The Medical Paratext

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Paratextual elements in *materia medica* manuscripts: The Arabic summaries of Galen's *Method of Healing* and *On Simple Drugs Ignacio Sánchez* (University of Warwick)

Galenic notions and theories circulated in pre-Modern Islamic lands in different forms and genres. Although the Arabic translations of Galen's works made in the 3rd/9th century continued being copied and used in medieval times, a large part of the Galenic corpus consisted of summaries, notably the *Summaria Alexandrorum* ascribed to the Alexandrian medical school, but also numerous abridgements of different sorts composed by Arab physicians. These summaries could comprise an entire work or a section of it, as happened with the fourteenth book *of* Galen's *Method of Healing* (*Hīlat al-bur'*) devoted to *materia medica*, which due to its practical character was abridged several times and in various formats.

This paper will compare and discuss several summaries of two Galenic works dealing with *materia medica*. The first one is the aforementioned Book 14 of the *Method of Healing*, preserved in several manuscripts from different times and places. The summaries of Book 14, which circulated in tree and tabular form, were copied by unknown physicians who adapted its contents to their own personal interests and needs, sometimes with explicit statements. The second work under discussion is the summary of Galen's *On Simple Drugs (al-Adwiya al-mufrada)* likely composed by Maimonides, which has survived in two recensions. I will survey the textual and manuscript tradition of these summaries, analyse the features and scribal —or authorial— interventions that can be understood as paratexts, and discuss the relevance of this notion to the practical character of *materia medica* manuscripts.

Making Galen accessible through paratexts: The case of Yale University Library, Beinecke MS.1121

Sophia Xenophontos (University of Glasgow)

This paper focuses on Yale University Library, Beinecke MS.1121, a twelfth-century medical manuscript containing eight Galenic treatises that come with four categories of paratexts. The first of these are editorial paratexts that help improve the state of the Galenic original through marginal and interlinear additions of missing words or lines, elimination of superfluous text, provision of variant readings and correction of erroneous words. The second category

encompasses explanatory paratexts that enhance acquaintance with the contents of the Galenic works and ensure rapid identification of key terms. The main examples here are notabilia and brief headings in the form of questions and answers. The codex also makes use of visual paratextuality, especially branch diagrams, which are important for making complicated material more comprehensible and easily memorable particularly, though not exclusively, for didactic purposes. The fourth category concerns linguistic paratexts, whereby Galen's wording is made more accessible through linguistic and conceptual adjustment in the interests of non-Greek-speaking readers and non-experts in medicine. The investigation of medical paratextuality in Beinecke MS.1121 shows that paratexts are of primary importance for how Galen was read, commented on, taught and made sense of by producers and consumers of manuscripts from late antiquity to the middle Byzantine period.

Byzantine diaireseis in a Hippocratic manuscript

Giulia Ecca (Sapienza University of Rome)

In the first folia of the MS *Vaticanus Urbinas graecus* 68 we find several didactic *diareseis* - namely schematic divisions - on different medical issues (illnesses, urines, pulses etc.). These diagrams are generically attributed to the Laskaris family, who lived in the Byzantine Period. The aim of my paper is to further investigate their composition and structure, as well to understand their possible original background.

Ordering medical books in the Roman Empire: A preliminary survey

Arthur Harris (University of Cambridge)

How, when and why did the paratexts found in late antique and early medieval medical manuscripts emerge? I focus on one case: the contents list. In the ancient Greco-Roman world, a broad contrast may be drawn between medical texts in the Roman Empire and in earlier periods. The reader of Hippocratic texts had to unfurl and read continuously through rolls of scriptio continua in search of a topic. Hellenistic papyri (e.g. Rylands 531) substantiate this picture, with minimal structure provided by *paragraphoi* dividing recipes. The situation was transformed by the introduction of the numbered contents list, first reliably attested in Latin authors of the first century CE such as Scribonius Largus. Over the following centuries, medical texts were increasingly divided into numbered chapters and prefaced by tables of contents, allowing non-linear reading, and enabling authors to organise vast collections of information. What factors were responsible for this paratextual innovation in medical writing? How far were writers' choices about how to organise their material influenced by views on the aims and values of the art of healing? First, I outline the early history of the numbered contents list and numbered titles in Roman medical texts, while also referring to their uses in nonmedical texts. Next, I explore the question of how these paratexts related to Roman medical writers' aims and values. My strategy here is to pay equal attention to those medical writers who chose not to adopt numbered contents lists.

Medical paratexts in the making of the Latin version of Alexander of Tralles: A provisional typology with examples

David Langslow (The University of Manchester)

This paper arises in the course of preparing a first critical edition of the Latin version of Alexander of Tralles, the short work *On Fevers* ('book 3' of the Latin Alexander) and the very extensive *Therapeutica* (books 1 and 2).

The conference prompts welcome reflection on the various kinds of Latin paratext in the Latin Alexander (i.e. material not employed in the basic rendering of the Greek Alexander into Latin). Latin paratexts appear either in a part of the tradition, one or more manuscripts, in the course of interpretation and transmission, or across the manuscripts tradition, in its earliest reconstructible stage, serving the making of the Latin text in the first place.

After a brief introduction to the Latin Alexander, this paper offers a provisional outline typology of Latin paratexts observed in editorial work to date, including especially (1) explanatory amplifications of Greek expressions (including etymologies, double translations, and further explications), and (2) 'editorial' material composed to introduce or to link originally discrete component parts of the Latin Alexander. Instances of both types are largely successful in 'infiltrating' the main, originally Greek text. Instances of both types may serve on the one hand (a) to group manuscripts within the Latin tradition, and on the other hand (b) to show the proximity of the Latin Alexander in time and space to the – better studied but still largely elusive – Latin versions of Oribasius.

Tree diagrams in late antique Alexandria and beyond

Oliver Overwien (Humboldt University of Berlin)

My lecture is about the dissemination and function of medical tree diagrams in late antiquity and the Middle Ages. I will start with the so-called Tabulae Vindobonenses, which were conceived as a textbook in late antique Alexandria and served there as a supplement to lectures about the writings of Galen of Pergamon (5th-7th centuries AD). The teaching of the Neoplatonists shows that tree diagrams were also widespread outside of medicine, i.e. in other disciplines of late antique teaching in Alexandria.

The second part of my lecture will deal with the fact that medical tree diagrams, starting from late antique Alexandria, found their way into the Middle Ages and did so in different ways. Several examples can be found in Greek manuscripts of Byzantine times. They also found their way into the oriental tradition as part of the Arabic translations in the 9th century AD. Interestingly, they circulated here not only as tree diagrams, but also as continuous text (*Summaria Alexandrinorum*). Finally, the Latin tradition shows that tree diagrams of Alexandrian origin were also used in the West to visualise medical content.

However, a look at all these stages of reception not only shows how popular medical tree diagrams were in different cultures over the centuries. It can also show that they served new purposes. I will address some of them in my presentation.

Explaining with images, explaining by images: The long life of the *fetus-in-utero* figures of Mustio's *Gynaecia*

Anna Maria Urso (University of Messina)

In the transmission process of Mustio's *Gynaecia*, an important role was played by images, in particular those depicting the fetal positions in the uterus. Already present in the most ancient manuscripts, these images, in addition to being transmitted together with the text, also circulated separately in a group of twenty manuscripts, where they appear in some cases alongside sections of Mustio's text as captions, in others without text or with gynaecological texts other than the original one.

These images soon captured the interest of scholars, who examined their workmanship or wondered about their dependence on Soranus. However, inadequate attention has been paid both to their integration into Mustio's compositional project and to the processes that favoured their displacement in texts other than the original one, to the point of transforming them from a paratext into an autonomous text.

My contribution aims to study the *Gynaecia* images from this perspective. In conclusion, I will also consider their possible philological implications and the challenges that the treatment of images poses to future editors of Mustio.

Paratexts in medieval Greek translations of Arabic texts: Vaticanus gr. 300 and the involvement of the Xiroi family

Petros Bouras-Vallianatos (University of Edinburgh)

This paper focuses on the various paratexts in Vaticanus gr. 300, a codex dated to the first half of the twelfth century. This manuscript is the earliest surviving witness of some important Arabo-Greek medical translations, such as the *Ephodia tou apodēmountos*, i.e. the Greek translation of Ibn al-Jazzār's (fl. tenth century) *Zād al-Musāfir wa-Qūt al-Hādir (Provisions for the traveller and nourishment for the sedentary*), which was widely circulated in late Byzantium. Interestingly, this manuscript was copied in Southern Italy or Sicily and thus its study can provide us with important insights into the medical activity of Greek-speaking physicians in the multicultural milieu of this region.

The first part of this paper examines the various kinds of interlinear and marginal notes in Vaticanus gr. 300 with the aim of distinguishing between various categories of data (e.g. synonyms, re-directions to other parts of the manuscript or other medical works, supplementary instructions/material etc). The second part aims to introduce a new notion in the study of medieval medical manuscripts, the so-called 'hidden paratext', i.e. the infiltration of additional material into the main text prior to or at the time of copying. For example, one finds several additional pharmacological recipes by Philip Xiros, most probably the commissioner of the codex itself, that have been included by the scribes in various chapters of the translation in the main body of the text, thus constituting an integral part of the *Ephodia tou apodēmountos* in this witness.

The paratexts of the manuscript tradition of John Zacharias' treatise on the psychic pneuma

Isabel Grimm-Stadelmann (Bavarian Academy of Sciences/University of Munich)

Some of the manuscripts containing the twofold treatise on the psychic pneuma by the Aktouarios John Zacharias (ca. 1275–1330) display a considerable amount of accompanying scholia which might be addressed as paratexts or paratextual elements. They refer to selected passages or features of the text mostly adding philological suggestions, terminological alternatives or synonymous options, but some of them also show different levels of engagement discussing some textual statements or key words in varying length. The current progress of the critical edition of John's treatise enables now the differentiation of approximately nine groups of different sorts of paratexts with more or less direct textual reference. My paper aims to present some examples of their broad variety comprising structural elements, corrections and emendations, commentaries of varying length, annotations supplementing and continuing some thought-patterns, detailed discussions of selected textual elements, diagrams, terminological, pharmacological and botanical explanations, therapeutical notes and possibly also hints to case studies and observations on individual patients. Besides, there also occur some paratexts containing recipe notations obviously not being in direct relation to the main text but seeming to make random use of the free space at the manuscripts' margins. The mentioned paratexts not only mirror a lively and intense scientific interaction of their authors with John's treatise but also provide interesting insights into the continuous evaluation and the progressive development of medical literature and demonstrate some patterns of its reception processes. Preparing the critical edition of John's treatise raises multiple questions about an adequate method of editorial visualisation of these paratexts corresponding to their historical value.

A medical *Hausbuch* from the Palaeologan Age: Neophytos Prodromenos and his Parisinus gr. 2286

Flavio Bevacqua (University of Padua)

In the second half of the 14th century, in the Petra neighbourhood of Byzantium, we witness a remarkable upswing in the copy of medical manuscripts, thanks to the Prodromos monastery and its adjacent hospital, the so-called *Xenodocheion tou Kralê*. One of the protagonists of this renaissance was Neophytos Prodromenos, a hieromonk who held one feature that distinguished him from many of his colleagues: he harboured a marked penchant for medicine and botany.

The aim of the paper is to analyse the paratexts of Neophytos in his personal medical *Hausbuch*, the autograph Parisinus gr. 2286. This notebook, thanks to his *marginalia*, depicts a "living" medical exercise, always in evolution, whose margins have been filled with additional notes that witness the practical use of the texts Neophytos had previously copied for himself.

The paratexts represent a rich supplement to the *sylloge* of medical works (Galen, Alexander of Tralles, Paul of Aegina, and many others) that constitutes the main text. In the margins, Neophytos puts together different sections of the same work or collates different works on the same subject, creating a dense network of intertextual references based on his

needs. He annotates his personal experience and transliterates Arabic names of ingredients, denoting active knowledge. He also affixes astrobotanical notes to Dioscorides and medical comments to the magical work *Cyranides*, in an attempt to conjugate ancient medicine with pseudo-scientific practices in vogue at the time.

The paratexts henceforth outline the physiognomy of their author, a peculiar monk who quotes Galen in his theological treatises. Their study will help to reconstruct a page of history of Byzantine medicine through the bequest of Neophytos's hand.

Traveling in quest of knowledge. The medical formation of al-Marāgī (13th c.) according to the paratexts in a Manisa manuscript

Jawdath Jabbour (Centre national de la recherche scientifique, Aix-Marseille)

An Arabic manuscript now housed in the Turkish library of Manisa presents a unique and exceptional document that attests to the medical formation in Anatolia and Northern Iraq and Syria in the 13th century CE.

The manuscript's copyist, owner and user Abū Yaḥyā Zakariyā b. al-Šayḫ al-Saʿīd Bilāl b. Yūsuf al-Marāġī (fl. 1221-1232 CE) copied a number of medical treatises and specified at the end of each one of them, in a detailed colophon, when and where he finished his copy. Sometimes he also indicated when he started working on a treatise, thus allowing us to conclude how long studying a certain medical text took. There are further four certificates of audition (*ijāzat al-qirā*'a) granted by the well-known polymath, physician, philosopher 'Abd al-Laṭīf al-Baġdādī (d. 1231 CE). They are presumably written in the latter's hand and provide dates and places of when and where they were granted. These colophons and certificates of audition make it possible to reconstruct al-Marāġī's formation over a period of about fifteen years. They also offer a historical witness to the peregrinations of 'Abd al-Laṭīf al-Baġdādī in the final years of his life, between Aleppo and several Anatolian locations.

This paper will present the manuscript, offer a summary of its different kinds of annotations before focusing on the steps of al-Marāġī's formation.

The paratexts in al-Marāġī's medical manuscript

Elvira Wakelnig (University of Vienna)

The 13th century physician Abū Yaḥyā Zakarīya al-Marāġī copied and annotated a number of medical treatises which he finally gathered in a manuscript (now in the Manisa library in Turkey). My contribution will focus on two types of paratexts contained in al-Marāġī's manuscript. The first type are short excerpts that al-Marāġī jotted down on space formerly left empty between the copied treatises. Studying these paratexts sheds light on how he sought to complement and complete the main texts copied as well as on what he considered being missing in these texts. The second type of paratexts consists of marginal notes that al-Marāġī added to some of the copied treatises. The treatise annotated most thoroughly are the *Medical Questions* (*Masā'il fī l-tibb*) by the famous ninth century translator, physician and philosopher Hunayn ibn Isḥāq. Annotations to the *Medical Questions* are introduced by words such as "i.e. (*ay*)",

"gloss (*hāšiya*)" or "comment (*šarḥ*)" and sometimes attributed to specific authors such as Galen or Ibn Sīnā. The positions and contents of these annotations show, e.g., for which medical terms al-Marāġī noted an explication, which statements of the text he supplemented and even opposed to statements by other medical authorities. In this way we will gain insight into how al-Marāġī studied the *Medical Questions*.

Crateuas's last Arabic heir. Remarks on the anonymous illuminated herbal Princeton, Garrett 583H (Hitti 1064)

Fabian Käs (University of Cologne)

Crateuas, nicknamed the "collector of roots" (Κρατεύας ὁ ῥιζοτόμος), who allegedly served Mithridates VI of Pontus (reigned 120-63 BC) as personal physician, is traditionally regarded as the inventor of the concept of illuminated pharmacological herbals. His idea of a lifelike depiction of a plant accompanying its description and information on its medicinal uses, was adopted by Pedanius Dioscorides (ca. 40-90 AD), whose De materia medica soon replaced the now lost work by his precursor. Dioscorides' book was highly appreciated by Arab physicians through the centuries; the doctor and geographer al-Idrīsī (12th c.) even referred to it as his Holy Scripture. Περί ὕλης ἰατρικῆς was translated several times into Arabic. The 9th century standard version by Istifan ibn Basīl was mostly transmitted without miniatures. However, already the anonymous older translation, discovered a few years ago by Manfred Ullmann, contains a great number of illustrations of plants. In the tenth century, an illuminated deluxe copy of the Greek original – apparently paralleling the famous Vienna Dioscorides (ca. 515 AD) – was sent as a diplomatic gift from Byzantium to Cordoba, where it was translated anew. Two more richly illustrated Arabic versions date from the 12th and 13th centuries. At about the same time, books on plants by autochthonous authors such as al-Ghāfiqī or Ibn Fadlallāh al-'Umarī were also decorated with coloured drawings. Most Arabic books on this topic written for the practical use of physicians were, however, copied without such expensive illustrations. One exception is a unique, but unfortunately anonymous, manuscript kept today in Princeton. Since neither the author nor the date of the text are known, this codex probably dating from the 15th century was almost totally neglected by the historians of Arabic medicine. After a brief outline of the history of Arabic herbals, Käs will focus on the importance of the Princeton manuscript as the youngest illuminated text belonging to the tradition founded by Crateuas. Special attention is given to the choice and arrangement of the plants contained in this codex and to the textual precursors of its anonymous author. The most important of these is obviously the influential book on simple drugs by Ibn al-Baytār written in the 13th century. The arrangement of the lemmas of the Princeton text mainly follows that by Ibn al-Baytar with a few additions. Since no illustrated copies of his Jāmi' are recorded, the miniatures were probably taken from another source.

Brain ventricles: From text to diagram (and back?)

Shahrzad Irannejad (University of Mainz)

The ventricles of the brain have been among the most salient structures in the anatomy of the brain in the medieval Islamicate tradition. The ventricles have been the meeting point of two discourses as received in the Arabic tradition: Galenic pneumatic physiology and Nemesian ventricular localisation of the inner senses. The ventricular system of the brain is a complex structure comprising of four interconnected spaces, and textual representation does not suffice to adequately describe the positioning of the ventricles with regard to one another. Rare diagrams depicting the ventricles show up in some manuscripts of Al-Manşūrī fi-t-Tibb by Rhazes (fl. mid-9th century CE) as complementing portions of the text describing the structure of the brain. These paratextual elements ---most of which use such basic shapes as circles and triangles to depict the four ventricles and their relation to one another- stand out in the Islamicate tradition, as most of them accurately depict the number and spatial relation of the ventricles to one another. In the later textual tradition in the Islamicate context the number of the ventricles were reduced to three, and the same number was received in the Latin tradition, on the basis of which numerous diagrams depicting three consecutive ventricles were produced. In my paper, I will address the possibility of establishing the relation between the manuscripts of this medical compendia by relying on these paratextual, instead of textual, elements. I will also discuss the importance of these paratextual elements —as reformulations of a textual tradition- in the diachronic transformation of the concepts of the brain and its ventricles, and their number.

Types of prologues in pharmacological texts, 12-14th century

Iolanda Ventura (University of Bologna)

In texts dealing with pharmacology, pharmacy, and pharmacotherapy, prologues play a pivotal role, as they offer some important insights into the perspective adopted by the writer, the criteria he used to structure and organise the material, and, most important, the theoretical background underlying his work and the perception and interpretation of nature and natural objects with reference to medicine and therapy. Therefore, prologues are important in defining the interaction of medical theory and practice in individual works and in the longue durée, as they witness the attempt to transform pharmacology, pharmacy, and pharmacotherapy in "natural sciences". I will discuss this phenomenon with the help of prologues opening pharmacological and pharmaceutical collections written between the 12th and the 14th century, examining both their content and structure as meant by the compiler and their reception in manuscripts.

The paratextual image: Urine flask illustrations as a mode of interlingual transmission in late medieval Latin Europe

Robin Reich (Fordham University)

Uroscopy, the diagnostic analysis of urine, became an essential aspect of medicine in Western Europe during the later Middle Ages. The practice of uroscopy is based on the work of the Byzantine Greek physician Theophilos Protospatharios, Peri Hulaes Iatrikaes. The practice was apparently common in the Byzantine and Islamicate worlds of the Eastern Mediterranean throughout the early Middle Ages. With the rise of the medical community in Salerno around the twelfth century, Theophilos's work was made widely available to Latin readers in Western Europe as part of the Articella, which became a central textbook of the university medical curriculum. As Theophilos's text, as well as the Latin and Arabic works it inspired, gained prominence in the Latin world, these works also gained an iconographic companion: the urine flask image. Around the year 1300, Latin manuscripts of uroscopy texts became associated with a formulaic image of a physician with a urine flask, often accompanied by an onlooker of some kind, such as a student or a patient. The development of this icon is notable for two reasons: first, because these, and indeed any images of urine flasks, are largely absent from Greek and Arabic uroscopy manuscripts; and second, because these images appear in a time of transition in the uroscopy tradition, when it is not clear that the people producing and consuming the Latin manuscripts of uroscopy texts were in fact practicing uroscopy. This paper establishes the characteristics of the icon of the physician with urine flask and considers its role as a paratextual element in late-medieval medical manuscripts, particularly how it conveyed information about practice that was not included in the texts of this period.



Fig. 1: Urine Flask Miniature. UCLA Benjamin MS. No.3, Bernard de Gordon, *De urinis*, early fourteenth century

Whose hands is this? Late medieval equine medicine between textual concepts, instructional illustration and practical work

Isabelle Schürch (University of Bern)

It is one of the most copied and printed veterinary, but also medical texts in late medieval Spain: The *Libre dels cavalls* by the Valencian nobleman Manuel Dies (1412-1443). His work has long been treated as a mere vernacular translation and recompilation of older veterinary texts and has not received the attention it definitely deserves. Not only does the wide distribution of his text (both geographically and socially) make it an interesting object of research, but also the different illustrations and additions in the various manuscripts. This provides the ideal basis for a comparative paratextual analysis.

The work proposed here aims to investigate the fascinating interplay between textual concepts of medieval equine medicine and paratextual instructional illustrations (e.g. fig. 1). While the basic layout of the work addresses a (male) ruling class whose social status depended crucially on horse ownership and a corresponding competence in riding, the instructive illustrations show young male «care workers» - or just their hands (fig. 2). These «care workers» had to have considerable practical skills and «embodied knowledge». This initially places them in contrast to the horse owners explicitly addressed in the medical manuals. The proposed paper aims to explore this socially specific and practically relevant range of hippiatric conceptual, textual, technical and embodied forms of knowledge and the interplay between text and paratext. In general, it will be argued that different forms of (equine) knowledge required different «horse carers», which can be discussed in terms of the specific (and complementary) functions of text and paratextual instructions: Aristocratic horse owners not only needed to have some basic understanding of medicine and horse care, but also of who could provide what kind of care.



Fig. 1: Manuel Dies, Libre dels cavalls,Fig. 2: Manuel Dies, Libre des cavalls, BibliotecaBeinecke MS.454, f. 1rCapitulary Colombina, Sevilla, MS 5-4-46, fol. 11v

A library in the margins: Paratexts in medieval Hebrew medical manuscripts

Carmen Caballero Navas (University of Granada)

The last decade of the twelfth century witnessed the inauguration of the Hebrew medical corpus in the Christian lands of the western Mediterranean. Built predominantly on translations, it grew and was disseminated over the following three centuries beyond the regions where it originated. Interestingly, a considerable number of the Hebrew medical manuscripts that have come down to us bear some form of paratextual element; particularly in the margins, where it is possible to identify different types of annotations, including glosses, recipes, comments, and even fragmentary and complete treatises. These provide information about the bi/multilingualism of owners and/or users, translation processes, textual (and codices) transmission through time and geography, medical training, actual practice, practice across religious borders, physicians' inter-cultural contacts, and other relevant issues regarding Jewish knowledge and practice of medicine in multicultural settings.

With all this in mind, this paper focuses on the marginal annotations of a group of manuscripts produced between the 13th and 15th centuries, containing encyclopaedias and general works of medicine, with the aim of reviewing and cataloguing them, and studying their functions. The study pays especial attention to extensive paratexts and what we can learn from them in terms of the (intense) practical use to which some manuscripts were put to; their role in the preservation, dissemination and transformation of medical knowledge and practice; and the ways in which they transformed specific texts, creating new meanings.

From index to multilingual synonym list: The fate of a particular type of paratext to Ibn Sina's *Qānūn fī l-Ṭibb*

Sebastian Lauschus and Luca Refrigeri (University of Göttingen)

The present contribution aims to present a particular kind of paratext featuring alongside the Hebrew translation of one of the most influential medical works of the Middle Ages, the $Q\bar{a}n\bar{u}n$ $f\bar{i}$ *l*-*Tibb* by Avicenna. The Hebrew version of the second book of this work, dating from the end of the 13th c., has the characteristic property of being accompanied - at least in some of the extant copies - by an index to the Arabic names of plant and remedies, in which each item is followed by translations and synonyms in other languages, e.g. Latin, Occitan, Catalan or Italian. In some manuscripts, this index is numbered, in other cases it reminds more of a glossary that also provides further information on individual remedies (e.g., where to find it or who else wrote about it). This index is independent from similar indices that are contained in Gerard of Cremona's Latin version of the $Q\bar{a}n\bar{u}n$.

The successive copying processes and the consequent geographical spread of the Hebrew version of Avicenna's work in various parts of the western Mediterranean made this paratext evolve, in particular through the addition of a) new synonyms and translations of the lemmata into the vernacular language(s) of the copyist(s), b) non-original elements from other sources, and c) annotations by copyists to the glossaries, thus forming a sort of paratext within the paratext.

Interestingly, from early times onwards, these lists could also be detached from their original context, thus beginning to circulate independently and to resemble other well-known medical glossaries of Middle Ages, e.g. the *Alphita*. This autonomy of the lists had probably the primary, practical utility of enabling physicians to promptly find the right remedy without consulting the main work.

The independence of the index from the work with which it was initially conceived leads to the following question: is it still possible to speak of a paratext, or is it the case of a paratext that has become a text? The main aim of our paper is to trace these developments by showing selected examples from some 14th–16th c. Hebrew manuscripts originating in the Western Mediterranean area.

Prognosis in paratext: The case of "Sphere of Life and Death" in Hebrew manuscripts *Sivan Gottlieb* (Harvard University)

In the medical market of the Middle Ages, one can find academic physicians alongside other healers. They all worked in a world where the boundaries between "science", "religion", and "magic" were unclear. There is evidence of using magic, amulets, and prayers, also among the academic physicians.

Hebrew medical manuscripts demonstrated these relations with texts that include elements from these different fields. We can find recipes using amulets for healing; recitation; signs for the future; and also, medical astrology that is based on the best time for administering medicine.

In this talk, I want to explore prognosis practices that connect the field of magic and medicine. The focus will be on different practices, texts, illuminations, and particularly diagrams, which try to predict the outcome of a patient's illness, and if he will live or die. I will compare Hebrew to non-Hebrew manuscripts and answer questions about the practical nature of these practices.