{th} book Hippocrates determines the first of the instruments of medicine, and it is called “the book of foods”, in Latin “liber de cibis”, that Hippocrates wrote it is said by Galen in the second of aphorisms in comment XI “it is easier to replenish [a body] with potion than with food.” In the XIX\textsuperscript{th} book [Hippocrates] determines the other instrument of medicine which is potion and <it is called “the” books of simple medicines, laxatives or medicaments”, in Latin “liber de simplicibus farmaciis”. And thus seems that all the books that Hippocrates wrote are XIX\textsuperscript{th} in number, and this
[one] which we have presently exposed or translated which is the first after “the book of the law” or “the introductory” which is as much wanted.
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