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#### Chapter

### Medieval Equine Medicine from Armenia

Jasmine Dum-Tragut

#### **Abstract**

The Armenian medieval and early modern equine medicine has rarely been noticed or researched by veterinarians, historians of science, philologists, or medieval researchers. As Armenia represents both a geographical border and cultural corridor between Muslim East and Christian West, a consideration of its hippiatric texts and their integration into the general history of veterinary medicine can only lead to a deeper understanding of equine medicine from the medieval to the early modern period. They could also contribute toward tracing the paths of knowledge diffusion and transmission across political, linguistic, and religious-cultural boundaries in the time of the Crusades. The role of Armenian manuscripts bridging the traditions of equine medicine from the Muslim East and the Christian West is examined by revealing the complicated history of Armenian horse treatises that traveled the long way from Baghdad via Sis to Tbilisi.

**Keywords:** medieval horse medicine, Cilician Kingdom of Armenia, knowledge transfer, cultural encounter between East and West, Crusades

#### 1. Introduction

In recent years, much research has been dedicated to the cross-cultural and cross-religious aspects of the encounters of peoples from the Christian West and the predominantly Muslim East during the Crusades. The role of the small Oriental-Christian kingdoms and principalities both geographically and culturally located between Europe and Asia was, however, very rarely taken into account.

Equine medicine occupies a prominent role: hippiatric treatises were widely circulated, translated, and adapted. According to tradition, Greco-Roman and Byzantine works lost in Europe in the Middle Ages were preserved in Arabic libraries in translations from the original Greek to Arabic. These texts returned to Europe in the Renaissance, with a greater or lesser influence of Muslim/Eastern knowledge on European. Detailed analyses show that even if European writings provided the basis for Arabic hippiatric books, the Arabs also referred to the knowledge of Indian medicine and their own local practices. Yet none of these studies question how and where European and Eastern traditions met, and whether there were any cultural intermediaries.

Only gradually, researchers began to understand the historical significance of a corridor country and significant negotiator with the peoples of the Far East: the Armenian principality and later Kingdom of Cilicia between the eleventh and fourteenth centuries. Despite religious and linguistic differences, mutual influences were revealed, which help to identify socio-cultural parallels, particularly concerning royal courts.

In addition to the royal treasury, manuscripts, noble horses, and court physicians were among the most respected possessions in many royal and noble courts.

#### 2. Medieval Armenian equine medicine

Medical works first appear in Armenian literature with the early translations from Greek into Armenian of the works of Galen (199 AD) by the Armenian philosopher David Anhałt (fifth century). During the age of Hunayn (prior to the ninth century), a translation followed from a Syriac version and the most comprehensive version of Galen's text was made from Arabic to Armenian in the period covered by the ninth to tenth centuries.

Genuinely Armenian medical literature only emerged in the medieval period, in the Armenian principality and the later Kingdom of Cilicia (1081–1375). Veterinary medicine developed later, initially under the influence of the secondary Armenian translation of the Byzantine compilation on agriculture, known as *Geoponica*. In this translation, we find the first chapters on horse medicine ever written in the Armenian language, in book 16, chapters 284–310.

From the eleventh century onward, Armenians experienced a striking acceleration of medical activities thanks to the patronage of the Cilician rulers and later royal dynasties. The number of surviving or known Armenian horse treatises is modest [1].

MS	Title	Folios	Date	Place	Scribe	State of Art	Comment
	About the treatment of horses	?	1263?	Baghdad	Step'anos	Not preserved. Only mentioned in colophon of F278, BNF	Commissioned by King Het'um I
M10975	Medical book for horse and mount	185	1296– 96	Sis	T'oros & Farač the Syrian	Edited 1984. Translated and analyzed	Commissioned by King Smbat
V2385	Copied from the Medical book for mount	6				Edited 1867. Translated and analyzed	Copy of M10975
M11161	Medical book for horses	287	1504	Sivas	_	Unedited. Superficially analyzed	Copy of M10975
M459	Medical book for horse, mule and donkey	21	1696	Hogac' Vank'	Łazar Amt'ec'i	Unedited; interlinear translation, tentative analysis	Obviously not related to M10975
M550	On the diseases and ulcers of the horse	2	1710?	_	_	Unedited. Superficially analyzed	Unclear relation to M109

**Table 1.**Overview of known Armenian manuscripts on horse medicine.

Medieval manuscripts—remarkable books painstakingly written and decorated by hand—are regarded some of the most precious objects produced in medieval times. Another precious object was the horse in the medieval aristocratic society. The horse cannot be dissociated from knighthood. The horses of the high-ranking knights and kings have been considered representatives of royal power, physical strength, beauty, and elegance. They were precious and expensive creatures; so, their training, care, and health were of paramount importance for their owners. Kings very often employed their own horse specialists, farriers, horse doctors or mounted militarists, often named by the rank of marshal or constable (**Table 1**).

And thus, it is not really surprising that kings and nobles combined the esteemed values of a medieval aristocratic society, namely manuscripts, royal steeds, and horse experts serving the king into one single prestigious object: a (professional) medical book on horses.

#### 3. The Cilician medical book for horses

The Armenian institute for ancient manuscripts, Matenadaran, in Yerevan holds a unique, illustrated manuscript, codex M 10975, called "Medical book for horse and mount" [2–7].

At the beginning of the twentieth century, this manuscript was still found on the "List of Armenian Manuscripts of Tabriz" as MS 74, owned by tailor Širmazani [8]. It was donated to the Yerevan collection only in April 1987, by a private owner named Saračyan from Los Angeles.

The manuscript is a hippological and hippiatric book on 184 folios, containing 182 chapters and some illuminations. It was written in 1296–98 on behalf of the Cilician King Smbat, as can be read in the manuscript's main colophon (f.184a):

Well, this medical book for horses and mounts was written to recognize the good and the bad [in a horse], on behalf of the Christ-loving 184a // and wise, thoughtful, witty, God-fearing King of the Armenians, Smbat.

And thus, I, the humble physician Farayč, on behalf of my lord, the holy king, took this [task] on me with great difficulty and translated this into a correct and clear language, for I was very well versed and have been trained in the art of healing in the big (city) Baghdad for many years. And I am a Syrian by origin and by faith, and by piety completely orthodox. And I worked on the translation of this medical book in the capital Sis [9].

Before we unfold the general history of this manuscript, its production, reception, and provenance, the socio-historical contexts of its time of production as well as the persons involved must be investigated. The efficacy and importance of this horse book will be tracked in the subsequent horse treatises both in the Armenian and the neighboring traditions.

#### 3.1 The production

#### 3.1.1 The time of the manuscript

Toward the end of the thirteenth century, after the Armenian Kingdom of Cilicia had already fought on the side of the European Crusaders, the small Christian Kingdom was still under the protection of the Mongolian Ilkhanids. The Armenians fought on the side of the Mongols and the European Crusaders against

the Islamic Middle East. The growing conflict with the Mamluks can be seen in this context of the Armenians' involvement with the Mongols [10]. This alley brought the Armenians into first direct contact with the forces of the Mamluk Sultanate: the Mongol conquest of the Middle East in 1259 was heavily supported by the Armenian King Het'um I. The Mamluks, steadily replacing the Ayyubid masters in the Middle East, by 1250 already controlled Egypt after having it defended from the crusaders. They had succeeded in re-uniting the Muslim Middle East.

The conflict between Mamluks and Armenians broke out with the request of the Mameluk Sultan Baybars to the Armenian ruler Het'um I to break the alliance with the Mongols and give those territories and fortresses to the Mamluks that had been granted to the Cilician king through the alliance with the Mamluks [11]. From the first invasion of the Mamluks in Cilicia in 1266, decades of constant threat to the Christian Armenians began. In 1285, the Armenians had to sign a 10-year armistice under harsh conditions, but the Mamluks did not actually keep it. Already in 1292 another Mamluk invasion forced King Het'um II to abandon many towns. He abdicated in favor of his brother T'oros III and entered the monastery Mamistra. After a short interregnum of his younger brother Smbat, King Het'um II returned to the throne in the summer of 1299. Faced with a new attack by the Mameluks, he asked the Mongol Khan of Persia, Ghâzân, for support. In response, Ghâzân marched toward Syria with the support of Franks of Cyprus. The allied Armenians and Mongols defeated the Mamluks in the battle of Wadi al-Khazandar, 1299. In 1303, the Mongols tried to conquer Syria once again in larger numbers (approximately 80,000) along with the Armenians, but they were defeated at Homs on March 30, 1303. At this time, the Mongol leaders had already turned to Islam, and this put also the Armenian-Mongol alleys to the end [12].

The Armenian royal family of the Het'umids continued ruling the unstable Cilicia until the midst of the fourteenth century, but it could not resist attacks from the Mamluks any longer. The Armenian capital Sis fell to the Mamluks in 1375, and the final king, Levon V, died in exile in Paris in 1393 [13, 14].

#### 3.1.2 King Smbat, the commissioner of the horse treatise

Smbat was the king of the Armenian Kingdom of Cilicia from 1296 to 1298. He was born in 1277 as one of the 16 children of king Levon II of Armenia and his wife Keran of Lambron and was a representant of the Hetumid noble family.

Upon the death of King Levon II on February 6, 1289 AD, his surviving 11 children fought for control of the kingdom, and three of his sons managed to obtain the throne, mostly for relatively brief periods at a time. First to emerge as king was his son Het'um II [15]. Smbat seized the throne with the aid of his younger brother Kostandin while his brothers King Het'um II and prince T'oros visited Constantinople. In 1297, on a journey to the court of the Mongol ruler of Persia, Ghazan, Smbat received recognition of his position as king from Ghazan, which was necessary to legitimate his usurpation. He also received a bride from the Mongol Khan in order to form a matrimonial alliance. During his return to Cilicia, he came across his two brothers in the region of Caesarea and imprisoned them in the fortress of Barjraberd. In early 1298, Smbat even ordered T'oros to be strangled and Het'um to be blinded with a hot iron. This cruel action resulted in the rebellion of his former ally, Kostantin. Smbat was imprisoned, and Het'um was freed [16]. Smbat plotted again to resume the throne of his brother Het'um, meanwhile a Francisan monk, but he was imprisoned for the rest of his life.

Thus, Smbat reigned only for a period of 2 years; he, however, left essential objects to posterity that make him unforgettable: King Smbat had his own smaller bronze

coins, called p'ol, minted, showing him on horseback and he commissioned a medical book for horses. And this makes him unforgettable in Armenian cultural history.

#### 3.2 Reception of the Cilician medical book(s) for horses

The reception of any manuscript can be measured by its output in the form of later copies and translations. In the later Armenian tradition, we do have at least two preserved Armenian copies of Smbat's horse book.

In 1867, a Mekhitarist father published the text of a horse book fragment with the title "I grastu bžškaranēn p'oxac" (copied/taken form the medical book for mount) in the armenological journal Bazmavep [17], which we could identify with manuscript Ms 2385 of the Mekhitharist Library in Venice [18]. This text consists only of three folios and was attached to a (human) medical book that was commissioned by King Het'um II and copied by a Vardapet Mkrtič' in 1294–1295, before Smbat seized his brother's throne. It is still unclear whether these three folios were written by the same scribe and in the same time or whether they were copied later and just bound into this book. Thus, at the current state of research it is uncertain whether these three folios are a later copy of Smbat's or of Het'ums horse book; the title, however, and obvious textual parallel speak for Smbat's horse book [19].

In 2008, the Institute for Ancient Armenian Manuscripts was given a voluminous, damaged codex from the private property of the Nazumlean family of Isfahan. It was catalogued as MS 11161 and contains various medical treatises and a treatise on the care of horses. It has not been explored yet, but in our first analysis after the manuscript's restoration in 2014 we discovered that the compilation's third stratum, a medical book for horses, consisting of folios 210a–261b, was copied in 1504 in the town of Sebaste, present-day Sivas (Turkey). It represents definitely a reproduction of Smbat's Cilician horse book, not an accurate copy, rather an adjusted and updated version.

If we dig deeper into Armenian medieval equine medicine, we see that the other surviving texts and fragments in Armenian language suggest that there was even an older Armenian horse treatise, written some decades before Smbat's text.

#### 3.2.1 The horse treatises of King Het'um I

In the main colophon of an Armenian chemistry and pharmacology treatise (*Girk' arvesti k'imiakan*), codex 248, kept in the Bibliotheque Nationale de Paris, one gets the following information about another horse treatise on Ff. 34v [20]:

"King Het'um, who marched again the enemy sultan with an army of [corrupt writing] horsemen, massacred and destroyed everything, and he went with big honour to Baghdad [...] and there a certain wise man, a deacon named Step'anos, with the king. This man had learnt plenty of languages and writings just like the former philosophers, and there was no writing, this man could not find. He was much loved by the Armenian king because of his knowledge and thus was asked by the King. And he translated three writings about the farriery (i.e. medical treatment) of horses and about how to make a sword...and he took them to the Armenian lands" [21].

These few lines lead us to believe that King Het'um I, one of the most colorful figures in the Armenian Kingdom of Cilicia and grandfather of Smbat, had commissioned one or even more horse treatises based on an Arabic source, and that these had been brought to Cilicia in the 1260s.

Unfortunately, there is no trace of these Hetumian horse books; we have to rely only on the information from this colophon. But this leaves another question: are Hetum's horse book and Smbat's horse book related? Since there is no preserved copy of Het'ums horse books, a meticulous text comparison cannot answer this

question. Therefore, we have to take a deeper look into the literature of the contemporary royal courts to see whether we find any traces of Het'um's or any other Armenian horse book [22].

#### 3.2.2 The Arabic-Armenian horse treatises

A certain Abū l-Farağ is named the author of an *Aqra'bādīn (al-hayl)* "Treatise about horses," which is kept in the Dār-al-Kutub Library in Cairo [23].

Its introduction says that this treatise was translated from Armenian to Arabic by a certain Mahbub (al Armani) and his friend Abū l-Farağ, who knew Arabic thoroughly and was versed in many languages. It was commissioned by Mahmud b. Khalīfah Ya'qūb and the philosopher Sa'd Al-Dīn b. Zāhir al-'Ajamī, during the reign of Sultan Baybars (i.e., 1260–1277). The colophon tells us that the Armenian king had removed the Arabic original from the school of Baghdad during the reign of Sultan Baybars [24]. This treatise most likely refers to the lost horse book of Het'um I. The mentioned manuscript in Cairo has not been analyzed yet—also because of the complicated access— but the information given in the collection's catalogue states that many expressions to be found in the text are given in Armenian [25].

The Arabic equine literature also provides further information about several copies of this Arabic translation of Het'um's horse treatise in London [26], Bethesda USA [27], and Gotha, Germany [28].

The Manuscript or.3133 of British Library was analyzed, literally translated and compared with the existing copy of the Armenian horse book of King Smbat.

In the introduction to the Arabic text, one reads that this text is a treatise on equine medicine:

"The Armenian king took the treatise out of the Dar al-cilm of the Caliph treasures in Baghdad ....... And it was an Arabic manuscript, which he brought to Armenia" [29].

In the first chapter the text continues,

"the one who translated the treatise from Armenian was called Mağbūb, the name of his friend was Abū l-Farağ, who spoke excellent Arabic ... .. And when the Armenian king took this treatise away from Bagdād, this was in the realm of Baybars, the ruler of Egypt ... " [29].

The colophon gives an exact date of completion of the manuscript: "The writing of the book was finished, with God's help, on Thursday, the 11th

ğumādā I of 1270" [29, 30].

This means, that the mentioned Arabic horse treatises kept in collections in Cairo, London, Bethesda, and Gotha are all based on the translation from the Armenian horse book of King Het'um I [31]. Historical sources additionally confirm this story. In 1258, joint Mongol-Armenian forces led by Het'um captured Bagdad.

The comparison of the Arabic translations of King Het'um's horse book with the text of Smbat's horse book of 1296–98 provokes an even greater confusion: the texts have striking similarities and textual parallels. Thus, a reverse conclusion is obvious: Smbat's horse book was probably created on the basis of the Arabic translation of Het'um's horse book.

#### 3.2.2.1 A multilingual Syrian physician: key to the puzzle?

The conclusion mentioned above could be supported by the key person in the production of the equine manuscripts: the compiler and translator of the Arabic and Armenian copies, the wise Abū l-Faraǧ of the Arabic and the Syrian physician Farač in the Armenian copies. Of course, it could be a simple similarity of names, but the description of a learned Syrian named Farač, who had an excellent command of Arabic and other languages, is found both in the Armenian and Arabic colophons and allows the conclusion that this is a single person. Thus, the Armenian designation as "wise Syrian Farač," and, especially, the Arabic form Abū l-Farağ point to one of the most famous Syrian scholars at the time: Gregory Bar-Hebraeus [32, 33]. The famous Syrian polymath and Bishop Gregory Bar-Hebraeus (1226–1286) wrote and compiled in his numerous and elaborate treatises research in theology, philosophy, medicine, science, and history. Being in general proficient in several languages, he was also known as gifted translator from and into Arabic.

The speculations about Bar-Hebraeus' involvement in the Armenian horse books could be confirmed not only by the name form Abū l-Faraǧ Ibn al-ʿIbrī commonly used in the Arabic sources, but also by the fact that the learned Syrian had studied medicine and also worked as a personal physician of the Ilkhan Hulegu Khan. He also had contact with the Cilician royal house and was ordained Primate of the East in 1264 in the Cilician capital Sis, in the presence of the Cilician King Het'um I. Moreover, the information provided by the Arabic colophons allows a dating of a translation of an Armenian horse book into Arabic during the reign of both King Het'um I and Mamluk Sultan Baybars and to the lifetime of Bar-Hebraeus. The argument in favor of Bar-Hebraeus may be reinforced by the fact that he was known in the Armenian tradition also very often by the Arabized form of his name, as Abu(l) Fara¸.

Strong counterarguments are, however, the fact that there is no indication in Syrian, Arabic, Persian, Armenian, or other sources that Bar-Hebraeus ever translated from Armenian into Arabic on the one hand, and veterinary treatises, on the other.

The assumption that the same Abū l-Farağ was also responsible for the translation of an Arabic horse book into Armenian on behalf of King Smbat, 1296–98, is difficult to sustain due to the biographical data of Bar-Hebraeus, who had already died in Maraga, Persia, in 1286.

One can even argue that the Armenian priest T'oros may have been working alone on an already existing, earlier translation by the Syrian Farač/ Abū l-Farağ particularly taking the fact into account that Arabic terms describing horse coat colors, diseases, and remedies are very often rendered completely corrupt in the Armenian horse book of king Smbat. A person who is said to have an excellent command of Arabic would not use such corrupt Arabic terms in Armenian.

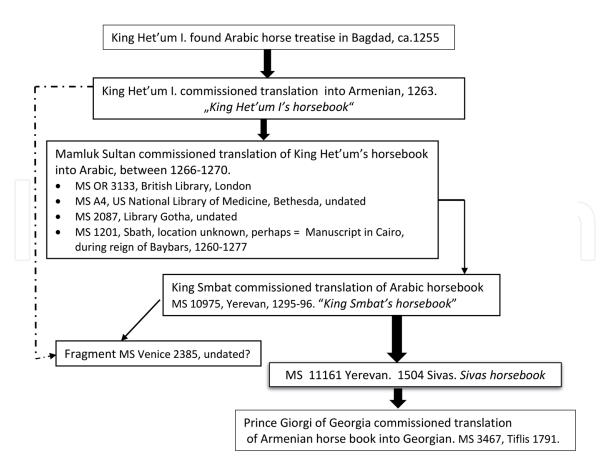
#### 3.2.3 The Georgian-Armenian horse treatise

Another further proof of the importance of this horse book is a late translation into Georgian. The national library of Georgia holds the manuscript T 3467, a Georgian horse treatise copied in 1791 [34].

The colophons tell us that

"On May 18th, 1788, we, the High priest of Sioni in Tiflis, Ioane Osedze and the Armenian priest Ter-Petros, were asked by Giorgi [35], the first born son and heir of the King of Georgia Irakli II, to translate this treatise from Armenian into Georgian. The copy was finished on August 23rd, 1791" [36].

From the colophon we also learn that a certain "Parač'i" had translated the original Armenian treatise from Arabic in the Armenian year 953 (1503) in Sebaste (Sivas) and that the exact name of the treatise is "Medical book for horse and mount." The Georgian translation was obviously based on the copy of Smbat's horse book in Sebaste 2004, M11161 (**Figure 1**).



**Figure 1.**Presentation of the assumed transfer of knowledge and reception of Armenian equine medicine manuscripts between the thirteenth and nineteenth centuries.

#### 3.3 Provenance of the Armenian horse books

Three of the given Armenian horse treatises, the Cilician horse book of king Smbat 1296–98, its not clearly dated Venice copy, and the voluminous Sivas reproduction of 1504, had been kept by private owners in the Armenian-inhabited settlements of Persia before they were donated to the Armenian manuscript collection in Yerevan. It is still one of the many unsolved mysteries of these Armenian horse books, how and when they ended up in Persia.

#### 4. To the west of Cilician Armenia, far beyond the Bosporus

The Cilician noble families have been under the constant cultural influence of the Frankish kings for many decades, particularly due to the close relations with the European noble crusaders and the Staufer kings. It was Prince Levon II (1150–1219) who profited from this situation by improving relations with the Europeans. Cilician Armenia's prominence in the region is attested by letters sent in 1189 by Pope Clement III to Levon and to Catholicos Gregory IV, in which he asks Armenian military and financial assistance to the crusaders. On January 6, 1199, Prince Levon II was crowned with great solemnity in the cathedral of Tarsus, in the presence of the Syrian patriarch, the Greek metropolitan of Tarsus, and numerous church dignitaries and military leaders. While he was crowned by the Catholicos Gregory VI of Cilicia, Levon received a banner with the insignia of a lion from Archbishop Conrad of Mainz in the name of Henry VI, Holy Roman Emperor. By securing his crown, he became the first King of Armenian Cilicia as King Levon I [13].

Cilician Armenians were attracted by European culture and art. It did not take long for them to absorb the findings and texts of European science and medicine. In addition to their local knowledge and that of the Muslim East they also started to include European knowledge, in particular also in horse breeding and training.

King Het'um I was a major player in the political struggles and shifting alliances during the Crusades, trying to keep ties with all sides, both in the West and the East. Perhaps he was not only fascinated by the Arabic equine treatises from Baghdad but also somewhat inspired by his European counterpart's hippiatric book? In Europe, Jordanus Ruffus, chief marshal and close associate of Staufer emperor Frederick II, completed his very influential "Medicina Equorum" around 1250, which was commissioned by and dedicated to his emperor. We know that this work spread quite quickly from Italy through Europe as a result of the Italian equestrian schools. Can the mere fact, that one of the most important contemporary European monarchs has commissioned a horse book, have affected the Armenian King Het'um I who was much oriented toward Europe?

The growing influence of European equestrian art and equine knowledge cannot be investigated in the Het'um's horse treatises, only guessed. Some 30 years later, however, this influence is clearly presented in the influential horse book of king Smbat, especially regarding breeding, training, and chivalrous tournaments (such as buhurt and jousting) [6]. The European influence was also increasingly reflected in some newly adopted Frankish terms in horsemanship, anatomy, and names of diseases, but hardly noticeable in farriery [37, 38].

#### 5. Outlook: galloping from east to west?

In order to understand the history and interrelation of Armenian and Arabic horse treatises, not only the person of the "producer and translator," the wise Syrian Farač/Abū l-Farağ, must be investigated, but also the socio-historical and scientific historical context. Moreover, the efficacy and importance of the Cilician Horse Book 1296–98 will be tracked in all subsequent texts—both Armenian copies and foreign translations. A range of local and foreign treatises will be checked: these are the supposed translations of an Armenian text into Arabic (13th c to 14th c) and into Georgian (18th c).

The meticulous comparison of all texts in question will perhaps also prove that the main source for all texts was an unknown Arabic text, which King Het'um I had discovered in Baghdad and which he had translated into Armenian. Further investigation of Armenian equine manuscripts and fragments will clarify what can be regarded as the actual starting point of the reception history of Armenian horse medicine.

This will be the goal of an interdisciplinary, international research project in the coming years.

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(November 1273 – October 27, 1331), fully Abu Al-fida' Isma'il Ibn 'ali ibn Mahmud Al-malik Al-mu'ayyad 'imad Ad-din and better known in English as Abulfeda, was a Kurdish historian, geographer and local governor of Hama. He was a prince of the Ayyubid dynasty and the author of *The memoirs of a Syrian prince: Abu'l-Fidā'*, *Sultan of Ḥamāh* 

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[21] The given quotation from the colophon ff.34v of the manuscript 234 (BNF) was translated from the Modern Armenian original into English by J. Dum-Tragut.

[22] Firsts hints at the entangled relationships between Armenian and Arabic horse treatises can be found in short essay published by Č'ugaszyan and Ter-Łevondyan in 1985. They have neither been scientifically reviewed nor have the alleged Arabic texts ever been examined or analyzed. Č'ugaszyan, B. Ter-Łevondyan, A. Bžskaran jioy erkri norahayt araberen targmanut'yuně. Lraber hasarakakan gitut'yunneri, 11. Erevan; 1985. pp. 63-68

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[24] Sbath P. Manuscrit Arabe sur la pharmacopée hippiatrique. Le Caire: L'institut français; 1932. pp. 80-81

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[26] Rieu C. Supplement to the Catalogue of the Arabic manuscripts in the British Museum. London: British Museum; 1894. pp. 532-533

[27] Schullian D, Sommer FA. Catalogue of Incunabula and Manuscripts in the Army Medical Library. Bethesda: Army Medical Library; 1950. p. 298

[28] Pertsch W. Die orientalischen Handschriften der herzoglichen Bibliothek zu Gotha, 3 Teil, die arabischen Handschriften. Gotha: Perthes; 1883. p. 110

[29] The given quotations of manuscript or.3133 were translated from Arabic to English by L. Nigst and J. Dum-Tragut.

[30] The year 1270 in Islamic calendar corresponds to 1834 A.D.

[31] There is another alleged Arabic translation of an Armenian horsebook in Armenian medical literature. Some scholars, never having thoroughly analysed the manuscript, claimed that it was a translation of Smbat's horsebook, commissioned in 1298-99 by Sultan al-Malik al-Mansour Hossam ad-Din Lajin al-Mansuri, Sultan of Egypt (1296-1299). Our research has however revealed that the text in question is nothing else than another copy of the Arabic translation of Het'um's treatise now kept in the library of Bethesda. C'ugaszyan B. Ter-Łevondyan A. Bžskaran jioy erkri norahayt araberen targmanut'yuně. Lraber hasarakakan gitut'yunneri, 11. Erevan; 1985. pp. 63-68

[32] Brock S. Gregor ibn al-<sup>c</sup>Ibri. Lexikon für Theologie und Kirche. 3. Auflage. Band 4. Freiburg: Herder; 1995. p. 1001f Manuskripten. Commentaria Classica, Studi di filologia greca e latina; 2018. pp. 359-382

[33] Wright W. A Short History of Syriac Literature. London: Cambridge University Press; 1894. pp. 265-281

[34] Catalogue of Georgian Manuscript in National Library Tiflis, Fund S. Available at: http:// www.manuscript.ge/index. php?m=11&cid=13

[35] Giorgi XII (1746 – December 28, 1800) was the son of Heraclius II (also known as Erekle), the king of Kartli and Kakheti, and his second wife Anna Abašidze. In 1766 he was recognized as crown prince and Lord of Pambak and Lori (now Northern Armenia). After the death of this father in 1798, he reigned Kartli and Kakheti until 1800. Anchabadze, G. History of Georgia. Short sketch. Tbilissi: Causasian House; 2005

[36] This unique specimen has not yet been examined in detail and compared with the Cilician horse book, M10975, Sis of 1296-98 and M11161, Sivas 1504 in terms of structure, content and terminology vocabulary. The translation of the given quotation from the introduction in the Georgian manuscript 3467 was translated from Georgian to English by M. Topadze and J. Dum-Tragut.

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