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The paper focuses on the Kitāb al-bayṭara*, an early Mamluk compilation of equine care texts "ever written down" in Arabic (or in Arabic translation) and circulated in Cairo in the late 1280s. It will show that this work, as a kind of corpus hippiatricorum arabicorum, was not only a response to the new cultural needs that reflected a renewed interest in the traditional al-furusīya wa-l-bayṭara (horsemanship and hippiatry), but also an ambitious and outstanding undertaking of Mamluk book culture in the well-known technique of muṣannaf-type collections of hadith literature.*

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The Making of a Hippiatric Corpus in the Mamluk Bayṭara Tradition

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Abstract

The paper focuses on the Kitāb al-bayṭara*, an early Mamluk compilation of equine care texts "ever written down" in Arabic (or in Arabic translation) and circulated in Cairo in the late 1280s. It will show that this work, as a kind of corpus hippiatricorum arabicorum, was not only a response to the new cultural needs that reflected a renewed interest in the traditional al-furusīya wa-l-bayṭara (horsemanship and hippiatry), but also an ambitious and outstanding undertaking of Mamluk book culture in the well-known technique of muṣannaf-type collections of hadith literature.*[1]

Keywords

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I. A book of "vague" provenance

In the series "Medicine with Pharmacy" of facsimile editions of Arabic sources published by the Institute for the History of Arabic-Islamic Sciences at the Johann Wolfgang Goethe University in Frankfurt am Main, a two-volume *Kitāb al-Bayṭara* was published in 1984,[2] whose author, according to the editor

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[2] Abū ʿAbd Allāh Muḥammad ibn Muḥammad ibn ʿAlī al-Ṣāḥib Tāǧ al-Dīn, *Kitāb Al-Bayṭara, Book on Veterinary Medicine, Reproduced from MSS 3608, 3609 Fatih Collection, Sülemaniye Library, Istanbul*, ed. Fuat Sezgin, Publications of the Institute for the History of

Fuat Sezgin, was *al-Ṣāḥib Tāǧ al-Dīn Abū ʿAbd Allāh Muḥammad ibn Muḥammad ibn ʿAlī*[3] (640/1242-707/1307).[4]

The Mamluk chronicles depict al-Ṣāḥib Tāǧ al-Dīn as a pious, generous and scholarly man who valued books and scholarship. Many poets dedicated hymns to him. He was involved in *furūsīya*,[5] was politically influential—not least because of his lineage[6]—and eventually attained a high position in the Mamluk administration. Thus, on Ṣafar 29, 693 (January 29, 1294), at the

Arabic-Islamic Science, Series C-Facsimile Editions 5:1-2 (Frankfurt am Main: Institute for the History of Arabic-Islamic Science at the Johann Wolfgang Goethe Univ., 1984).

[3] See also the *ʿUnwān* of Ms. Fatih 3608, fol. 1r, "*taṣnīf al-ʿabd al-faqīr ilā Allāh Muḥammad b. Muḥammad b. ʿAlī ġafara Allāh la-hu*." On the *al-Ṣāḥib Tāǧ al-Dīn* in the Mamluk chronicles, see Sezgin, *al-Bayṭara I*, Editor's Introduction, fn. 1, also Housni Alkhateeb Shehada, *Mamluks and Animals. Veterinary Medicine in Medieval Islam*, Sir Henry Wellcome Asian Series 11 (Leiden: Brill, 2013), 142, fn. 49.

[4] The dates used are *anno Hegirae* (AH) and *anno Domini* (AD) respectively. Arabic is transliterated according to the DMG rules, with some minor modifications, see *Die Transliteration der arabischen Schrift in ihrer Anwendung auf die Hauptliteratursprachen der islamischen Welt: Denkschrift dem 19. internationalen Orientalistenkongreß in Rom*, vorgelegt von der Transkriptionskommission der Deutschen Morgenländischen Gesellschaft, Carl Brockelmann, August Fischer, W. Hefening und Franz Taeschner, mit Beitr. von Ph. S. van Ronkel und Otto Spies (Leipzig: Brockhaus, 1935).

[5] The term *furūsīya* encompasses a variety of meanings, from the strictest definition of "horsemanship" to "military arts" to what might be called "chivalry," evoking the image of the noble *fāris* (knight) of ancient times. *Furūsīya* literature is considered a genre in its own right, covering the entire field of equine knowledge, both theoretical and practical, including the principles of hippology, horse care, farriery (including some veterinary aspects), as well as *siyāsat al-ḫayl*, a more precise rendering of the term "equitation," which can be defined as the art of training and properly using a saddlehorse. There is also an understanding of the concept of *furūsīya* as the mastery of the horse, proficiency in handling all types of weapons, and bravery (as an ethical code). Cf. G. Douillet and D. Ayalon, "Furūsiyya," in *Encyclopaedia of Islam New Edition Online (EI-2 English)*, ed. P. Bearman (Leiden: Brill, 2012), https://doi.org/10.1163/1573-3912_islam_COM_0226 (accessed April 15, 2024).

[6] As the grandson of the powerful vizier of the Sultan *al-Malik al-Ẓāhir Rukn al-Dīn Baibars al-Bunduqdārī* (reigned 658/1260-676/1277) *al-Ṣāḥib Bahāʾ al-Dīn* (d. 677/1278), he enjoyed fame and honor "such as his grandfather had never known." See Faḍl Allāh b. Abī al-Faḫr Ibn al-Ṣuqāʿī, *Tālī Kitāb Wafayāt al-ʾAʿyān: Un Fonctionnaire Chrétien Dans L'administration Mamelouke*, ed. and trans. J. Sublet, (Institut Français, Damas, 1974), 99-100. See also Taqī al-Dīn Aḥmad b. ʿAlī al-Maqrīzī, *Kitāb al-Muqaffā al-kabīr*, ed. Muḥammad al-Yaʿlāwī, vol. 7, 8 vols. (Bayrūt: Dār al-Ġarb al-Islāmī, 1991), 111–17, and Idem, *Mawāʿiz wa l-iʿtibār fī ḏikr al-ḫiṭaṭ wa l-ʾāṯār fī Miṣr wa-l-Qāhira*, vol. 4, 4 vols. (Bayrūt, 1998), 306.

beginning of the *Nāṣirī* period,[7] he assumed the vizierate[8] after the assassination of the emirs *Šams al-Dīn b. al-Salʿūs* and *ʿAlam al-Dīn Sanjar al-Šuǧāʿī* in Ṣafar/January of the same year.[9] He commissioned the construction of a *ribāṭ*[10] (died before completion),[11] that housed a library[12] in the days of al-Maqrīzī (d. 845/1442) and possibly even earlier. He also founded a *zawiya*[13] where two Islamic scholars—one a *Shafiʿi* and the other *Māliki*—taught Islamic law side by side.[14]

[7] First reign of the Mamluk Sultan *al-Nāṣir Muḥammad b. Qalāwūn* (693/1293-694/1294).

[8] Tāǧ al-Dīn does not seem to have been very successful in this position, as he was dismissed after one year, reappointed, and dismissed again within the same year. See *al-Maqrizī, al-Ḫiṭaṭ*, vol. 4, 307, and Ibn al-Ṣuqāʿī, *Wafayāt*, 99.

[9] Cf. Šihāb al-Dīn Aḥmad Ibn Ḥaǧar al-ʿAsqalānī, *al-Durar al-kāmina fī ʿayān al-miʾa al-ṯāmina*, vol. 4, 4 vols. (Bayrūt: Dār al-Ǧīl, 1993), 201–2, and Shah Morad Elham, *Kitbuġā und Lāǧīn: Studien zur Mamluken-Geschichte nach Baibars al-Mansūrī und an-Nuwairī*, Islamkundliche Untersuchungen 46 (Freiburg im Breisgau: Schwarz, 1977), 147, 150–51, 152.

[10] A military-religious institution of medieval Islam; a frontier post or fortified city on the border of *Dār al-Islām*, see J. Chabbi and Nasser Rabbat, "Ribāṭ," *Encyclopaedia of Islam New Edition Online (EI-2 English)*, ed. P. Bearman (Leidein: Brill, 2012), https://doi.org/10.1163/1573-3912_islam_COM_0919 (accessed April 15, 2024).

[11] The *ribāṭ* was located on the pilgrimage route to Mecca and was known as *ribāṭ āṯār*, as al-Ṣāḥib Tāǧ al-Dīn had acquired some relics (*ʾāṯār*, lit.: traces) of the Prophet Muhammad for 60,000 dirhams and displayed them there. It is also to this *ribāṭ* that we owe the extensive information on al-Ṣāḥib Tāǧ al-Dīn, see al-Maqrizī, *al-Ḫiṭaṭ*, vol. 4, 306-7. The name *al-ʾāṯār al-nabawīya* does not refer to a manuscript, as Alkhateeb Shehada (*Mamluks and Animals*, 144) suggests, but to these relics. See also Abū ʿAbdallāh Muḥammad Ibn Baṭṭūṭa, *Riḥlat Ibn Baṭṭuṭa al-musammā tuhfat al-nuẓẓār fī ghara͂ib al-ʾamṣār wa ʿaja͂ib al-asfār*, vol. 1 (Bayrūt, 1987), 65, and al-Maqrīzī, *al-Muqaffā*, vol. 7, 113. Tāǧ al-Dīn's father also had a *ribāṭ* built (*ʾanšāʾa-hu*), known as the *Ribāṭ al-Ṣāḥib*, which was endowed (*waqafa ʿalay-hi*) by his father, the vizier *al-Ṣāḥib Bahāʾ al-Dīn*, see al-Maqrizī, *al-Ḫiṭaṭ*, vol. 4, 302–3.

[12] Cf. Youssef Eche, *Les Bibliothèques arabes publiques et semipubliques en Mésopotamie, en Syrie et en Égypte au Moyen Âge* (Damas: Institut Français de Damas, 1967), 262, and Celeste Gianni, *History of Libraries in the Islamic World: A Visual Guide* (Fano (PU): Gimiano editore, 2016), 43.

[13] In the Islamic context, a small mosque, oratory, or prayer room, lit.: "corner, nook [of a building]," see Sheila S. Blair, J. G. Katz, and C. Hamès, "Zāwiya," in *Encyclopaedia of Islam New Edition Online (EI-2 English)*, ed. P. Bearman (Leiden: Brill, 2012), https://doi.org/10.1163/1573-3912_islam_COM_1384 (accessed February 26, 2024).

[14] One of the six *zāwiyas* at the mosque of ʿAmr ibn al-ʿĀs in al-Fusṭāṭ, cf. Jonathan Porter Berkey, *The Transmission of Knowledge in Medieval Cairo: A Social History of Islamic Education*, Princeton Legacy Library (Princeton, New Jersey: Princeton University Press, 1992), 52. In Mamluk Cairo, there was a certain tendency to unite the Sunni schools of jurisprudence under one roof, cf. Ibid., 48.

F. Sezgin's facsimile edition is based on the manuscripts Fatih 3608 and 3609 from the Süleymaniye Library in Istanbul.[15] In his brief preface, F. Sezgin suggests that Fatih 3609 is the second part of the work referenced in the colophon of Fatih 3608. Sezgin considers this to be an autograph. Despite the different script, Sezgin considers Fatih 3609 an autograph as well, or at the very least a copy made from the author's draft.[16]

What F. Sezgin believed to be a work by al-Ṣāḥib Tāǧ al-Dīn is actually another textual witness to the first, hippological part of the *Kitāb al-furūsīya wa-l-bayṭara* (The Book of Horsemanship and Hippiatry), attributed to *Muḥammad ibn Yaʿqūb ibn aḫī Ḥizām al-Ḫuttalī* (third/ninth century), as Martin Heide clarified in his critical edition of the book's hippiatric part more than 20 years later.[17]

On the other hand, the Fatih 3609, a work by an unknown author,[18] stands out for its 19 sophisticated miniatures, a feature atypical for this type of treatise. The miniatures appear to belong to the *Baghdad School* tradition.[19] The Fatih 3609 compiles various hippiatric texts gathered "from the words of the

[15] See *Defter Fatih Kütüphanesı* (İstanbul, Mahmud Bey Matbaası, 1155), 207, https://portal.yek.gov.tr/works/detail/241935 (accessed April 6, 2024).

[16] Cf. Sezgin, *al-Bayṭara I,* Editor's Introduction.

[17] Martin Heide, *Das Buch der Hippiatrie - Kitāb al-Bayṭara von Muḥammad ibn Ya'qub ibn aḫī Ḥizām al-Ḫuttalī, Teil 1: Einleitung, Übersetzung, Indices, Teil 2: Kritische Edition des arabischen Textes*, Veröffentlichungen der Orientalischen Kommission (VOK) / Akademie der Wissenschaften und der Literatur, Mainz, 51:1-2 (Wiesbaden: Harrassowitz, 2008) =*Hippiatrie I*, 57–60, 71–76.

[18] Ibid., 60–62.

[19] Also known as the "Arab School" of miniature painting; a relatively short-lived but influential movement in Islamic art that emerged in the late sixth/twelfth centuries and largely faded away by the early eighth/fourteenth centuries, eventually being replaced by stylistic trends from the Mongolian tradition. One of the most notable figures of the "Arab School" is *Yaḥyā b. Maḥmūd al-Wāsiṭī* (seventh/thirteenth century), famous for his 96 colorful illustrations of the *Maqamat al-Hariri* (d. 516/1122), completed in 634/1236. In addition, two illustrated manuscripts of the *Kitāb al-bayṭara* by *Aḥmad b. al-Ḥusayn b. al-Aḥnaf* (sixth/twelfth century) can be associated with pre-Mongol Baghdad and the "Baghdad School." Both are in the hand of the same scribe, *ʿAlī ibn Ḥasan ibn Hibatallāh*, and are dated 605/1209 (Cairo, Egyptian National Library, Khalil Agha F8) and 606/1210 (Istanbul, Topkapı Sarayı, Ahmet III 2115). See Anna Contadini, *A World of Beasts: A Thirteenth-Century Illustrated Arabic Book on Animals (the Kitāb Naʾt al-Ḥayawān) in the Ibn Bakhtīshū' Tradition* (Leiden; Boston: Brill, 2012), 103, fn. 2, and Zeynep Atbaş, "Artistic Aspects of Sultan Bayezid II's Book Treasury Collection: Extant Volumes Preserved at the Topkapı Palace Museum Library," in *Treasures of Knowledge: An Inventory of the Ottoman Palace Library*, ed. Gülru Necipoğlu, Cemal Kafadar, and Cornell H. Fleischer, vol. 1, 2 vols. (Leiden: Brill, 2019), 197.

wise and ancient philosophers and others, from the Romans [i.e., Byzantines] and Persians and Indians and Arabs."[20] It contains 68 parallel passages to the Arabic translation of the veterinary treatise of *Theomnestus of Nicopolis*[21] and includes "more than half of all symptoms and therapies [...] known from the *Kitāb al-bayṭara* [by ibn aḫī Ḥizām – M.Y.] and often corresponds to them word for word."[22]

The second part of Fatih 3608, which constitutes the second book of ibn aḫī Ḥizām's work, is actually housed in the Bibliothèque nationale de France under the catalog number Arabe 2812.[23] During the *recensio* of *Aqrābāḏīn al-ḫayl* (see below), two new textual witnesses from the same transmission

[20] Ms. Fatih 3609, fol. 1v:3–4, cf. also Heide, *Hippiatrie I*, 61.

[21] See Susanne Saker, *Die Pferdeheilkunde des Theomnest von Nikopolis: ein Handbuch für den praktischen Tierarzt im arabischen Sprachraum des Frühmittelalters*, Veröffentlichungen der Orientalischen Kommission (VOK) / Akademie der Wissenschaften und der Literatur, Mainz 49 (Wiesbaden: Harrassowitz, 2008), 13. *Theomnestus of Nikopolis* (first half of the fourth century AD), one of the most significant authors of the *Hippiatrica* (known as the *Corpus Hippiatricorum Graecorum*, CHG), whose veterinary treatise is widely regarded as fundamental to the establishment of the Abbasid veterinary tradition. It was through him that Arabic literature was introduced to know the renowned Greek hippiatrician *Apsyrtus* (fourth century AD). On the Greek influence in Arabic equine texts, see Ibid., 2–14, also Herbert Eisenstein, review of "Susanne Saker, *Die Pferdeheilkunde des Theomnest von Nikopolis. Ein Handbuch für den praktischen Tierarzt im arabischen Sprachraum des Frühmittelalters*. Wiesbaden: Harrassowitz Verlag 2008. XII, 265 S.," *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 161, no. 1 (2011): 174–76, and Robert G. Hoyland, "Theomnestus of Nicopolis, Ḥunayn Ibn Isḥāq and the Beginnings of Islamic Veterinary Science," in *Islamic Reflections, Arabic Musings: Studies in Honour of Professor Alan Jones*, ed. Robert G. Hoyland and Philip F. Kennedy (Cambridge: Gibb Memorial Trust, 2004), 150–69. On *Apsyrtus of Clazomenae* and *Theomnestus'* hippiatric writings and their translations in the context of medieval science, see Stavros Lazaris, "Some Thoughts on the Development of Medieval Hippiatric Science in the Mediterranean Region," in *Anekdota Byzantina: Studien zur byzantinischen Geschichte und Kultur. Festschrift für Albrecht Berger anlässlich seines 65. Geburtstags*, ed. Isabel Grimm-Stadelmann et al., vol. 41, Byzantinisches Archiv (Berlin, New York: De Gruyter, 2023), 391–412.

[22] Heide, *Hippiatrie I,* 61, see also Saker, *Pferdeheilkunde,* 13. On this question in the context of the „Übergang griechischer Tierheilkunde in die arabische Tradition" see Gudmund Björck, "Griechische Pferdeheilkunde in arabischer Überlieferung," *Le Monde Oriental* 36, no. 1 (1936): 1–12.

[23] M. le Baron Slane and Bibliothèque nationale (France) Département des manuscrits, *Catalogue des manuscrits arabes* (Paris: Imprimerie Nationale, 1883-1895), 506, and George Vajda and Régis Morelon, *Notices de manuscrits arabes rédigées par George Vajda et Régis Morelon (Arabe 2802 à 2844), Arabe 2812* (Paris: Bibliothèque nationale de France, 1940-1969), 19, cf. the ms. at https://archivesetmanuscrits.bnf.fr/ark:/12148/cc307280 (accessed March 12, 2024). On the manuscript, see also Heide, *Hippiatrie I*, 54–57.

branch as BnF Arabe 2812 were identified, which were previously unknown.[24] They are cataloged in the Egyptian National Library (*Dār al-Kutub al-Miṣrīya*) in Cairo under the title *al-Bayṭara* ([The Book of] Hippiatry) by an unknown author, and are bound as the first and second parts (*ǧuzʾ*) of the codex Ṭibb 1219.

As will be demonstrated in the following section, they offer a more comprehensive understanding of the transmission history of ibn aḫī Ḥizām's text and the emergence of a new genre of equine literature in Mamluk Cairo.

A. The Cairo witnesses

Ṭibb 1219-1 (= Šabbūḥ 41)[25]: first part of the codex, 202 fol., 25x20 cm, 11 lines per page; custodes (irregular, partly double, partly by a later hand), headings and key words in the main text and in the marginalia in red; largely vocalized, almost completely dotted, cleanly written and well readable *Nasḫī*; omissions; chapter numbering; incomplete at the beginning and at the end; rebound, some layers and leaves transposed; soiled and heavily worn at the edges; some water stains; repaired with paper strips in damaged places; fol. 16r–17v, 191r–v and 193r–197v torn along the inner margin, tears and holes in the text that have been pasted over, affecting the legibility of the text; small wormholes; in the margin, mostly vertical, but also interlinear additions, corrections (*wa-ʾinnamā l-nāsiḫ ġaliṭa* error note on fol. 61r, 65r; *bi-kaḏā wuǧida*[26] note on fol. 188r; *bayān* note on fol. 194v) and glosses (fol. 8r, 9v, 11v, 95r, 114v, 122r, 146r etc.) to the main text by the scribe, as well as numerous variants based on a collation marked with *nusḫa*[27] (fol. 3r, 43v, 44r, 45r, 45v, 49r, 49v, 55v, 56r, 59r, 65v, 95r, 107r, 120v). An incomplete table of contents is on fol. 1r–5v. Owner's stamp of the Egyptian

[24] See Marat Yavrumyan, *Die Kunst der Pferdeheilung: armenische Hippiatrie in arabischer Rückübersetzung. Kritische Edition mit Übersetzung, Einleitung und Kommentar* (Berlin, New York: De Gruyter, forthcoming).

[25] Aḥmad b. ʿAbd al-Majīd Abū Nahla, "Fahāris maḫṭūṭāt Dār al-kutub al-miṣrīya, (2) Qāʾimat bi-l-maḫṭūṭāt al-ṭibbīya," *al-Mawrid* 9, no. 3 (1980): 289. See also Ibrāhīm Šabbūḥ, *Fihris al-maḫṭūṭāt al-muṣawwara: ʿulūm, al-tibb, 3/2,* (al-Qāhira: Ǧāmiʿat al-duwal al-ʿarabīya, Maʿhad al-maḫṭūṭāt al-ʿarabīya, 1959), 37, cf. http://alnadeem-mss.malecso.org/cgi-bin/koha/opac-detail.pl?biblionumber=110109 (accessed February 15, 2024).

[26] In general, the term *wuǧida* could be understood as "Entlehnungen aus einem authentischen Buch, das als Autograph oder in einer bekannten Rezension benutzt wurde." Cf. Fuat Sezgin, *Geschichte des arabischen Schrifttums: Qurʾānwissenschaften, Ḥadīṯ, Geschichte, Fiqh, Dogmatik, Mystik bis ca. 430 H.*, vol. I (Leiden: E. J. Brill, 1967), 78.

[27] See Adam Gacek, *Arabic Manuscripts: A Vademecum for Readers* (Leiden, Boston: Brill, 2009), 272: "Non-specific variants (usually from another copy) may be indicated as follows: *nuskhah, nuskhah ukhra, fī nuskhah, fī nuskhah ukhra, fī ukhra*."

National Library (ENL) is on fol. 1r, 5v, 6v and 202v. Without colophon, the manuscript is undated, by an unknown author. According to a cautious assertion by Ibrāhīm Šabbūḥ, it may have served as the direct *Vorlage* for Ṭibb 1219-2.[28]

The current binding concludes with five single leaves presented in reverse order (fol. 198r–202v) that contain text fragments that were started in the margin and continued separately. A note *tatimmat al-ḥawāšī* accompanies each leaf (fol. 198r, 201r, 202r); fol. 199v appears to be blank; fol. 198r–v repeats the text of 201r–v, is written in a different hand, and comes from Ṭibb 1219-2.

Ṭibb 1219-2 (= Šabbūḥ 40)[29]: second part of the codex, 272 fol., 25x18 cm, 11 lines per page; custodes throughout; headings and key words in the main text and in the marginalia in red; the main text and the marginalia in an almost completely dotted, hardly vocalized, well readable *Nasḫī*; no foliation,[30] chapter numbering, Arabic numbering of the layers fol. 11r-261r all 10 leaves (at 11r begins *ṯāliṯ al-ṯānī* ~ "the third [layer] of the second [block]"); paper repaired in places at the beginning and towards the end of the manuscript, minor worm damage; in the margin several variants marked with *nusḫa* as well as isolated additions, corrections (*ṣḥ*-note, fol. 97r) and glosses in the scribe's hand, also interlinear; no table of contents. On fol. 1r, there is an ownership entry of a certain *ʿAbd al-Ḥamīd...* and a note on a legal (*šarʿī*) purchase by *ʿAbd al-Raḥmān b. Yaḥyā al-Tāǧī al-Baʿlī*[31] in 1164/1750-1751. The same note is also on fol. 2r. Ownership stamps of the Egyptian National Library are on fol. 1r and 274r; further stamps, completely illegible, are on fol. 273v.

No author is mentioned. A colophon on fol. 274r indicates the conclusion of the second part of the *Kitāb al-bayṭara*, and consequently the end of the entire work. It identifies the scribe as *ʿAbd al-Raḥmān b. ʿAlī (al-Shāfiʿī al-Kanānī*) and states that the transcription was completed in Ǧumādā l-āḫira 686/July-August 1287.

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[28] Šabbūḥ, *Fihris*, 37.

[29] See Abū Nahla, *Fahāris*, 289, and Šabbūḥ, *Fihris*, 36.

[30] The folio numbers given below refer to our foliation.

[31] He seems to have been the son of the later Mufti of Baalbek, *Yaḥyā Ibn ʿAbd al-Raḥmān Ibn Tāǧ al-Dīn al-Baʿlī al-Ḥanafī al-Tāǧī* (1095/1684-1158/1745), cf. Muḥammad Khalīl b. ʿAlī al-Murādī, *Kitāb Silk al-durar fī aʿyān al-qarn al-thānī ʿashar*, ed. Muḥammad ʿAbd al-Qādir Shāhīn, vol. 4, 4 vols. (Bayrūt: Dār al-Kutub al-ʿIlmīya, 1997), 232–33, who owned several manuscripts, cf. www.qalamos.net/receive/MyMssPerson_agent_00000844 (accessed March 5, 2024). The scribe of Ms. Arabic 697 (Wellcome Collection) *Tāǧ al-Dīn b. Muḥammad b. Yaḥyā b. ʿAbd al-Raḥmān b. Tāǧ al-Dīn al-Tāǧī al-Baʿ[a]lī* comes from the same family and is in fact his grandson, cf. https://www.fihrist.org.uk/catalog/manuscript_16341 (accessed March 5, 2024).

There are no marginal notes extending onto a separate page (see below), nor any notes added later during collation next to chapter headings. The main text concludes with a *takḏīya*-note from the scribe in the middle of fol. 137r. The *scholia* begin on folio 137v and continue to the end of the manuscript, comprising more than half of it. Similar *takḏīya*-notes are also found on fol. 258r and 267v.

Unlike Ṭibb 1219-1 and BnF Arabe 2812, the Ṭibb 1219-2 has not been transposed; the leaves are in their original order, and the text is complete. However, the extent of the paratext differs, including the marginal notes and the *nusḫa*-variants.

B. The Tāǧ al-Dīn Family of Witnesses

Together with Ar. 3319 from the Chester Beatty Library,[32] all four textual witnesses associated with the name of *Tāǧ al-Dīn*—namely, Fatih 3608, BnF Arabe 2812, and Ṭibb 1219-1|2—can be assigned to the same branch of the *ibn aḫī Ḥizām* text's transmission. CBL 3319, dated 10 Muḥarram 869 (September 12, 1464), lacks the marginal notes characteristic of this family. However, it contains brand marks[33] on fol. 48r–49r, which are absent from Fatih 3608.

As previously mentioned, Fatih 3608 contains the first part of *ibn aḫī Ḥizām's* work, while BnF Arabe 2812 and Ṭibb 1219-1|2 include the second part. All four witnesses use the Greek-Coptic numerals to number the chapters, a system that was commonly used in Egypt and throughout the Maghreb until the early Ottoman period for paginating and foliating Arabic texts, and for administrative purposes (*ḥurūf al-zimām*).[34] The first part of the book consists of 57 chapters. Chapters 53, 54, 55, and 57 specifically detail equine defects and diseases in separate sections. Chapter numbering restarts in the second part and concludes with chapter 297.

According to *ʿUnwān*, Fatih 3608 and BnF Arabe 2812 were intended for the library of the Mamluk Sultan *al-Nāṣir Muḥammad b. Qalāwūn* (*bi-rasm al-ḫizāna […] al-nāṣirīya*). This suggests that they date from the late seventh/thirteenth century or the early eighth/fourteenth century at the latest. Additionally, the colophon indicates that the transcription of Ṭibb 1219-2 was

[32] Cf. Heide, *Hippiatrie I,* 52, 69. The last chapter is omitted in this family, Ibid., 56.

[33] For more on the brand marks in the context of Smat's Horse Book, see Jasmine Dum-Tragut in this volume: "Meeting in the body of the horse."

[34] Cf. Stephen Chrisomalis, *Numerical Notation: A Comparative History*, 1st ed. (New York: Cambridge University Press, 2010), 149–52, and Gérard Troupeau, "À propos des chiffres utilisés pour le foliotage des manuscrits arabes," *Arabica* 21, no. 1 (1974): 84.

completed in Ǧumādā l-āḫira 686/July-August 1287. This throws some light on the early phase of the formation of the Tāǧ al-Dīn witnesses.

Fatih 3608 and BnF Arabe 2812 were compared to the original (*balaġa muqabālatan*). Both Ṭibb 1219-1|2 and BnF Arabe 2812 contain variant readings (*varia lectio*), noted as *nusḫa* in the margin or interlineally. In some cases, these readings suggest a connection with the transmission line OB360-LB299-BP13-FT3609 of the *Kitāb al-bayṭara*.[35] However, this does not support the assumption that an example from this branch was used for the comparison. It is noteworthy that none of the textual witnesses used in M. Heide's critical edition fully convey these variants; their similarities appear to be coincidental. A closer examination of the Tāǧ al-Dīn witnesses[36] revealed that these *nusḫa*-variants originate from the sources which are written down as marginal notes, and the transmission within this family sometimes includes interpolations from these sources.[37]

II. A *corpus of scholia* in the manner of a *muṣannaf*

The witnesses Fatih 3608, BnF Arabe 2812 and Ṭibb 1219-1|2 are of particular interest due to the numerous passages added to the margins or immediately after the main text of the *Kitāb al-bayṭara*. These text fragments, scattered throughout the work, consist of extensive extracts from the hippological and hippiatric writings of various "scholars, sages, and hippiaters" from Indian, Persian, Byzantine, Arabic, and Greek traditions, some of whom are mentioned by name.[38] Extracts from Armenian sources are referenced as well.[39] During the *recensio,* they were identified as originating from the *Aqrābāḏīn al-ḫayl*, a back-translation of a quite early copy of Hethum's Horse

[35] For more on this family, see Heide, *Hippiatrie I,* 69.

[36] For a *stemma codicum* of these witnesses based on the *nusḫa*-variants and the *Aqrābāḏīn*-excerpts see Yavrumyan, *Rückübersetzung,* (forthcoming).

[37] Some of the *nusḫa*-variants are found in the critical apparatus of the *Kitāb al-bayṭara* edition by M. Heide because of this kind of interpolation; cf. *hattā tasqut al-zunūd* Hippiatrie II, §117b 294.4] *hattā yanqatiʿ al-ǧild wa-yaqaʿ al-ʿūd* BnF Arabe 2812 (76r:7), Ṭibb 1219–2 (107r:2–3), Ṭibb 1219-1 (120v:11) as a verbatim interpolation from *Aqrābāḏīn* (§132:78–83), for additional examples and the discussion, see Yavrumyan, *Rückübersetzung,* (forthcoming).

[38] For the origins of the question, see Björck, *Griechische Pferdeheilkunde*, 8–12.

[39] See also Alkhateeb Shehada, *Mamluks and Animals,* 100: "The name of the Armenians appears only a few times in al-Ṣāḥib Tāj al-Dīn's veterinary book, and then mainly in the margins. … It is not clear whether al-Ṣāḥib Tāj al-Dīn used early Armenian sources or whether these were Arabic sources that were later translated into Armenian."

Book, made in Mamluk Cairo between 1281-1287.[40] The extracts are so close to the original that they can be considered direct quotations.[41] The *Kitāb al-bayṭara* transmits the text of 144 of the 182 chapters of the *Aqrābāḏīn*, in varying in length and with minor stylistic changes. These extracts are consistently introduced with an "anonymized" formula *wa-qāla l-ʾarman* (the Armenians say...).[42]

M. Heide's assumption that the copyist began these "marginalia" on the still empty pages of his manuscript BnF Arabe 2812, which was intended for the *main text* and then, due to lack of space, wrote the rest in the margin,[43] characterizes the distribution of these extracts as purely "formal" and fails to differentiate between text in the margin and text following the main text. Furthermore, it is overlooked that in Fatih 3608 (the first part of the work),

[40] Under the so-called Hethum's Horse Book, we refer to the Armenian translation of *ibn aḫī Ḥizām's Kitāb al-furūsīya wa-l-bayṭara* from Arabic, made most likely in the second half of 1260, by a deacon named *Stepʿanos* on behalf of the King Hethum I (r. 1226-1269). According to the colophon of *Aqrābāḏīn*, the Arabic back-translation was made from a copy captured by the governor of Damascus and the later Mamluk Sultan *Ḥusām al-Dīn Lāǧīn al-Manṣūrī* (r. 696/1296-698/1299) at the Second Battle of Homs in Raǧab 680/October 1281; the copy was taken from the treasure of the King of the Armenians (*bi-ḫizānat takfūr malik al-ʾarman*). Based on these references alone, it can be inferred that the colophon pertains to King Levon III (r. 1269-1289), who joined the Mongols in their invasion of Syria and took part in the Battle of Homs. Notably, *Aqrābāḏīn* preserves a quite early version of the Hethum's Horse Book, which is in places more complete than the surviving Armenian copy of King Smbat, dated 1296-1298. The extracts from the *Aqrābāḏīn* cited as "Armenian tradition" in the Tāǧ al-Dīn witnesses provide a *terminus ante quem* for the back-translation Ǧumādā l-āḫira 686/July-August 1287. For details see Yavrumyan, *Rückübersetzung*, (forthcoming), for a discussion of the reception of Armenian equine medicine manuscripts, see Jasmine Dum-Tragut, "Meeting in the body of the horse," in this volume, and "Medieval Equine Medicine from Armenia," in *Equine Science*, ed. Catrin Rutland and Albert Rizvanov (IntechOpen, 2020), 3–16. Also see Dum-Tragut, Jasmine and Ovsanna Khachatryan. "The 'Nazlum Family Medical Book'. Codex M 11161 and its 'Medical book for horses'." *Matendaran: Medieval and Early Modern Armenian Studies* 2,1 (2025): 119-143.

[41] For the requirements for clearly defining the text passages to be marked as quotes in the context of determining indirect transmission, see e.g. Annette Geßner, "Das automatische Auffinden der indirekten Überlieferung des Platonischen *Timaios* und die Bedeutung des Tools ‚CitationGraph' für die Forschung," in *Das Portal eAQUA – Neue Methoden in der geisteswissenschaftlichen Forschung I*, ed. Charlotte Schubert and Gerhard Heyer (Leipzig, 2010), 28–29.

[42] A referencing technique used to indicate the transition between quoted passages of different origins. Another expression, *wa-la-hum* ("from them [in addition]"), introduces additional passages from the same source that are from a different section than the previous one.

[43] Cf. Heide, *Hippiatrie I*, 56.

these annotations appear exclusively as geometrically and graphically cumbersome marginal notes.

However, in at least two places in BnF Arabe 2812 (fol. 71r–v and 86r–87v),[44] the text that begins in the margin continues onto the following leaves, covering them entirely and sometimes even extending into the margins. The script retains its characteristic size and shape, and there are indications "of a continuation and completion of the marginal note" (*tatimmat al-ḥāšiya*).[45] This suggests that for the author (or copyist) these passages were still intended to be placed in the margin, as opposed to those belonging at the end of the main text. In other words, there are two different criteria, and consequently two different techniques, that underpin the relationship between the main text and the "accompanying" text.[46]

Despite M. Heide's edition and clarification of the relationships between Fatih 3608, Fatih 3609 and BnF Arabe 2812, Housni Alkhateeb Shehada—who apparently had access only to F. Sezgin's facsimile edition, could not take BnF Arabe 2812 into account and continued to assume al-Ṣāḥib Tāǧ al-Dīn as the author of Fatih 3608|3609[47]—goes even further[48] and claims that "the marginal notes in the first volume [Fatih 3608 – M.Y.]… include much information drawn from other treatises, which he [al-Ṣāḥib Tāǧ al-Dīn – M.Y.] presumably discovered after finishing the book and wanted to update it with

[44] The passages are found in Ṭibb 1219-1 on fol. 199r–202v (the last four leaves; fol. 198r–v, however, belongs to Ṭibb 1219-2) and fol. 32v–35r, also with the note *tatimmat al-ḥāšiya*. In Ṭibb 1219-2 the text has been truncated so that it appears only in the margins (cf. fol. 39v–40r).

[45] Cf. Gacek, *Arabic Manuscripts*, 115: "… in the Mamluk period calligraphers distinguished between the *naskh* script of the main text and the *naskh* used for glosses by calling the former *qalam al-matn* and the latter *qalam al-ḥawāshī*."

[46] Typologically, this is comparable to biblical *catenae*, "both in the form of a commentary separate from the scriptural text (*Breitkatenen*), and as a marginal commentary (*Randkatenen*);" on this and other techniques of marginal scholia, cf., e.g., Fausto Montana, "The Making of Greek Scholiastic Corpora," in *From Scholars to Scholia*, ed. Franco Montanari and Lara Pagani (Berlin, New York: De Gruyter, 2011), 118ff., see also Ibid., 108–9: "… marginal scholia… arranged in full page display in the form of a separate commentary (recensions *a recueil*), i.e. without the poetic text or distant from it… In some cases, we can document that here we are dealing with the editorial outcome of a path that proceeds backwards: starting from one or more *corpora* of marginal scholia, it derives and (re)composes a separate full-page comment formally similar in effect to continuous *hypomnemata*. Moreover, it is not unusual to find materials re-worked in the opposite direction, i.e. cases of re-montage from the full page to the margins."

[47] Alkhateeb Shehada, *Mamluks and Animals*, 7.

[48] H. Alkhateeb Shehada has even dedicated an entire chapter to the figure of al-Ṣāḥib Tāǧ al-Dīn and his impact on Mamluk Furūsīya literature, Ibid., 142–48.

all the relevant material."[49] I. e., H. Alkhateeb Shehada acknowledges only the technical and formal aspects of the marginal notes, suggesting that they were intended to supplement the work after its completion, and does not notice the notes' contextual features.

Following the discovery of the Cairo witnesses—which alongside Fatih 3608 and BnF Arabe 2812 form a common line of transmission and can be traced back to a hyparchetype—this unique technique of notation, found in the margins or on separate pages, can no longer be seen as an isolated individual phenomenon, as was previously believed. The extracts drawn from various sources do not simply appear as brief or detailed glosses, explanatory notes, or commentaries on *ibn aḫī Ḥizām*. In other words, they cannot be typologically categorized as "episodic, sporadic marginalia" that serve a subordinate and complementary role in relation to the (concerned) main text. Despite their formal resemblance to "classical" marginalia, they differ in terms of scope, complexity and the overall ambition of the concept. The editorial effort involved in their composition and design, as well as the range of their (intended or unintended) cultural impact, also sets them apart.[50]

From this perspective, the systematic collection of homogeneous and consistent extracts from various hippological and hippiatric sources—arranged in an orderly manner adjacent to or surrounding the (concerned) main text of the *Kitāb al-bayṭara*—will be referred to in the following discussion as a *corpus of scholia* in the sense proposed by Eleanor Dickey[51] and Fausto Montana.[52] The term *scholium*, in turn, will be understood as an extract from another source surrounding the main text (a purely formal criterion), while also considering additional contextual features.[53]

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[49] Ibid., 148.

[50] Cf. Montana, *Corpora*, 156ff. on the genesis of scholiography as an "*individual history* of texts."

[51] See Eleanor Dickey, *Ancient Greek Scholarship: A Guide to Finding, Reading, and Understanding Scholia, Commentaries, Lexica, and Grammatical Treatises, from Their Beginnings to the Byzantine Period*, American Philological Association Classical Resource Series (Oxford New York: Oxford University Press, 2007), 11–14, where medieval scholia are "dense and systematic collections of extracts from different sources," Ibid., 12.

[52] See Montana, *Corpora*, 107, "We will define a *corpus* of scholia as an exegetic *editio variorum*, designed to be made up in an orderly way alongside or around the text commented upon. By *"editio variorum"* we refer to the result of a carefully planned and systematic editorial process of compiling and stratifying different sources."

[53] Cf. Ibid., 16 on contextual features while defining *scholium*, "Thus today the word [*scholium* – M.Y.] is generally taken to mean *tout court* a textual explanation placed in the margin with respect to the concerned main text: any marginal note considered in its own

It can be assumed that this work, attributed to *al-Ṣāḥib Tāǧ al-Dīn*, appears to be an effort to integrate the hippological and hippiatric texts (or inheritance) available (or still practiced)[?] in the seventh/thriteenth century into the generally accepted (prototypical) main work[54] of one's own tradition, or at least to contextualize them within its framework.[55] This attempt can be divided into three stages, allowing us to identify three distinct types of extracts in the *Kitāb al-bayṭara*.

First, extracts that were considered similar or identical were placed exclusively in the margins of the concerned chapters of the *Kitāb al-bayṭara*. These extracts were stylistically adapted, rearranged independently of their original layout, taken out of their original context and spread over several chapters, or gathered around a chapter, begun in the margin and continued on separate pages, and so on. Extensive and systematic editorial work was carried out in this process.[56] In essence, these extracts are intended to provide parallels to certain aspects dealt with in the main text. They serve as a kind of coherent apparatus of *loci similes*[57] from works within the same genre as the main text to which they refer, and they need to be contextualized within or to benefit of the main text. These extracts form the class of "recognized"

right, that is to say, disregarding to other contextual characteristics, is usually denominated *scholium*."

[54] For more on the "imitation of the ancients" in Arabic literature, how it spread as a method, as a kind of "creative competition between authors," and how it shaped medieval scholars' ideas of "the model" and "the prototypical work," see, e.g., Alexander B. Kudelin, "K probleme sootnosheniya tradicionnogo i originalnogo v srednewekovoj poetike [Issues on the Relationship between the Traditional and the Original in Medieval Poetics]," in *Arabskaya literatura*, 238–39 (Moskva: Yazyki slawyanskoj kultury, 2003).

[55] This complex editorial and codicological process leads to what Montana, *Corpora*, 111, calls the "typological gap that distinguishes a copy with exegetic *marginalia* from one supplied with a *corpus* of scholia."

[56] See, for example, the combined passage of two *Aqrābāḏīn* treatments (the last treatment from chapter §105:89-139 follows the first treatment from chapter §62:47–65), which stands as a *locus similis* parallel to chapter §94b (*Hippiatrie II*, 94b 257.1–9) of the *Kitāb al-bayṭara* (Ṭibb 1219-1, fol. 102v; Ṭibb 1219-2, fol. 87r, BnF Arabe 2812, fol. 59r). The remaining ten *Aqrābāḏīn* treatments from chapter §62:71–461, together with chapter §128, are already *loci similes* for §43b-c and §43e of the *Kitāb al-bayṭara* (*Hippiatrie II*, 43b-c 178.9–179.2; 43e 179.11–14) accordingly (Ṭibb 1219-1, fol. 40v–41r; Ṭibb 1219-2, fol. 45v–46r, BnF Arabe 2812, fol. 92v–93r). Similarly, the passages dealing with "mulberry" swellings from *Aqrābāḏīn* chapters §133, §60, and §171 have been compiled as *loci similes* for chapter §125b ("mulberry" in the eye, *Hippiatrie II*, 125b 301.18–22).

[57] Montana, *Corpora*, 130–32, describes a main text with parallel extracts from the works of "authors of repute" as a kind of "commented edition" within the framework of the "scribal practices in the preparation of scientific texts."

knowledge (class *loci similes*). The passages that were somehow challenging or impossible to connect to the main text begin with the "Chapter on Instructions for Paddocks and Stables for Horses" and continue the main text until the end of the manuscript (§§204-297).[58] These independent excerpts drawn from the various traditions and comprising nearly half of the hippiatric portion of the work, are grouped thematically, structured within individual chapters (§§204-266),[59] and represent, as a kind of additional layering of the main text, knowledge that could not be recognized within the main text's framework (class *addenda*).

In both classes, the extracts from various traditions are not contradictory or alternative; on the contrary, they are complementary. They often reflect the sources from which *ibn aḫī Ḥizām* himself drew, such as the extracts on colors and defects from the Indian tradition along with the direct mentions of *Ǧanna*

[58] In Ṭibb 1219-2 (fol. 137r), the main text ends in the middle of the leaf and receives the scribe's *takḏīya*-note "*kaḏā wuǧida fī l-ʾaṣl al-manqūl min-hu* ~ So in the original from which it was copied"; the *addenda* are introduced only with the following verso. In BnF Arabe 2812 (fol. 22r), the text is continuous. In Ṭibb 1219-1, "The Chapter on Instructions for Paddocks and Stables for Horses" begins with fol. 89r (the leaf is apparently transposed). The fact that there is no note at this point in Ṭibb 1219-2 about the end of the main text of the *Kitāb al-bayṭara* (or at least about the end of part of the work), and that such a note can only be read at the end of the manuscript, together with the scribe's *takḏīya*-note mentioned above, is a further indication that this book was conceived as an independent work in its entirety and hardly as an ordinary, albeit scholia-enhanced copy or "commented edition" of the *Kitāb al-bayṭara* by *ibn aḫī Hizām*.

[59] It is somewhat similar to the ancient continuous *hypomnemata* to the classical authors, "where different opinions were often recorded under the same lemma," cf. Montana, *Corpora*, 120.

the Indian,[60] who also appears in the main text[61]; or entire chapters of the *Aqrābāḏīn*, which are essentially the main text presented through a back-

[60] Also known as *Ǧunna* or *Ǧull* (see following note), mentioned in the Armenian as "the Indian sage " associated with the author of the most important work of ancient Indian statecraft *Arthaśāstra* (c. 300 BC) *Kauṭilya* (or *Kauṭalya*) *Cāṇakya (c. 350-283 BC)*, the chancellor and closest advisor of the first emperor of the Indian Maurya dynasty *Chandragupta Maurya (d. c. 293 BC)*, cf. Jasmine Dum-Tragut, *Kilikische Heilkunst für Pferde: das Vermächtnis der Armenier. Kommentar - Übersetzung - Glossar* (Hildesheim: Olms, 2005), 24. The *Arthaśāstra* has a special chapter on how a horse should be trained, stabled, and treated, see Chapter 30, "The Superintendent of Horses," *Kauṭilya's Arthaśāstra*, ed. Shama Sastri Rudrapatna, 3rd ed. (Mysore: Wesleyan Mission Press, 1929), 149–53. *Šānāq*, the author of a poison book famous in Arabic tradition, was identified with *Cāṇakya* (rather with a pseudo-*Cāṇakya*), to whom another book on equine medicine translated into Arabic is also attributed, see the discussion in Bettina Strauss, *Das Giftbuch des Śānāq: Eine literaturgehistorischliche Untersuchung, mit arab. Text u. Übers.*, vol. 4/2, Quellen und Studien zur Geschichte der Naturwissenschaften und der Medizin (Berlin: J. Springer, 1934), 114–18, and Werner Schmucker, "Ein Beitrag zur Indo-Arabischen Arzneimittelkunde und Geistesgeschichte," *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 125, no. 1 (1975): 66–67. The passages quoted by *ibn aḫī Ḥizām* are taken from a treatise entitled *Kitāb (ʾayḍan) fī ʿilm al-ḫuyūl min qabīḥ wa-ǧayyid li-ḥukamāʾ al-furs wa-l-hind wa-l-ʿarab*, by *Ǧanna the Indian*, the vizier of the last Sassanid king, Khosrow II Parviz (r. 590-628); a hippological rather than hippiatric work, presented in the genre of a prince's mirror, dealing primarily with horse breeds and their status for the ruler, see Yavrumyan, *Rückübersetzung*, (forthcoming). This is entirely in keeping with the Indian tradition, where veterinary medicine is primarily concerned with elephants and horses, over which the kings had a monopoly, cf. Julius Jolly, *Medicin*, vol. 3/10, Grundriss der Indo-arischen Philologie und Altertumskunde (Strassburg: Verlag von Karl J. Trübner, 1901), 14. If the opening colophon of *Kitāb fī ʿilm al-ḫuyūl* is to be believed, the book originated as a lively dialogue between the vizier Ǧanna and the Persian king Khosrow II and was composed/written down by Ǧanna himself at the king's request; for further details, see Yavrumyan, *Rückübersetzung*, (forthcoming). This means that this short treatise can be seen as part of the early period of translation and adaptation of certain Indian texts or key works into Arabic, and can be dated between 170/786 and 205/820, at the latest, rather through a Middle Persian intermediate version, cf. Oliver Kahl, "On the Transmission of Indian Medical Texts to the Arabs in the Early Middle Ages," *Arabica* 66, no. 1–2 (2019): 82–97.

[61] Cf. Fatih 3608, fol. 40r ff., so called *Junnat l'Indou* in the new edition and French translation of Abû ʿAbdallah Ibn Akhî Hizâm al-Khuttalî, *Chevaux et Hippiatrie (Al-Khayl Wa Al-Baytara)*, ed. Abdelkrim El Kasri and Jamal Hossaïni-Hilali (El Jadida: Association du Salon du Cheval, 2018), 86ff. All the passages with the *Ǧanna the Indian* by *ibn aḫī Ḥizām* are also quoted almost verbatim under the name of *Ǧull al-Hindī* by ʿAbd Allāh b. Muḥammad b. Ǧuzayy al-Kalbī al-Ġarnāṭī (d. 8th/14th century), *Kitāb al-ḫayl, maṭlaʿ al-yumn wa-l-ʾiqbāl fī intiqāʾ kitāb al-ihtifāl*, ed. Muḥammad al-ʿArabī al-Ḫaṭṭābī, (Bayrūt: Dār al-Ġarb al-Islāmī, 1986), 82-85, an epitome of *Kitāb al-iḥtifāl fī istīfāʾ mā li-l-ḫayl min al-ʾaḥwāl* by *Muḥammad b. Riḍwān b. Arqam al-Numayrī al-Wādī* (d. 657/1259), dedicated to the first ruler of the Emirate

translation; or large numbers of extracts "from the words of the Persians, Byzantines, etc." apparently in the original, transmitted in places as the main text of the *Kitāb al-bayṭara*.

This taxonomy continues up to those passages which, for various reasons—such as misinterpretation[62]—cannot be clearly classified into any of the existing categories (§§267-297). It means that the continuous and consistent selection and compilation of the equine sources results in a so-called "remainder." This consists of entire passages that are included in the main work in their original form. In other words, it is a type of knowledge that is still "recycled" within the same framework and objective as we found it previously documented, thereby complementing the main text (class *recyclate*).

As mentioned, this technique[63] of excerpting from various sources aims not only to identify and record the hippological and hippiatric knowledge of the time but also to embed (to contextualize) this knowledge within its own tradition through a recognizable pattern. There is little or no critical reflection on the knowledge being incorporated; instead, there is a targeted distribution of extracts from different sources in the margin, based solely on their appearance in the main work, regardless of whether they are convergent or consistent. The historicity[64] of the extracts is often overlooked, and the potential emergence of factual convergences is not considered superfluous or useless. If at all, it was practical but contradictory considerations, such as saving space and the completeness of the extracts, that made it necessary to thin out, shorten, rearrange, etc. some critical passages in the margins, or to add them to the main text, or in the worst case to quote them indirectly when they were too close in wording to the main text. This apparent redundancy can be plausibly explained by a certain editorial intention to provide *a*

of Granada, and the founder of its ruling Nasrid dynasty *Muḥammad I al-Ġālib bi-Llāh* (r. 629/1232-671/1273).

[62] See the *Aqrābāḏīn* chapter §87 on *Kusāḥ* (= *Hippiatry II*, §72), which has not been assigned to any chapter of the *Kitāb al-bayṭara* and follows the main text (§287).

[63] For a similar descriptive approach in the Arabic linguistic tradition, see Marat Yavrumyan, *Das System der Verbalstämme in der arabischen linguistischen Tradition: Elemente der morphologischen und semantischen Analyse.* Dissertation (Bayreuth, 2006), 27.

[64] Historicity as a property of texts in the sense of a "erkennbaren Verortung in einer bestimmten Zeit," see Jochen A. Bär, "38. Historizität," in *Sprache - Kultur - Kommunikation / Language - Culture - Communication: Ein internationales Handbuch zu Linguistik als Kulturwissenschaft / An International Handbook of Linguistics as a Cultural Discipline*, ed. Ludwig Jäger, Werner Holly, Peter Krapp, Samuel Weber and Simone Heekeren (Berlin, Boston: De Gruyter Mouton, 2016), 388.

comprehensive overview of the selected sources. From this point of view, which is more philological than strictly professional, and which also recognizes a hippiatric heritage among other "peoples" (cultures), it may also make sense to preserve this knowledge in all its complexity and uniqueness.

In the absence of reliable editions of these extracts or corresponding sources, some aspects must remain speculative for the time being. For instance, is the *Kitāb al-bayṭara*—as a Mamluk compilation of texts on the care and healing of horses, handed down in Arabic (and in Arabic translation), as a kind of *corpus hippiatricorum arabicorum*—an innovation driven by a new cultural need? Does it demonstrate, in the grand style of the collections known from the history of hadith literature, such as *muṣannaf* and (*al-ǧāmiʿ*) *al-ṣaḥīḥ*, a tendency, on the one hand, to collect the transmitted knowledge and organize it into chapters[65] and, on the other hand, to assign a "canonized" (approved or recommended for practical use)? rank to certain parts[66] of the hippological and hippiatric knowledge by their classification (cf. class *loci similes*)?[67] Was the selection of the extracts a purely theoretical reflection on highly professionalized or specialized knowledge, or was it determined by the aims of the teaching process? Or is it "quite simple" and we are dealing here with a philologically interested editor who compiled the hippological and hippiatric writings in a new authoritative edition as an ambitious and outstanding undertaking of Mamluk book culture? Finally, can all the extracts still be traced back to their sources, or do we owe some of them only to this corpus of scholia?

[65] I.e., as a simple *muṣannaf-type* collection, in the sense of "an early technical term in Arabic literature applied to a collection of religious learning organized upon an abstract, structured subdivision in chapters," see G.H.A. Juynboll, "Muṣannaf," in *Encyclopaedia of Islam New Edition Online (EI-2 English)*, ed. P. Bearman (Leiden: Brill, 2012), https://doi.org/10.1163/1573-3912_islam_SIM_5575 (accessed March 13, 2025), also Sezgin, *GAS I*, 55–58.

[66] I. e. recognized as a "canonical collection," cf. A.F.L. Beeston, (ed.) and G.H.A. Juynboll, "Musnad," in *Encyclopaedia of Islam New Edition Online (EI-2 English)*, ed. P. Bearman (Leiden: Brill, 2012), https://doi.org/10.1163/1573-3912_islam_COM_0814 (accessed March 13, 2025).

[67] Cf. another similar strategy of placing linguistic questions in the mainstream of a norm of *Arabīya* as a well-known genre of *Streitfragen* in the Arabic linguistic tradition ʿAbd-ar-Raḥmān Ibn-Muḥammad Ibn-al-Anbārī (271/885-328/940), *Die Grammatischen Streitfragen der Basrer und Kufer*, herausgegeben, erklärt und eingeleitet von Gotthold Weil (Leiden: Brill, 1913).

More importantly, this work, whose composition (*taṣnīf*)[68] is associated[69] with the name of *al-Ṣāḥib Tāǧ al-Dīn*, a scion of a prominent bureaucratic family in Mamluk Cairo, stands as one of the earliest and most influential examples of Mamluk *Bayṭara* literature, which would reach its peak in the first half of the eighth/fourteenth century with *Abū Bakr ibn Badr al-Dīn* (d. 741/1340-1341) and his *Le Nâcérî*.[70]

III. Between the corpus of scholia and doxographical compilations

The manner in which the hippological and hippiatric knowledge of various traditions is perceived, discussed above, does not represent an isolated phenomenon.

Another compendium of hippiatric text fragments, particularly from the writings of the "ancients," Byzantines, Persians, as well as various sages and scholars, has been preserved in the form of doxographical[71] extracts (cf. "this or that says…").[72] Cataloged as Or. 299-3 (Warner Collection) [no. 1411] of the Leiden University Library (fol. 85v–161v), it contains nearly identical fragments in terms of both content and style as the scholia included in the margins or after the main text of the *Kitāb al-bayṭara*. Dated to 743/1342, this

[68] On the concept of "putting in order, composing a book, etc." see Ed., "Taṣnīf." in *Encyclopaedia of Islam New Edition Online (EI-2 English)*, ed. P. Bearman (Leiden: Brill, 2012), https://doi.org/10.1163/1573-3912_islam_SIM_7438 (accessed March 13, 2025).

[69] In the light of the above discussion, *al-Ṣāḥib Tāǧ al-Dīn* should be regarded as the person who commissioned this work or even designed it.

[70] Compiled almost 450 years after the first translations of the Greek hippiatrians into Arabic (733/1333), this comprehensive work for its time would play a key role in the reception of hippological and hippiatric knowledge by later Arabic literature and European authors, cf. Katharina Schwind, "Die Pferdeheilkunde Abu Bakrs Teil II: 2. Band, 5. Abschnitt, Kapitel XI - XXXIV, 2. Band, 7. Abschnitt, Kapitel XXVIII - LVI, 2. Band, 8. Abschnitt, Kapitel I - LXXI; Übersetzung und Vergleich mit pferdeheilkundlichen Schriften der Spätantike und des islamischen Mittelalters" (Diss., München, LMU, 2005), 7, 220ff.

[71] Here, doxography is not understood in the strict philosophical-historical sense, but rather as a method that deals with the knowledge of previous generations and involves a certain degree of "self-justification," as Richard Rorty points out in his well-known essay, cf. Richard Rorty, "The Historiography of Philosophy: Four Genres," in *Philosophy in History: Essays in the Historiography of Philosophy*, ed. Jerome B. Schneewind, Quentin Skinner, and Richard Rorty, Ideas in Context (Cambridge: Cambridge University Press, 1984), 49–76.

[72] See the most used formulas such as *ʾahl al-maʿrifa* (*al-ʿilm*) *bi-ʿilāǧ* (*bi-ʿilal*) *al-dawwāb* (*wa-l-ḫayl*), *qawm min al-falāsifa al-rūm al-qudamāʾ*, *baʿḍ al-muʿāliǧīn*. Among these, an *Apsyrtus* or *Astartus the Romer* (*Absarṭus*/*Astarṭus al-rūmī*) is also mentioned (cf. 97r:15/97r:21), the latter is probably a misspelling of the same person.

doxographical compendium is bound in a codex alongside the *Kitāb al-bayṭara* by ibn aḫī Hizām (Or. 299-2 Warn. [no. 1409], fol. 45r–85v)[73] and another "lacunose" copy of the *Kitāb al-Furūsīya wa-l-Bayṭara* (Or. 299-1 Warn. [no. 1408], fol. 1r–45r) by the same author.[74]

Another anonymous and undated *Risāla (laṭīfa) fī l-furūsīya* from the Aya Sofya collection of the Istanbul Süleymaniye Library (AS 3314-3[75], fol. 110v–139r), after the classical, briefly summarized chapters on preparing horses, fighting on horseback, shield use, "exercise in a circular training-routine" (*nāward*),[76] breeds of horses, club swinging, provides extensive extracts on the training and preparation of the foal, drawing from Byzantine (*li-l-rūm*)[77] and Persian (*li-l-furs*)[78] traditions (fol. 124r–128v). From fol. 128v to 137v, there are descriptions of the bad habits (*ʿuyūb*) of riding animals according to Iraqi, Persian, Maghrebi, and other traditions. The anonymous doxographical formula "this or that says…" is also present.[79] Three subsequent chapters address equine diseases, with the symptoms directly followed by the

[73] See Heide, *Hippiatrie I*, 63–64.

[74] Petrus Voorhoeve, ed., *Handlist of Arabic Manuscripts in the Library of the University of Leiden and Other Collections in the Netherlands*, 2nd ed., Codices Manuscripti Bibliothecae Universitatis Leidensis 7 (The Hague, Boston, London: Leiden University Press, 1980), 40, 85, and Jan Just Witkam, *Inventory of the Oriental Manuscripts of the Library of the University of Leiden: Manuscripts Or. 1-Or. 1000*, vol. 1 (Leiden: Ter Lugt Press, 2007), 152.

[75] For a brief description of this three-part compendium on riding, archery (AS 3314/1), and competition and game rules (AS 3314/2), as well as further bibliographical references, see Hellmut Ritter, "La Parure des Cavaliers und die Literatur über die ritterlichen Künste," *Der Islam* 18 (1929): 140, and for the Ms. cf. https://portal.yek.gov.tr/works/detail/203979 (accessed March 15, 2025).

[76] F. Viré "Khayl." in P. Bearman (ed.), *Encyclopaedia of Islam New Edition Online (EI-2 English)*, (Brill, 2012), https://doi.org/10.1163/1573-3912_islam_SIM_4254 (accessed March 13, 2025).

[77] Here the Theomnestus (of Nicopolis) is mentioned by name, cf. *qāla Ṯīwmnīsṭīs al-ḥakīm al-rūmī* (124r:12).

[78] The Persian tradition also mentions a certain *Qusṭūs*, probably an extract from the agricultural compilation of *Cassianus Bassus*, translated from Middle Persian into Arabic under the title *Filāḥa Fārisiyya* of *Qusṭūs Iskūrāstīkina*, see Carlo Scardino, *Edition antiker landwirtschaftlicher Werke in arabischer Sprache: Prolegomena*, vol. 1, Scientia Graeco-Arabica 16/1 (Boston, Berlin: De Gruyter, 2015), 230ff.

[79] In addition to the text of the *Aqrābāḏīn*, the *Kitāb al-bayṭara* contains also various individual records scattered throughout the region, excerpts from ancient agricultural literature, etc. These passages, along with additional references to the *al-bayāṭira (al-maġrib), baʿḍ ʾahl al-maʿrifa, ʾahl al-ʿilm wa-l-maʿrifa, ʾahl al-maʿrifa wa-l-ḫibra min al-bayāṭira, baʿḍ al-ruwwāḍ, al-ʿiraqīyūn, al-šāmīyūn, ʾahl al-ǧazīra, al-ḫurāsānīyūn, al-maġāriba*, etc., still require further study.

corresponding treatments (fol. 137v–139v).[80] These fragments again refer to anonymous Byzantine and Persian scholars, sages, and "some ancient ones," including *Theomnestus* and a certain *Apsyrtus*.[81] The *Kitāb al-bayṭara* transmits an almost identical set of these excerpts as scholia in the margins or after the main text.

At least two more undated copies of the same *Risāla (laṭīfa) fī l-furūsīya* are located in Istanbul: Süleymaniye Kütüphanesi, Murad Molla 1315-8[82], fol. 167r–176v; and Nuruosmaniye Kütüphanesi, Nuruosmaniye 3901-2[83], fol. 24v–40v. Like AS 3314-3, these two copies are found in a collective volume alongside *Ṭaybuğā al-Ašrafī al-Baklamišī al-Yūnānī's* (d. 797/1394) work *Ğunyat al-rāmī wa-ğāyat al-marām lil-maʿānī* by[84]. However, both witnesses (and apparently the *Vorlage*) have a different chapter order and end with a description of the horse breeds (i.e., valued and hated marks). The excerpts presented in AS 3314-3 are notably absent here, which does not necessarily imply that the version transmitted in AS 3314-3 is secondary.

The Leiden Or. 299-3 and the Istanbul AS 3314-3 indicate that in the latter half of the thirteenth century, there must have been short doxographical compilations of various veterinary (and possibly agricultural) sources in Arabic translation as stand-alone codices, which could have been obtained by individual copyists or intellectuals in Cairo, such as al-Ṣāḥib Tāğ al-Dīn.[85] It is reasonable to assume that these compilations, as we will see below with *Baktūt*

[80] As in the Smbat's Horse Book, symptoms and therapies are combined here, so that the description of a specific disease is immediately followed by one or more treatment methods. This approach contrasts with that of the *Kitāb al-bayṭara*, which first covers all diseases, including their etiology and symptoms, before discussing treatments. However, not all witnesses of the *Kitāb al-bayṭara* adhere to this structure of separating symptoms from therapies (see CBL 3073, also Fatih 3609), which, according to M. Heide, "auf eine frühere griechische Form der hippiatrischen Literatur zurückgehen dürfte, die uns heute nicht mehr erhalten ist." Idem, *Hippiatrie I*, 70.

[81] See the chapter on the treatment of dry phlegm (glanders), fol. 138v:8 and 139r:1, respectively.

[82] See https://portal.yek.gov.tr/works/detail/311990 (accessed November 15, 2024).

[83] See https://portal.yek.gov.tr/works/detail/177775 (accessed November 15, 2024).

[84] See Ritter, *Cavaliers*, 137, and Carl Brockelmann, *Geschichte der arabischen Litteratur*, 2., den Supplementbänden angepaßte Aufl., vol. 2 (Leiden: Brill, 1949), 168–69.

[85] Al-Maqrīzī reports numerous "splendid volumes" in the library (*ḫizānat kutub ğalīla*) of the *al-madrasa al-ṣāḥibīya al-bahaʾīya*, whose first teacher was Tag al-Din's father, *al-Ṣāḥib Fahr al-Din Muḥammad*. The madrasa was built in 654/1256 by *al-Ṣāḥib Bahāʾ al-Dīn* (d. 677/1278), the powerful vizier of Sultan *al-Malik aẓ-Ẓāhir Rukn ad-Dīn Baibars al-Bunduqdārī* (r. 658/1260-676/1277) and the grandfather of *al-Ṣāḥib Tāğ al-Dīn*, see al-Maqrīzī, *al-Ḫiṭaṭ*, vol. 4, 211–12.

al-Rammāḥ, were regarded as convenient and accurate summaries, and they were utilized in practice.

For his corpus of scholia, *Kitāb al-bayṭara* appears to have utilized a source analogous to the extant doxographical Or. 299-3 and AS 3314-3, which was subsequently supplemented by extracts from other works, such as the *Aqrābāḏīn*.[86] Further exploration of the origins of scholiography in the Arabic hippiatric tradition will undoubtedly elucidate the underlying connections. However, an illustrative *recensio* of the chapter on the "Arousal of the Black Bile"[87] reveals not only omissions in all the collated textual witnesses, i.e. *Trennfehler* that make it completely improbable that one was derived from the other, but also a *locus criticus* and yet another *locus desperatus*, where AS 3314-3 (fol. 138r–v), Ṭibb 1219-1 (fol. 37r), Ṭibb 1219-2 (fol. 42r) and BnF Arabe 2812 (fol. 89v) show a close relationship to each other, which can probably be traced back to a common *Vorlage*, and where Or. 299-3 (fol. 96v) seems to have preserved readings from a completely different branch of the tradition.[88]

IV. Concluding remarks

Given the *Kitāb al-bayṭara's* status as a systematic compilation from various sources centered around the main work of one's tradition, it is reasonable to return to the so-called *individual history* of this, in many respects, key work of the Mamluk *bayṭara*-literature. As previously mentioned, the dearth of editions or research efforts on the relevant hippiatric writings hinders the ability to address more nuanced questions, such as the degree of authority or influence of these extracts and their sources on the different stages of the development of the Arabic veterinary tradition. Nevertheless, three brief

[86] Cf. Alkhateeb Shehada, *Mamluks and Animals*, 100, "It should be emphasized that this heritage is rarely encountered in Arabic literature, and in fact al-Ṣāḥib Tāj al-Dīn's treatise is one of the few containing materials attributed to Armenians in the context of horse treatment."

[87] See also an almost verbatim version in ibn aḫī Hizām (*Hippiatrie II*, §39d 172.11-16). The text seems to go back to an anonymous "Book of Hippiatry" translated from Persian into Arabic (cf. chapter §24 in Gotha Ms. orient. A 2073, fol. 58v; also BnF Arabe 2810, fol. 101v; Köprülü 959-2, fol. 110r–v; British Library Add MS 14056-3, fol. 80r–v; Dār al-kutub Ṭibb 1588, fol. 64v), which is "hardly rightly" attributed to *Abū l-Ḥasan Ṯābit ibn Qurra* (d. 288/901), cf. Manfred Ullmann, *Die Medizin im Islam*, Handbuch der Orientalistik. Erste Abteilung, der Nahe und der Mittlere Osten, herausgegeben von B. Spuler, Ergänzungsband 6, 1. Abschnitt (Leiden, Köln: Brill, 1970), 124, 220.

[88] Cf. كهربا AS : كمّون Or. and الثوبا بريح AS (sic!) : البراريح Or. (sic!) respectively.

examples from the perspective of the research project "Meeting in the Body of the Horse" may demonstrate the potential for fruitful research in this area.[89]

The case of *Aqrābāḏīn al-ḫayl* demonstrates that such a corpus of scholia can sometimes transmit old and valuable readings that can be reliable (or genuine) for establishing a critical text.

A similar situation can be observed with *Ǧanna the Indian*, as well as with the Persian, Byzantine, and local or regional traditions, documented as scholia. These can provide a deeper understanding of how different writings were perceived and integrated into new works and how they contributed to the development of Arabic equine medicine. They can also help reconstruct the original texts. The Armenian extracts, which, as mentioned earlier, are a back-translation of *ibn aḫī Hizām's* text, are particularly noteworthy due to the significance of revealing interlanguage factors on translation, scribal practices, textual transmission, sharing of appropriate technical vocabulary, etc.

It is also worth considering the spread of hippiatric knowledge in the region and the prism of its perception in later works. In 1290, just three years after the earliest dated testimony of *Kitāb al-bayṭara* we have, *Badr al-Dīn Baktūt al-Rammāḥ al-Ḫāzindārī al-Malikī al-Ẓāhirī* (d. 711/1311-2) wrote a work entitled *Kitāb fī ʿilm al-furūsīya.*[90] This work, which states that "any rider who does not know how to treat his horse is deficient in horsemanship,"[91] includes several practical veterinary passages derived from the *corpus of scholia* of the *Kitāb al-bayṭara*, especially from the "Sayings of the Armenians." One might ask how various hippiatric traditions, referring to the real cavalries, grooms, supply chains, etc., can contribute to the pursuit of perfection for a skilled trooper in the *ḥalqa*[92] of Sultan *al-Ašraf Ḫalīl* (r. 689/1290-693/1293) such as *Baktūt al-Rammāḥ*, namely during the siege of Acre, when he began to write his book.

[89] The further discussion, see Yavrumyan, *Rückübersetzung*, (forthcoming).

[90] For a discussion of this "oldest surviving general Mamluk furūsīyah treatise" see Shihab Al-Sarraf, "Mamluk Furūsīyah Literature and Its Antecedents," *Mamluk Studies Review* 8, no. 1 (2004): 195.

[91] For a *recensio* of witnesses to *Baktūt al-Rammāḥ* and the horse healing (*ʿilāǧ al-al-ḫayl*) part of his work, see Yavrumyan, *Rückübersetzung*, (forthcoming).

[92] Mixed cavalry formation of the Mamluk army, consisting of mamluks and freeborns; elite corps (lit.: circle) that surrounded the Sultan and formed his bodyguard; for further discussion see David Ayalon, "Studies on the Structure of the Mamluk Army-II," *Bulletin of the School of Oriental and African Studies* 15, no. 3 (1953): 448–76.

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