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MEDICAL KNOWLEDGE IN HEBREW: MANUSCRIPTS AND EARLY PRINTED BOOKS

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SUMMARY

This article presents a short survey of the Hebrew textual production on medical literature during the Middle Ages in the West. It explores diverse trends in the writing and diffusion of medical texts from the creation of the Hebrew medical corpus, as well as the fortuna that the transmission of this genre had after the introduction of printing.

Introduction

From the end of the twelfth century onwards, learned Jews began to produce science in Hebrew, either by writing their original contributions in this language or - and especially- by translating Arabic and Latin scientific works into Hebrew. Medical knowledge and practice benefited greatly from this trend. During the twelfth to fifteenth centuries, a great enterprise of translation – justified through a variety of arguments by authors and translators in the prologues to their works – took place. Major and minor medical works, both from the Arabic and the Latin, and also from some vernacular languages, were translated into Hebrew and made available to all kind of medical practitioners and literate lay people with an interest in the matter. The result was the creation of a Hebrew medical corpus, similar to that held at Christian universities, which circulated widely through Western Europe at the time[1].

This article is an attempt to analyse trends of textual transmission

Key words: Medicine in Hebrew - Manuscripts – Early Printing

and reception of medical knowledge written in Hebrew. I will explore the role that written texts – which had a significant influence on the transmission of notions on physiology, health and disease within Jewish western communities – played in the training and education of physicians and other healers. This is to be achieved through the analysis of the possible audience of this written material and the access that literate Jews had to it, as well as through the study of the type of texts that were made available and of their circulation. That means that I will try to ascertain how Jewish translators shaped medical knowledge through the texts they chose and made available (by translating them), analysing at the same time whether their choice is a reflection of the different medical and philosophical concerns which preoccupied Jews.

I will finally discuss the impact that printing had on Jewish medicine according to the different editions of medical books made from the end of the fifteenth and throughout the sixteenth centuries.

Medicine in Hebrew

There is not such a thing as Jewish medicine, but medicine practiced by Jews or, in the case of medical books, medicine written in Hebrew. And this last phenomenon, the writing of medical and scientific texts in Hebrew, did not happen, except for a few instances, until the twelfth century. I do not intend to discuss in this article the medical knowledge integrated in Jewish legal and religious texts that, on the other hand, was highly indebted to the healing traditions of the historical context in which they were produced and transmitted – including Graeco-Latin medicine –, but the specialized production of medical texts in Hebrew.

During the Middle Ages, Jewish communities in Islamic countries had adopted Arabic as their mother tongue and as a vehicle for learning and cultural transmission. Arabic medical knowledge, that flourished from the middle of the eighth century and was available through Arabic translations from Greek, as well as from their own original production, was assimilated, learned and even taught by Jews. Jewish authors, such as Isaac Israeli, in the tenth century North

Africa, and Maimonides, twelfth century Al-Andalus and North Africa, wrote their medical works in Arabic[2]. During the high Middle Ages we know of an only example of a work written originally in Hebrew. Shabbetai Donnolo, a contemporary of Isaac Israeli, wrote in southern Italy a pharmacological book on compound medicines called Sefer ha-Yaqar[3]. Around the same time, the Sefer Asaph or Sefer Refu'ot, a medical book written according to some in Palestine in the third or fourth centuries, was circulating in the same area, reedited (or composed?) by Donnolo[4]. But it was not until approximately the end of the twelfth century that Hebrew became a scientific language. It seems that the first factor that contributed to the use of Hebrew for scientific purposes was the necessity of making philosophical and scientific works written in Arabic available to Jews who did not understand that language, that is, to the Jewish communities of Christian lands. The first agents of this endeavour – Jews forced by political and social circumstances to flee from Al-Andalus – contributed also to the process of cultural transmission of Graeco-Arabic knowledge to the medieval Latin world[5].

But this is not the only factor that led to the translation into Hebrew of an enormous scientific corpus. Some practical reasons, as well as reasons of national and cultural identity, also played a role in the initiation and continuity of this endeavour[6]. Romance languages had become the mother tongues of Jews in the West. And even Jews originally from Islamic countries had lost familiarity with Arabic and were unable to understand books written in that language. However, during the Middle Ages, the majority of male Jews, and some women, were literate in Hebrew[7]. The lack of scientific terminology in Hebrew did not scare translators, whose first representatives made a titanic effort to render profane knowledge into their sacred language, adapting Hebrew in the process to the new needs[8].

Soon, Hebrew medicine became closely linked to the medical corpus developed by the Latin tradition. Between 1197 and 1199, a translator active in Provence, whose identity is unknown, translated from Latin into Hebrew a series of seven theoretical and seventeen practical books that formed part of the corpus of medical literature

that circulated in, and/or was translated at, the medical school at Salerno[9]. This ambitious enterprise, which inaugurated the Hebrew medical corpus that was to circulate from then on, witnessed the favourable reception by Jewish learned physicians of the new trends in medicine implemented in Western Europe through the influence of the Latin translations made during the eleventh and twelfth centuries and initiated by Constantine the African. Among these first translations from Latin are: the *Isagoge Iohanicci ad Tegni Galieni* by Hunain ibn Ishaq; Galen's *Microtechne*; Hippocrates' *Prognostikon*; *Liber Pantegni* and *Viaticum peregrinantis*, Constantine the African's translations of al-Majusi's and Ibn al-Jazzar's major works, respectively; Isaac Israeli's *Book of urine*; two works derived from Latin adaptations of Sorano's *Gynaecology*; and the first translation into a language other than Latin from one of the three texts on women's healthcare attributed to Trota or Trotula of Salerno, *Liber de sinthomatibus mulierum, 3*[10].

The production of medical manuscripts in Hebrew is, thus, intimately connected to translation, while original production in Hebrew is less abundant. Actually, it is difficult to measure the impact of science among Jewish and their preferences while they read Arabic texts available to them, except for the texts that circulated in Judeo-Arabic. On the contrary, the supremacy of Hebrew as a scientific language from the twelfth century onwards allows us to appreciate different trends in the acquisition and transmission of medical knowledge among Jews. This supremacy of Hebrew as a scientific language, however, did not prevent Jews from reading, and even writing, their works in Arabic and, later, in Latin and the vernacular[11].

Shaping the Hebrew medical corpus

It therefore seems relevant to ask what this medical corpus in Hebrew is like. Are the preserved texts representative of the trends subscribed by Jews? Obviously, we are discussing here medical trends connected to written production. Even so, we are aware that not all texts are addressed to the same audience. Not all of them are associated to practice, to begin with. And although the translation of

the majority of them is intended for the training of qualified physicians, some seem to have been associated to practitioners who were not necessarily within the framework of licensed practice, or even addressed to a lay interested audience.

But what led translators to choose one text instead of another? It depended on a wide range of factors such as personal or professional choice, economic reasons, availability of Arabic or Latin manuscripts, and developments in the medical profession. This last factor played an important role in the construction of the Hebrew corpus. From the thirteenth century onwards, medical practice began to be regulated by licensing. Not only university trained physicians but anyone aspiring to practice medicine in southern Europe needed of a *licentia practicandi et curandi*, which was generally to be acquired through examination. Jews, who were not, as a norm, allowed in universities, learned medicine through an open system based upon private teaching plus some years of apprenticeship. Oral and textual learning were intermingled and, obviously, textual choice was conditional on the books and theoretical knowledge required by authorities, or the examining board, in order to grant a license[12] (licenses were also granted to illiterate practitioners, but they allowed the practitioner just to perform concrete kinds of cures or practical remedies). Medical books were, in general, intended to give a medical education and to be used both during training and practice. Manuscripts with marginal notes, sometimes very profuse, give evidence of that actual use. Some manuscripts were illustrated with depictions that helped to understand a certain remedy or a physiological description. Nevertheless, there are also samples of beautifully illuminated manuscripts that were hardly commissioned with the aim of being carried by a physician visiting the sick[13].

As we have seen, the curriculum for licensed physicians was, in a high degree, shaped by university curricula. Although not exclusively. Contemporary philosophical concerns that preoccupied Jews also played a role in the shaping of the corpus. This can be observed

in a survey of the texts and authors chosen for translation, which often correspond to those whose demand was high amongst contemporary intellectual circles. For example, Galen, whose influence reached Hebrew medicine through Arabic medicine, was translated on numerous occasions into Hebrew: Semuel ibn Tibbon translated the *Microtegne* with a commentary by Ali ibn Ridwan; his son Moses also translated works by Galen along with those of influential Arabic authors (Ibn Sīnā, al- Rāzī and Ibn Rushd); Zerayah ben Yishaq Hen or Gracián translated in the thirteenth century *De causis et syntomatibus* and part of the *Katagene*; Hippocrates' *Aphorisms*, together with Galen's commentaries, were also translated from Arabic by Nathan b. Eliezer ha-Me'atī (thirteenth century), who also translated the treatise *On airs, waters and places*; Kalonymos ben Kalonymos translated between 1307 and 1308, Galen's *De clysteriis* and *De venesectione*[14].

Regarding original Arabic works, al-Zahrāwī's *Kitāb al-tasrīf liman aŷiza an al-talif (The recourse of him who cannot compose [a medical work of his own])*, a compendium of health comprising thirty books, was rendered into Hebrew in two occasions: between 1254 and 1262, by Shem Tov ben Yishaq Tortosi with the title *Sefer ha-shimmush*; and several years later by Nathan b. Eliezer ha-Me'ati. It seems that some fragments of the Tasrīf were also rendered by anonymous translators[15].

Some Arabic major works were translated into Hebrew both from Arabic and from Latin, which makes very difficult to determine the path of transmission, but illustrates how highly estimated they were. It also shows Jewish appreciation of both Arabic and Latin medical traditions, which tended towards the Latin model from the end of the twelfth century. Al-Rāzī's best known work, the al-Kītab al-Mansūrī *(Liber Ad Almansorem or Liber Almansoris in Latin)*, was translated into Hebrew from the Arabic in 1264 by Shem Tov ben Yishaq Tortosi. In the second half of the fourteenth century, Leon Joseph of Carcassonne made an abbreviated translation of the ninth book (*De curatione aegritudinum qui accidunt a capite usque ad pedes*) from Gerard of Cremona's Latin translation,

adding Galen's commentaries. Recently, Tzvi Langermann has identified a new translation from the Latin of the whole work, whose only extant manuscript was copied in 1374 in Portugal[16].

Ibn al-Jazzār's Zād al-musāfīr wa-qūt al-hādir (*Provisions for the Traveller and Nourishment for the Sedentary*), that had been translated into Latin by Constantine the African at the end of the eleventh century under the title *Viaticum peregrinantis*, and had become before long one of the most influential medical books in medieval Europe, was translated three times into Hebrew. Twice from the Latin: in 1197-99 by an anonymous author, who attributed it to Isaac Israeli, under the title *Sefer ya'īr nativ*, and later by Abraham ben Isaac as *Tsedāh la-orechim*; and once from the Arabic, by Moses ibn Tibbon in 1259 under the title *Tsedat ha-derakhim*[17].

The work of Ibn Sīnā (980-1037) was translated into Hebrew on many occasions, particularly the Canon, the medical text that circulated most widely in Hebrew. It was translated by Nathan b. Eliezer ha-Me'ati and by Zerayah ben Yishaq Hen in the last quarter of the thirteenth century, and by Yosef ben Yehošuah ibn Vives Lorki one century later. There are also a good number of anonymous translations[18]. Also the Arjūza, a poem summarizing the fundamental medical knowledge of Ibn Sīnā's time, was translated at least four times into Hebrew, the first one executed, together with a commentary, by Šelomoh ben David in 1233[19].

Regarding works written originally in Latin, masters from Montpellier's medical school, such as Arnold of Vilanova, Armengaud Blasi, and other Christian medical authors were soon translated. For example, six works by Bernard of Gordon were translated into Hebrew. The Lilium medicinae, his major work, was translated twice in the fourteenth century, by Moseh ben Semuel and by Yequtiel ben Salomon of Narbona, and probably once more, although this last one has not been identified yet[20]. In the second half of fourteenth century, Abraham Abigdor, the first Jew known as to have studied at the medical school of Montpellier, translated Gerard de Solo's *De febribus* and Arnold of Vilanova's *Medicationis parabolae*[21].

These instances illustrate the resemblances between the Hebrew medical corpus and the medical corpus that circulated in Latin during the late middle ages, which also incorporated numerous translations form the Arabic. But the fact that some works have been preserved only in their Hebrew translation may point out to a certain preference on the part of Jewish physicians that was not always shared by their contemporaries. This is especially the case with some Arabic works that appear to have been overlooked by both Arabs and Christians, since they have been preserved exclusively in Hebrew, or in Judeo-Arabic, i.e., Arabic in Hebrew script. For example, the *Sefer ha-segulot* is the Hebrew translation of a Arabic treatise written by 'Adl al-Rahman b. Ishaq b. al-Haitham (tenth century), now lost and of which only the Hebrew version has been preserved (in eight copies). Moreover, based on this treatise, an unknown author wrote in the twelfth century the *Sefer ha-nisyonot* or *Book of medical experiences*, a treatise on therapeutics preserved in five manuscripts[22]. In total, 13 Hebrew manuscripts of a book whose original Arabic was lost and that never, as far as we know, was translated into Latin. Certainly, it must have had some interest for Jewish readers.

Original Hebrew production also meant sometimes the re-elaboration of medical notions that circulated at the time. While learned Hebrew works may have been highly indebted to Graeco-Arabic science, like the *Tsori ha-guf* and the *Sefer ha-yosher* – two works written in the thirteenth century in the North of Spain and Provence, respectively[23] –, practical and less scholarly works show at times certain "judaization" of the ideas. For example, by integrating practical kabbalah in their magical remedies[24].

Apart from the cited factors that derived in a given corpus of translated works (curricular requirements to obtain a license, and contemporary intellectual preoccupations), the translators' personal choice, which is sometimes expressed in the prologues to their works, is also an aspect to take into account. They often expressed, for example, their wish of providing Jewish physicians with texts they needed in the practice of their profession, and Jewish population with well trained Jewish physicians[25]. This is true especially in

the case of the translators who were medical practitioners themselves. For many of them, economic incentive may have played an important role in the election of texts (remuneration for day of work or for folio), as well as the availability of original texts especially in case of translations. In fourteenth century Provence a ban against the sale of Latin books to Jews was enacted, which made more difficult and expensive to get texts to be translated[26].

According to what has been said until now, we are to suppose that, in general, the titles selected to be translated and/or copied were somehow in demand. Another way of establishing the relevance or popularity of a given work is the number of copies that were done of it. Undoubtedly, the most copied medical book in the history of Jewish medicine is Avicenna's *Canon*. One hundred and five copies have been preserved of it, although only four of them contain the whole five books. We have to sum up to this the large number of commentaries that were written on it by Jewish authors. Benjamin Richler has investigated the number of manuscripts extant of each one of the five books. The results offer us an approach to the medical issues that seem to have preoccupied Jewish practitioners at the time[27].

Book I	General physiology, disease, health and therapeutics	52 mss.
Book II	Simple medicines	32 mss.
Book III	Pathology of certain organs	21 mss.
Book IV	Fevers, signs, symptoms, diagnoses, prognoses, minor surgery, tumours, wounds, fractures, bites, poisons	44 mss.
Book V	Compound medicines	13 mss.

Other works seem to have been also very popular, although never reached the number of copies than the *Canon* did. Bernard of Gordon's *Lilium medicinae* has been preserved in 30 mss[28]; Hunain ibn Ishaq's *Isagoge* in 37 mss, 17 in the translation from the Arabic and the rest from the Latin[29]. However, some books that have not been apparently preserved in many copies seem to have borne a large influence upon other works. The *Sefer ya'ĭr nativ* (translation of Constantine's *Viaticum peregrinantis* and preserved, as far as we know, in five copies[30]) influenced many other works, especially regarding sexual diseases. We found its important ascendance in the *Sefer ha-yosher*[31], but also in anonymous works on women's healthcare, some of which reproduced whole literal fragments, as the late medieval short treatise called *Sa'ar ha-nashim*[32].

But, can we measure the individual success of the texts included in the Hebrew medical corpus through the assessment of the number of translations and its distribution? As we have seen, some medical texts were translated in several occasions and copied repeatedly, while other texts seem to have been soon disregarded. Nevertheless, it is difficult to reach conclusions on the success of some texts over others just on account of the preserved manuscripts, since vicissitudes of transmission may have modified sensibly the number and distribution of copies that were passed down. And although sometimes we can resource to different kind of sources, as letters or contracts, to acquire more data about the commission and production of translations and manuscripts copies, this information is not yet enough to give a whole picture of medical knowledge that circulated among Jewish communities.

The progressive hardening in the life conditions of Jewish communities in southern Europe was a serious obstacle to the tasks of translation and copying, and led to the destruction of thousands of manuscripts. Scholars have estimated the extant number of medieval Hebrew manuscripts in 40.000 volumes in the West, plus 210.000 fragments from Cairo's Genizah (or repository of manuscripts), and 15.000 from the Russian National Library in San Petersburg. During the last few years new Genizot are being discovered, yet the total

amount of extant manuscript seem to be no more than 5% of the original production. And of those, only some 3000 are dated (10%). Studies on these dated manuscripts offer a pattern to understand the chronological and geographical distribution of the production along the Middle Ages[33].

There is no definitive estimate as to the number of works translated and written in Hebrew, neither as to the number of medical manuscripts produced, although it seems that the proportion was very high. Some studies point out, for example, that a good part of the manuscript circulating in Judeo-Arabic was devoted to medicine. Joseph Shatzmiller has said that the Medieval Jewish Library was richer in medical volumes than the one existing today in Israel, where four universities teach medicine in Hebrew[34].

Printed books

Printing, which was introduced early in Jewish communities, radically changed the panorama I have outlined. First attempts at printing seem to have taken place in Avignon in 1446, although the first dated Hebrew printed book was produced in 1475 in Padua (Italy). Nevertheless, there is evidence that at least ten books were produced before that date[35].

By 1492, Jewish presses were active in seven cities in Spain and Portugal, six in the North of Italy and two in the South. When Jews were expelled form Spain in 1492, many thousands settled in Naples, a flourishing town at the time, which was able to support three competing Hebrew presses. The French conquest of 1495, made it impossible for Jews to remain there. By mid-sixteenth century Venice had become the capital of Hebrew printing, and along the century Hebrew books were printed in fifteen Italian cities[36].

From 1475 to 1500, around 139 incunabula editions were produced, of which 2000 copies are nowadays preserved in public libraries. Most of these items are Bibles, religious and legal texts, although philosophy, kabbalah and science are also represented. Of them, just one medical item is listed. And this is, unsurprisingly, Avicenna's *Canon*. The *Canon ha-gadol* (in Hebrew), probably the

largest Hebrew incunabulum, was printed between 1491-92 by Azriel ben Joseph [Ashkenazi Gunzenhaus] in Naples. It was made up of Nathan ben Eliezer ha-Me'ati and Joseph ben Joshua ha-Lorkìs joint translations. There have come to us 51 whole and fragmentary copies, which are nowadays distributed between 41 libraries. The book was never reproduced again[37].

However, after the *Canon* hardly any medical books were printed during the sixteenth century. In 1542 Averroes' *Colliget* was printed; and in 1559 his commentaries on Aristotle, on which natural philosophy at the time was based. Gershom Ben Shelomoh's *Sha'ar ha-shamayim* (*Gates of Heaven*) was published in Venice in 1547[38]. This work, written originally Hebrew in the fourteenth century, was divided into three parts dealing with science, astronomy and theology. The part devoted to anatomy and physiology, where the author presented his own clinical observations, was especially interesting to medical students[39]. Another book on medicine, by Yehudah al-Harizi, was printed in 1552 in Ferrara[40]. Shem Tov ibn Falaquera's *Tsori ha-guf (Balm of the body)*, written in the thirteenth century, was published in Cremona in 1557[41]. These and a few works more, are the only printed representatives of the otherwise rich Hebrew medical corpus.

One cannot stop wondering why does this radical change in the trends of textual production on medicine happen. And the answer is not an easy one. Certainly, demand played an important role in the decisions of printers, who only produced those books of which they had some guarantee of selling the 300 copies made in every print[42]. However, the scarcity of printed medical books is also connected to the situation that Jewish communities were living (destruction of books and persecution) and their reaction to it. Printed production seems clearly concentrated in religious and legal writings. As an example, of the approximately 133 printed books produced until 1600 and kept in the British Library, around 96 are copies of the Bible, as a whole or of some of its books[43]. Was this a way of expressing Jewish identity in the new age? Hebrew seems to have lost its prominence as a vehicle of science. And there is evidence that by the

end of the fifteenth century Jews were reading scientific works in their original languages, Latin and the vernacular. For example, manuscripts in other languages with annotations in Hebrew, witnesses of the access Jewish physicians had to medical texts in those other languages, are fairly common.

Nevertheless, and although Jews printers do not seem to have shown the same promptness in producing medical books as they did with religious books, it does not mean that medical texts were not produced. In fact, the task of copying medical manuscripts in Hebrew was still carried out during the fifteenth and sixteenth centuries, as we can ascertain by the number of copies preserved[44].

Therefore, in contrast with manuscripts, printed books are not reliable as a historical source for the understanding of patterns of readership and book ownership, nor of the circulation of medical notions in Jewish communities. They offer a distorted and incomplete image of the richness of the Hebrew medical corpus that was still circulating among medical practitioners and interested learned Jews at the time, and are not representative of the scientific interest of the moment[45].

Conclusion

Manuscripts and books are part of the material culture of a given historical moment. They tell us about how they were transmitted and received, and about how they shaped education and thinking of their readers. During the Middle Ages, the existence of a rich corpus of medical texts written in Hebrew and circulating widely among the Jewish communities of Southern Europe is evidence of a specific and deep interest of Jews in theoretical and practical medicine. The fact that most of the works are translations from Arabic and Latin is also witness of the intellectual interests and the professional aspirations of Jewish physicians and intellectuals. Apart from the vicissitudes of textual transmission and distribution, the patterns that guided the choice of works for translation and copying is also eloquent of the systems of thought adopted by Jews. Even the timing of translation is consistent with their choice. An example is that Avicenna's *Canon*

was not translated, despite the fact that it had been available in Arabic and Latin for two and one centuries respectively, until new trends in European universities implemented what has been called "new Galenism", and Avicenna's work was expected to increase the understanding of Galen[46].

The surprising nearly absence of medical works in the beginning of printing is also evidence of a change in the patterns of readership and book distribution. And also in the way in which medical education was implemented within Jewish communities, where more learned members had access to Latin and vernacular texts and where religious studies took preference over scientific interest.

This is just a very brief survey of Hebrew medieval production in medicine. Nevertheless, I hope it may give us a notion, even if slight, as how medical knowledge and practice were acquired and managed within the framework of Jewish western communities.

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25. These are the reasons alleged by Leon Joseph of Carcassone in the prologue to his translation of Gerard of Cremona's Latin translation of Liber Ad Almansorem. See GARCIA-BALLESTER L., FERRE L., FELIU E., see ref. 5, pp. 107-117.
26. SHATZMILLER J., see ref.5, p. 31.
27. See RICHLER B., ref. 18. See also FERRE L., see ref. 18, pp.; and SHATZMILLER J., see ref. 5, p. 49.
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29. See FERRE L., *The Medical Work of Hunayn ben Ishaq (Johannitius) in Hebrew translation*. Korot 1995; 11:42-53.
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Articoli/*Articles*

I MANOSCRITTI DELLE OPERE DI GEROLAMO MERCURIALE CONSERVATI NELLA BIBLIOTECHE DI CESENA, FORLÌ E RAVENNA

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SUMMARY

THE MANUSCRIPT CODICES OF GIROLAMO MERCURIALE'S WORKS KEPT IN MUNICIPAL LIBRARIES IN CESENA, FORLÌ AND RAVENNA

Girolamo Mercuriale (Forlì 1530-1606) was a celebrity in his day, not only in the medical field, but in any other branch of humanist learning. He exerted his widespread contacts outside medicine with philological humanists, antiquarians, architects, and artists interested in ancient material and social culture. He studied in Bologna and Padova and taught at Padua (1569-1587), Bologna (1587-1592) and Pisa (1592-1606). He wrote more than twenty printed books, a lot of them derived from lessons gathered by his students. He wrote prolifically on all sorts of subjects, from psychiatry to gynecology, pediatrics, dermatology, toxicology, infectivology, epidemiology, history of medicine.
In the Municipal Libraries in Cesena, Forlì and Ravenna are kept twelve codices concerning Girolamo Mercuriale's works handwritten between the sixteenth and the seventeenth century. The main body of these works concerns the lectures dictated in Padua, which will merge with the printed texts of the Medicina Pratica *and the* De morbis mulieribus praelectiones, *printed both in Venice respectively in 1603 and 1587. Two codices are autographed and includes notes and reflections on Hippocrates works, a translation into Latin of two Polibio's works (*Problemata *and* De fraterna benevolentia*) and the* Constitutio *of Padua from 1577 till 1578. These codices bear witness to the importance of Mercuriale's work and to the diffusion of his lectures. Moreover, their analysis enables us to understand*

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