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DOI:

[10.1163/2212943X-00503004](https://doi.org/10.1163/2212943X-00503004)

Document Version

Accepted author manuscript

[Link to publication record in Manchester Research Explorer](#)

Citation for published version (APA):

Karimullah, K. (2017). Transformation of Galen's Textual Legacy from Classical to Post-Classical Islamic Medicine: Commentaries on the Hippocratic Aphorisms. *Intellectual History of the Islamicate World*, 5. <https://doi.org/10.1163/2212943X-00503004>

Published in:

Intellectual History of the Islamicate World

Citing this paper

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Transformation of Galen's Textual Legacy from Classical to Post-Classical

Islamic Medicine:

Commentaries on the Hippocratic Aphorisms

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Abstract

I assess Galen's (d. ca. 216) textual legacy on Arabic commentaries on the Hippocratic *Aphorisms*. I show that early authors in this tradition employ exegetical strategies taken from Alexandrian exegetical models. Applying these strategies to the Hippocratic-Galenic text makes Galen's commentary the primary means for these authors to understand the *Aphorisms*. By introducing a host of commentary strategies that depart from Alexandrian models, Ibn Abī Šādiq's (d. after 1067 CE) commentary is a watershed moment in the *Aphorisms*-commentary tradition. Nevertheless, Galen's commentary remains crucial for Ibn Abī Šādiq. These commentary strategies lead him to introduce texts, concepts and classifications that move beyond Galen's *Aphorisms*-commentary. Finally, in one of the last texts in this corpus dating to around 1350, Ibn Sīnā's (d. 1037) *Canon of Medicine* and Ibn Abī Šādiq's commentary have become major sources for understanding the *Aphorisms*. Galen's commentary is used sparingly.

Keywords: Islamic medicine, Galen, Hippocrates, Aphorisms, Ibn Sīnā, Canon of Medicine, commentary

Introduction

In this paper, I examine transformations in Galen's (d. 216) medical legacy in late-antique genres of medical writing from the end of the classical into the post-classical period of Islamic medicine.¹ The body of Arabic commentaries

1. This corpus is being edited at the University of Manchester by researchers under the direction of Peter E. Pormann with financial support from the European Research Council.

on the *Aphorisms* together with Ḥunayn ibn Ishāq's (d. 873) Arabic translation of Galen's commentary on the *Aphorisms* serves as the textual basis for this study. It constitutes a unique corpus of medieval Arabic medical texts, which provides a unique opportunity to revisit Galen's legacy and to trace its evolution over a period of more than five centuries.

Observing that medieval Islamic medical theory continues and builds upon late antique trends in Greek and Roman Galenism² and that medieval

2. The standard work is Oswei Temkin, *Galenism: the Rise and Decline of Medical Philosophy* (Ithaca: Cornell University Press, 1973). For Galenism in Islamic medicine, see Manfred Ullmann, *Islamic Medicine* (Edinburgh: Edinburgh University Press, 1978), 7–40; Peter Pormann and Emilie Savage-Smith, *Medieval Islamic Medicine* (Edinburgh: Edinburgh University Press, 2007), Chapter 1. Vivian Nutton usefully summarises the characteristic features of Galenism in Vivian Nutton, *Ancient Medicine* (London: Routledge, 2004), 292: “By AD 650 ancient medicine had taken on the form in which it was to dominate the theory and practice of medicine in the Greek East, and subsequently in the Muslim world and the Latin West, for a millennium—namely, Galenism. Learned doctors and other intellectuals were now agreed that the human body, organised anatomically and physiologically in three almost separate systems based on the brain, heart and liver, depended for its health ultimately on a balance between its four constituent humours, blood, bile, black bile, and phlegm. This balance varied according to the individual's age and diet (in the broadest sense of the term), the season of the year and the environment, and determined not only physical but also mental well-being. It was a system standing firmly on the twin pillars of observation and logic, and gained added authority from the longevity of the theories on which it was based and from the ease with which it could be co-ordinated with other systems of thought such as Aristotelianism, Platonism and monotheism. It was not entirely immune to change, although its rhetoric of certainty did not allow for radical developments or more than a circumscribed

Islamic physicians inherited all the major genres of medical writing from late antiquity, Manfred Ullmann has wondered whether the “very colourful and varied picture” offered by Islamic medicine “might not have led to a lively argument with Galen, and whether Galen’s doctrine might not have been severely tested or even revised.”³ Ullmann concedes that while there are cases in which individual doctrines of Galen come in for criticism, such as when Ibn al-Nafīs (d. 1288) proposes the existence of the pulmonary transit in his commentary on Ibn Sīnā’s (d. 1037) *Canon of Medicine*,⁴ nevertheless

area of disagreement. Such a theory, backed up by centuries of observations and apparently effective therapies, had deservedly triumphed. The vigorous debates of fifth-century BC Greece or second-century Rome were long gone: arguments over the interpretation of Galen had replaced disputes over alternatives to Galen.”

3. Ullmann, *Islamic Medicine*, 22.

4. After citing the passage from Ibn al-Nafīs’ commentary on the *Canon* in which “for the first time” the circulation of blood in the lungs is described, Ullmann says (*Islamic Medicine*, 69) that Ibn al-Nafīs “gained his knowledge not on the basis of systematic physiological research but by plain logical deduction derived from the knowledge about the impenetrability of the septum. This must be kept in mind if the significance of his teaching is to be rightly judged. In the Islamic world this teaching had practically no influence. Only Zayn-al-‘Arab al-Miṣrī [d. 1368] and Saḍīd-ad-Dīn al-Kāzarūnī [d. ca. 1344] mention it briefly.” In *Science and Religion in Mamluk Egypt* (London: Routledge, 2013) Nahyan Fancy does not dispute Ullmann’s claims. However, he examines the the larger religious and philosophical motives, especially Ibn al-Nafīs’ theory of the soul, which compelled Ibn al-Nafīs to go against Galen’s physiology. Fancy’s latest work tries to understand the exegetical tradition in which Ibn al-Nafīs’ commentary on the *Canon* and his revisions to

there was no revision, far less dissolution, of the general Galenic system. This could not happen because the lively development which classical Greek medicine had undergone came to a halt after the imperial period. This halt in development came to an end in the West only in Renaissance times when things started moving again through Vesalius and Paracelsus. Arabic medicine falls in the period of medieval quiescence, though this must not be viewed as stagnation. The Arabs had received Greek medicine at the last stage of its development and they could do no other than to assume that this system was perfect and final.⁵

Ullmann's historical determinism should not be overstated. What Ullmann means in part is that late antique Greek and Roman medicine represents a consolidation of Galenism, and while individual physicians contributed to expanding medical knowledge, no alternative "systems" are proposed. Crucially, Ullmann ties the victory of Galenism over its rivals in late antiquity with the genres of medical writing that were popular in the period. For Ullmann, the fact that in Greek and Roman late antiquity medical lore was handed down in certain types of exegetical genres—e.g. *summas*, *encyclopaedias*, *compendia* of quotes from earlier medical authors, self-help

Galenic physiology were received; see Nahyan Fancy, "Post-Classical Medical Commentaries: A Preliminary Examination of Ibn al-Nafīs's *Shurūḥ*, the *Mūjaz* and Commentaries on the *Mūjaz*," *Oriens* 41 (2013): 525–545.

5. Ullmann, *Islamic Medicine*, 22.

guides—led to a situation in which medical theory in Islamic civilization is based on medical theory from texts by Galen or late antique summaries of his works.⁶

Aspects of Ullmann's viewpoint are intriguing. For one, Ullmann uses the fact that Islamic physicians inherited Galenism in the form of *exegetical genres* of medical writing to explain lasting continuities with late antique Greek and Roman medicine. Of course, Ullmann was aware of the fact that there are numerous, well-documented examples of instances in which medieval physicians writing in Arabic openly contradict Galen on principles of medical science and anatomy.⁷ Yet, when Ullmann wonders in effect why there was no Arabic Vesalius or why Arabic translations of medical theories that begin from non-Galenic, non-Hippocratic medical paradigms “hardly received a wide circulation,” and “were without influence” in seventeenth- and eighteenth-century Ottoman lands,⁸ it becomes clear that a revolution-

6. See Manfred Ullmann, *Die Medizin im Islam* (Leiden: Brill, 1970), 65–67.

7. Ibn al-Nafīs' positing the existence of the pulmonary transit is only the best known example. Ullmann discusses (Ullmann, *Medizin*, 171–172) 'Abd al-Laṭīf al-Baghdādī's criticism of Galen's views on the anatomy of the lower jaw bone and the number of bones in the sacrum. Ullmann also translates (Ullmann, *Medizin*, 177) an important passage from Abū al-Faraj Ibn al-Quff's (d. 1286) work on surgery, in which he postulates the existence of capillaries, whose existence even William Harvey was not clear on, and which awaited discovery by Malpighi in 1661 using a microscope.

8. Thus, Ullmann mentions (*Islamic Medicine*, 50–51; *Medizin*, 182–184) that Paracelsus' “chemical medicine” arrived at the court of the Ottoman Sultan Mehmet IV (r.1648–1687) in

metaphor informs Ullmann's expectation about the forms that historical development in Arabic medicine should have taken. On the other hand, in a programmatic essay Robert Wisnovsky has suggested that rather than studying how scientific discourses evolve in exegetical genres, historians would be better served by analysing the *textual mechanisms* by means of which scribes, translators and exegetes consciously or unconsciously bring about scientific change.⁹ For in addition to dramatically toppling individual

the sixteenth-century through the offices of the Ottoman court physician Şāliḥ b. Naṣr Allāh Ibn Sallūm (d. 1669). According to Ullmann, Ibn Sallūm "develops pathology, not from Galen's theory of humours, but from the three basic substances, salt, quicksilver and sulphur, and teaches therapy using the philosopher's stone, the universal remedy." Ullmann further observes that in the late nineteenth century, the Ottoman sultan Mustafa III (r. 1757–1774) commissioned a "translation of Herman Boerhaave's *Institutiones medicinae* [...] and *Aphorismi de cognoscendi et curandis morbis* [...]. The work was carried out by the court physician Şubḥī-Zāde 'Abd-al-'Azīz [...]. It was not a literal translation, but rather an adaptation, because Şubḥī-Zāde was trying by means of explanations and additions to harmonize this modern medicine with the traditional views."

9. Wisnovsky's ideas on this subject are drawn from evolutionary biology; see Robert Wisnovsky, "Towards a Natural-History Model of Philosophical Change: Greek into Arabic, Arabic into Latin, Arabic into Arabic," in *Vehicles of Transmission: Translation and Transformation in Medieval Textual Culture*, eds. Robert Wisnovsky, Faith Wallis, Jamie Fumo, and Carlos Fraenkel (Turnhout: Brepols, 2012), 145, 143–157: "In general, transformations in Greek and Arabic-Islamic philosophical texts can be divided into two categories: expansions and compressions on the one hand and mutations on the other." For the philosophical tradition and the rise of the exegetical practice of verification (*taḥqīq*), see Robert Wisnovsky, "Avicennism and Exegetical Practice in Early Commentaries on the

medical and anatomical doctrines that Galen propounded, there are other types of tangible, large-scale shifts away from the Galenic medical legacy in Islamic medical commentary corpora. But they are often seemingly mundane shifts rather than olympian clashes of incompatible medico-philosophical systems. More often than not, these shifts are *textual* rather than conceptual, yet their tangible effects accrue in corpora over time. They occupy commentary margins, are constituted by telling omissions, deliberate misunderstandings, poignant selections of variants and alternative translations, and erroneous abridgments, and they are made possible by different types of commentary strategy.¹⁰

Ishārāt,” *Oriens* 41 (2013): 349–378. For reading practices and verification in the seventeenth-century Ottoman Middle East and North Africa, see Khaled El-Rouayheb, *Intellectual History in the Seventeenth-Century: Scholarly Currents in the Ottoman Empire and the Maghreb* (Cambridge: Cambridge University Press, 2015).

10. In this paper, I do not offer yet another critique of the “decline narrative” of the Islamic sciences after the twelfth or thirteenth centuries. Nor do I feel the need to argue that original scientific and philosophical thought can be found in scientific and philosophical commentaries in the medieval Islamic world. My aim is to investigate the textual processes and mechanisms that medical commentators utilise when they are working with Galen’s medical texts because this strikes me as a promising avenue for historical analyses of scientific commentaries. The tendentiousness of the “decline narrative” about science in Islamic history and the intellectual worth of scientific commentaries are topics that have been admirably discussed by George Saliba, especially Chapter 7 of George Saliba, *Islamic Science and the Making of the European Renaissance* (Cambridge, Mass.: MIT Press, 2007). For medicine see Nahyan Fancy, *Science and Religion in Mamluk Egypt*, Chapter 1.

To this end, in this paper I assess the Galenic legacy in Islamic medicine by examining the influence exerted by the *text* of Galen's commentary on an Arabic corpus of commentaries on the Hippocratic *Aphorisms*.¹¹ Proceeding in this fashion occasions the opportunity to observe how shifting commentary strategies and attitudes toward medical authority lead to long-term changes in how the text of Galen's *Aphorisms*-commentary influenced classical and post-classical authors in the corpus. Finally, proceeding through the corpus from Galen's commentary on the *Aphorisms* offers an occasion for plotting the influence of Galen's text over centuries. What we discover in this corpus is not medical revolutions against Galenic medical theory, but a state of affairs in which by the time the commentary tradition on *Aphorisms* terminates in around the fifteenth century, the text of Galen's *Aphorisms*-commentary has been crowded out by non-Galenic texts.

Nīlī, Ibn Riḍwān, Rāzī and Galen

I will pursue three related tasks in this section. The first is to illustrate how the writings on the Hippocratic *Aphorisms* by Abū Sahl Saʿīd b. ʿAbd al-

11. The classic paper is Franz Rosenthal, "'Life is Short, the Art is Long': Arabic Commentaries on the First Hippocratic Aphorism," *Bulletin of the History of Medicine* 40/3 (1966): 226–245. This corpus has been described in detail in Peter E. Pormann and N. Peter Joosse, "Commentaries on the Hippocratic *Aphorisms* in the Arabic Tradition: The Example of Melancholy," in *Epidemics in Context: Greek Commentaries on Hippocrates in the Arabic Tradition*, ed. Peter E. Pormann (Berlin: De Gruyter, 2012), 211–250.

‘Azīz al-Nīlī (d. 1029, hereafter called “Nīlī”)¹² and ‘Alī Ibn Riḍwān (d. 1067, hereafter, called “Ibn Riḍwān”)¹³ share textual features with late antique Alexandrian exegetical medical writing. The second task is examining the exegetical strategies that Ibn Riḍwān uses in his “marginal notes” on Galen’s commentary on the *Aphorisms*. I show that it is certain that in another work Ibn Riḍwān responded to the objections raised against Galen’s interpretations of the *Aphorisms* by Abū Bakr Muḥammad b. Zakarīyā’ al-Rāzī (d. ca. 925, hereafter called “Rāzī”)¹⁴. Yet, I conclude that the exegetical strategies Ibn Riḍwān uses in his marginal notes on Galen’s *Aphorisms*-commentary are *closed*, in the sense that they ensure that Ibn Riḍwān’s text hews to Galen’s commentary exclusively.

The third task is to assess whether Ibn Abī Uṣaybi’a’s claim that Nīlī used Rāzī’s commentary on the *Aphorisms* in his abridgment of Galen’s *Aphorisms*-commentary is true. I show that the strategies that Nīlī uses to abridge Galen’s commentary are similar to the way Ibn Riḍwān constructed his marginal notes on Galen’s commentary. As a consequence of the closed

12. Ibn Abī Uṣaybi’a, *‘Uyūn al-anbā’ fī ṭabaqāt al-aṭibbā’* ed. Augustus Müller (Königsburg: self-published, 1884 [reprint Hants, UK: Gregg International Publishers, 1972]), I.253-254.

13. On Ibn Riḍwān, see *El²*, “‘Alī b. Riḍwān [Joseph Schacht]”; Ibn Abī Uṣaybi’a, *‘Uyūn al-anbā’*, II.99–105.

14. This is the famous Rhazes, as he was known in medieval Europe. See Sarah Strousma, *Freethinkers of Medieval Islam: Ibn al-Rāwandī and Abū Bakr al-Rāzī and their Impact on Islamic Thought* (Leiden: Brill, 1999).

strategies Nīlī employs, his text cannot afford reliable evidence about whether or not he was familiar with Rāzī's *Aphorisms*-commentary.

ʿAlī Ibn Riḍwān is well-known to scholars of late antique and classical Islamic medicine.¹⁵ Based on material derived mainly from Ḥunayn b. Ishāq's *Missive to ʿAlī b. Yaḥyā*,¹⁶ Iskander's tentative reconstruction of the Alexandrian medical curriculum is partially based on Ibn Riḍwān's *The Useful Book of Medicine* (*al-Kitāb al-nāfiʿ fī al-ṭibb*).¹⁷ Well-known too is the influence that the Alexandrian medical curriculum exerted on Ibn Riḍwān's medical thought.¹⁸ His work on the *Aphorisms*, entitled *Notes of Lessons from Hippocrates' Aphorisms with Galen's Commentary* (*Taʿālīq fawā'id kitāb al-fuṣūl li-Abuqrāṭ tafsīr Jālīnūs*), appears to have been originally conceived as a collection of personal notes that Ibn Riḍwān wrote down for himself as he

15. Manfred Ullmann, *Medizin*, 158-160. For the famous exchange between Ibn Riḍwān and Ibn Buṭlān, see Pormann and Savage-Smith, *Medieval Islamic Medicine*, 92–93. For Ibn Riḍwān's medical thought, see Michael Dols, *Medieval Islamic Medicine: Ibn Riḍwān's Treatise 'On the Prevention of Bodily Ills in Egypt'* (Berkeley: University of California Press, 1984).

16. Ḥunayn b. Ishāq, *Fī dhikri mā turjima wa-mā lā turjima min kutubi Jālīnūs: Ḥunayn ibn Ishāq über die syrischen und arabischen Übersetzungen*, ed. Gotthelf Bergsträsser (Leipzig: Brockhaus, 1925).

17. A. I. Iskander, "An Attempted Reconstruction of the Late Alexandrian Medical Curriculum," *Medical History* 20/3 (1976): 235–258.

18. Mossmann Roueché, "Did Medical Students Study Philosophy in Alexandria?" *Bulletin of Classical Studies* 43/1 (1999): 153–169.

worked through Galen's commentary on the Hippocratic *Aphorisms*. Iskander has observed that creating medical compendia was characteristic of late antique Greek medical practice, which classical Arabic physicians such as Rāzī continued to practice in accordance with late antique Greek recommendations by compiling commonplace books for personal use.¹⁹ There is good reason to believe that what motivated Ibn Riḍwān was a similar concern for compiling medical wisdom for personal use.²⁰ Such a commonplace book would also serve the practical end of helping the physician digest and preserve invaluable parts of medical wisdom. That

19. Iskander suggests that Rāzī's *Comprehensive Book of medicine (al-Ḥāwī fī al-ṭibb)* was probably intended for personal use rather than publication; see Iskander, "Reconstruction," 241–242. Other scholars of the *Ḥāwī* have followed Iskander's conjecture, e.g. Jennifer Bryson, *The Kitāb al-Ḥāwī of Rāzī (ca. 900 AD): Book One of the Ḥāwī on Brain, Nerve, and Mental Disease: Studies on the Transmission of Medical Texts from Greek into Arabic into Latin* (Ann Arbor: Bell and Howell, 2001), sections I and II. And now: Oliver Kahl, *The Sanskrit, Syriac and Persian Sources in the Comprehensive Book of Rhazes* (Leiden: Brill, 2015).

20. Rāzī, *Kitāb al-Murshid aw al-Fuṣūl: The Guide or Aphorisms with Texts Selected from His Medical Writings*, ed. A.I. Iskander ([Cairo: Dhulqi, 1961]), [2nd series] 124–125: Rāzī exhorts his pupils with the following words: "If you have an interest in the art [of medicine, sc. *ṣināʿat al-ṭibb*] and you desire that none of it should escape you, and as far as possible that you should not lack a single detail [about it], then you ought to collect as many books on medicine as you can, after which you ought to compile a book for yourself in which you record what the other book has omitted and what escaped its attention with regard to every species of illness." Cf. Iskander, "Reconstruction," 241–242.

these objectives motivated Ibn Riḍwān is supported by personalised elements in the statement that begins the manuscript of Ibn Riḍwān's *Notes* ("marginal notes by me, 'Alī b. Riḍwān...") as well as the phrase marking the beginning of his epitome of Galen's commentary on aphorisms ("I understood the gist [*siyāqa*] of the two parts of the first aphorisms as follows...").²¹

In his introductory remarks Ibn Riḍwān also exhibits a well-known Galenic concern with the ordering of the books of the Hippocratic corpus, a problem which became especially acute in Alexandria. In this particular instance, however, Ibn Riḍwān appears to express his own views about the *Aphorisms*' position in the Hippocratic corpus. Ibn Riḍwān says that

[T1] Galen had the *Book of the Aphorisms* follow the *Book of Places, Waters and Airs* [*taliyan li-kitāb al-mawāḍi' wa-l-miyāh wa-l-ahwiyat*],²² which is Hippocrates' book on local diseases [*kitābi fī al-amrāḍ al-*

21. This work is contained in the manuscript Cambridge, University Library, ms. Cantabr. Dd. 12.1, ff. 51a-83a. See E.G. Browne, *A Handlist of the Muhammadan Manuscripts Including All Those Written in the Arabic Character, Preserved in the Library of the University of Cambridge* (Cambridge: Cambridge University Press, 1900), 307–308 [Item 1386].

22. Note the unusual form of the title for Hippocrates' book entitled *Airs, Waters and Places* (Περὶ ἀέρων ὑδάτων τόπων). Manfred Ullmann records (*Medizin*, 27) several different versions of the title: *Kitāb al-ahwiya wa-l-buldān* and *Kitāb al-hawā' wa-l-mā' wa-l-masākin*. Ya'qūbī records (Ya'qūbī, *al-Ta'rikh*, ed. Martin Houtsma (Leiden: Brill, 1883 [reprinted 1965]), I.107) the title as *Kitāb al-buldān wa-l-miyāh wa-l-ahwiya*.

baladiyya]. For in the book on local diseases, Hippocrates says how to recognise prevailing diseases [*al-amrāḍ al-‘amma*] in each locality so that one takes precaution from them and prepares remedies to heal what comes about because of them. To achieve this [aim], it is necessary to discuss the different diseases that are specific to each individual. But this matter is not known, nor is it recognised as it should be, until the principles of the art of medicine are known beforehand. To this end, he [Galen] felt it was fitting to have the *Book of the Aphorisms* follow the book on prevailing diseases, which is then followed by his books on different diseases, which is followed finally by his [viz. Hippocrates’] book on epidemic diseases [*kitābihi fī al-amrāḍ al-wāfida*].²³

It is possible that these comments about the proper order for reading the Hippocratic corpus reflect Ibn Riḍwān’s personal view of the order of the Hippocratic corpus. However, what seems more likely is that they reflect Alexandrian curricular debates about the proper order of this corpus, which are recorded by Ibn Abī Uṣaybi‘a (d. 1270), in Ya‘qūbī’s (d. ca. 897) *History* and in Ibn al-Nadīm’s (fl. 987) *Fihrist*.²⁴

23. Ibn Riḍwān, *Notes of Lessons from Hippocrates’ Aphorisms with Galen’s Commentary* [*Ta‘ālīq fawā'id kitāb al-fuṣūl li-Abuqrāṭ tafsīr Jālīnūs*], ed. Taro Mimura and Aileen Das, Cambridge, University Library, ms. Cantabr. Dd. 12.1, ff. 51a, ll.1-13.

24. See Ullmann, *Medizin*, 26–27. For the ordering in Ibn Abī Uṣaybi‘a, see *‘Uyūn al-anbā’*, I.31–33. It is unlikely that Ibn Riḍwān took this ordering or its justification from Ya‘qūbī or Ibn al-Nadīm. No similar ordering of the Hippocratic books appears in the *Fihrist* (Ibn al-

In his prefatory remarks to his abridgment of Galen's commentary on the Hippocratic *Aphorisms*, it is clear that Nīlī does not share Ibn Riḍwān's interest in the order of *Aphorisms* in the Hippocratic corpus. Yet, Nīlī's introduction reflects the well-known late antique "decline-trope,"²⁵ according to which (1) the quality of the medical and philosophical instruction in Alexandria declined; (2) the medical and philosophical curricula contracted so that medical instruction was mainly by means of abridgments of Galenic works and philosophy focused mainly on the *Organon*; (3) student laziness was purportedly both a cause and a symptom of the decline in the quality of medical education and the need for abridgments of Galen's works rather than the original works. In fact, all three of these elements of the "decline-trope" are present in Nīlī's introduction to his abridgment. Nīlī appears unaware of the irony that lies in condemning epitomes and abridgments, and yet offering his own as an ostensive remedy.

[T2] In spite of the fact that I lack the ability and the assurance to produce [a work] that matches the order, quality and clarity of his

Nadīm, *The Fihrist of Ibn al-Nadīm*, ed. and trans. Bayard Dodge (New York: Columbia University Press, 1970), II.691–692; and in Ya'qūbī's *History* (I.106–107) the *Aphorisms* is made to precede *Airs, Waters and Places*. Nor is there any overt marker in Ya'qūbī's *History* that the order in which the books appear in the passage reflects any curricular or pedagogical tradition.

25. Iskander, "Reconstruction," 241–244; Roueché, "Medical Students," 169; Garth Fowden, *Before and after Muḥammad: the First Millennium Refocused* (Princeton: Princeton University Press, 2013), 127.

book, what compelled me to compose an abridgment of Galen's commentary on Hippocrates' *Aphorisms* is that my contemporaries are too lazy to read long books, that they lack competence and prefer abridgments because they are bored and [their attention] flags quickly. The novice among them judges that if he learns just what the abridgments contain, he has no need to consult the long works and is not obliged [to read them]. Upon my life, epitomising what is prolix and distilling it into concise aphorisms greatly assists memorisation, and when one forgets, one may peruse [a book for what was forgotten] quickly. For this reason, one of the ancients [*ba'ḍ al-awā'il*] said: "memorise less, study more." Yet, reading long books is what gives the person access to the reality of meanings, allows him to grasp them, and gives him the ability to manipulate them easily. For this reason, Galen doggedly exerted himself and expended effort in [explaining] the medical meanings and made his commentary on them lengthy. The objective that each of them [i.e. Hippocrates and Galen] pursued is praiseworthy and necessary. I have, thus, sought God's permission to write an epitome of this commentary, and to limit it to mentioning its [the commentary's] main points [*al-nukat*].²⁶

Nīlī's comments resemble Ibn Riḍwān's complaints about medical instruction

26. Abū Sahl al-Nīlī, *An Abridgment of the Commentary by Galen on the Aphorisms of Hippocrates*, ed. ARABCOMMAPH (Oxford, Bodleian Library, ms. Huntington 359.1), f.1b, ll.1-11.

in Egypt, which the latter records in his *Useful Book on How to Study the Art of Medicine*.²⁷ Like Ibn Riḍwān, Nīlī reproduces the “decline-trope” of medical education, both in terms of instruction, and in terms of the laziness that typified medical students in his day. These negative trends in medical education were commonplaces as the quality and quantity of medical education declined in late antique Alexandria until it purportedly ceased altogether some 80 years after the Muslim conquest of Egypt during the caliphate of ‘Umar II (r. 717-720).²⁸

Ibn Riḍwān’s and Nīlī’s abridgments display characteristics that typify late antique medical writing. This suggests that the early stage of the Arabic *Aphorisms*-commentary tradition corresponds to the era of Arabic medicine in which the legacy of the Alexandrian medical curriculum and textual practices remained evident in Arabic medical authors. Of course, the very fact that Nīlī and Ibn Riḍwān chose to write abridgments of Galen’s commentary, the latter for his idle contemporaries and the former for personal use, is itself another sign of Alexandrian influence. It is well-known that Galen exerted enormous influence on the Alexandrian medical tradition, to the extent that for centuries medical education consisted largely of reading Galen’s major medical works and Aristotle’s logical works.²⁹ In examining Ibn

27. See Pormann and Savage-Smith, *Medieval Islamic Medicine*, 84. The edition is Ibn Riḍwān, *al-Kitāb al-nāfi‘ fī kayfiyat ta’līm ṣinā’at al-ṭibb* (Baghdad: Wizārat al-ta’līm al-‘ālī wa-l-baḥth al-‘ilmī, 1986).

28. Ullmann, *Medizin*, 21.

Riḍwān's and Nīlī's abridgment strategies, it is apparent that the text of Galen's commentary exerted a near exclusive hold over how these authors understood the Hippocratic lemmata.

Indeed, a comparison of Ibn Riḍwān's abridgment with Rāzī's discussion of Galen's commentary on the *Aphorisms* in the *Doubts on Galen* shows that Rāzī appears to have exerted no influence on the way Ibn Riḍwān understood the *Aphorisms* or Galen's commentary on it. This fact is surprising since it is certain that Ibn Riḍwān was familiar with Rāzī's writings and criticisms of Galen. Recently, David Reisman has discussed how in his protreptic "autobiography," Ibn Riḍwān sought to model his way of living (*sīra*) on the life Galen presents to his readers in the autobiographical portions of his writings.³⁰ Rāzī's "spiritual physick" is also a carefully crafted

29. Pormann and Savage-Smith, *Medieval Islamic Medicine*, 13. The classic survey of the late antique commentary literature is L.G. Westerink, "Philosophy and Medicine in Late Antiquity," in *Texts and Studies in Neoplatonism and Byzantine Literature: Collected Papers*, ed. L.G. Westerink (Amsterdam: Hakkert, 1980), 83–91. For medical and philosophical elements in teaching practice, see John Duffy, "Byzantine Medicine in the Sixth and Seventh Centuries: Aspects of Teaching and Practice," *Dumbarton Oaks Papers* 38 (1984): 21–27.

30. D. Reisman, "Medieval Arabic medical autobiography," *Journal of the American Oriental Society* 129/4 (2009): 559–569. The classic article is, again, by Franz Rosenthal, "Die arabische autobiographie," in *Muslim Intellectual and Social History*, ed. Franz Rosenthal (Aldershot, UK: Variorum, 1990). See also Stephen Menn, "The *Discourse on Method* and the tradition of intellectual autobiography," in *Hellenistic and Early Modern Philosophy*, ed. Brad Inwood et al. (Cambridge: Cambridge University Press, 2002), 141–191.

contribution to the protreptic physician-cum-philosopher biography genre.³¹ Though this genre seems to have been inspired largely by Galen, it is likely that Rāzī's semi-autobiographical works also influenced how Ibn Riḍwān wrote his "autobiography." What is more, compelling, third-party evidence leaves no doubt that Ibn Riḍwān was familiar with Rāzī's objections to Galen's interpretation of the *Aphorisms* in *Doubts*, and even went so far as to respond to them in Galen's defense.

In *Aphorisms* ii.39 Hippocrates claims that mature adults (*al-kaḥūl*, οἱ πρεσβῦται) are generally affected by fewer diseases than young adults (*al-shabāb*, οἱ νέοι), though mature adults typically die when they contract a chronic illness (*al-amrāḍ al-muzmina*, χρόνια νοσήματα). In his commentary on this aphorism, the great thirteenth-century Levantine physician Abū al-Faraj Ibn al-Quff (d. 1286, hereafter called "Ibn al-Quff")³² discusses how Galen, Rāzī and Ibn Riḍwān interpreted Hippocrates' claim. Galen qualifies the aphorism's validity so that it applies only to mature adults who do not follow a strict regimen.³³ Rāzī says that the aphorism is valid universally, and

31. Rāzī, *The Spiritual Physick of Rhazes*, trans. Arthur Arberry (London: John Murray, 1950).

32. Ullmann, *Medizin*, 176–177.

33. Galen, *Commentary on the Hippocratic Aphorisms*, trans. Ḥunayn b. Ishāq, ed. Taro Mimura: "Not every mature adult becomes ill less than young adults [*laysa kull al-kuḥūl yamraḍu aqall mim mā yamraḍu al-shabāb*]" Galen, *Opera Omnia*, ed. Karl Gottlieb Kühn, 20 vols. (Leipzig: Car. Knoblochii, 1821-1833), XVII.b, 538: "not all mature adults fall ill less than the young [Οἱ πρεσβῦται τῶν νέων οὐ πάντες ἥσσον νοσοῦσιν]."

that Galen is wrong to limit the aphorism's scope. Rāzī faults Galen on three counts. First, his interpretation makes the aphorism vacuous because it is self-evident that people who follow a strict regimen fall ill less frequently, regardless of their age. Second, Rāzī says that his own clinical experience runs counter to Galen's interpretation. Galen claims, in effect, that mature adults who follow a strict regimen fall ill less frequently than young adults, but those who do not follow such a regimen fall ill more frequently than young adults. Rāzī says that his clinical experience leads him to conclude that, in fact, the mature adult falls ill less frequently than the young adult. Finally, medical theory provides Rāzī with a rationale for why Hippocrates' dictum is true in all cases, "for the bile in them [mature adults] is not sharp and the moistures in them have decreased in amount. As a consequence, there is less putrid matter in them [*dhālika anna ḥiddat al-mirār qad inkasarat fīhim wa-naquṣat ayḍan ruṭūbātuhum fa-yaqillu bi-dhālika al-ʿafan fīhim*]."34

Ibn al-Quff then reports Ibn Riḍwān's retort to Rāzī. Though Ibn al-Quff scoffs at what he sees as Ibn Riḍwān's juvenile attempts at criticising the great Rāzī, his report leaves no doubt that Ibn Riḍwān knew Rāzī's work on the *Aphorisms* and that Ibn Riḍwān had defended Galen against Rāzī in one of his own writings.

[T3] Ibn Riḍwān made a response [to Rāzī] the gist [*ḥāṣiluhu*] of which is derived from what Rāzī himself had said, though he [Ibn Riḍwān] addressed him [Rāzī] in a manner that is inappropriate for the likes of

34. Rāzī, *Doubts*, 188.

Ibn Riḍwān to direct toward someone of Rāzī's rank, whom Ibn Riḍwān does not match or come close to in knowledge of medicine or any other [science]. [The gist of Ibn Riḍwān's rejoinder] is that the understanding of this aphorism eluded Rāzī, for he [Hippocrates] said that for the most part mature adults become ill less than young adults, i.e. with *acute diseases*, not with any kind of disease. To the contrary, they [mature adults] are affected by more illnesses than young people because their heat is weaker and the amount of extrinsic heat [*al-ḥarāra al-gharība*] in them is great. This is why Hippocrates said *for the most part*. Otherwise, the mature adult falls ill with acute diseases, but less frequently. This response is derived from the sense of what Rāzī said, since the reason [for what Ibn Riḍwān says] is simply the fact that the bile in their bodies is not sharp and there is a small amount of it as well.

Ibn al-Quff's report leaves no doubt that in another work, Ibn Riḍwān mounted a (feeble) defense of Galen against Rāzī's attacks. Yet, in his abridgment of Galen's *Aphorisms*-commentary, Ibn Riḍwān does not address himself to Rāzī's criticisms at all. The reason for this fact, I argue, is that the late antique medical abridgment genre is characterised by exegetical strategies that lead Ibn Riḍwān to reproduce parts of the text of Galen's commentary, whereas dialectical and exegetical strategies that lead to expansion are out of place in this genre.

Ibn Riḍwān's marginal notes tend to be "ratio-centric," in the sense

that they mainly constitute a concise restatement or verbatim quotation from a passage in Galen's commentary in which Galen makes explicit the medical theory that serves as an explanation for why Hippocrates's statement is true. Thus, the text that follows Ibn Riḍwān's "I understood" this or that from Galen's commentary is one in which Galen provides the reason or cause for the phenomena stated in the aphorism. For example, in *Aphorism* iv.52, Hippocrates says that during a fever or any other illness if tears flow from the patient voluntarily, this is bad. However, it is worse (*arda*) if the tears flow involuntarily. In explanation, Galen cites a passage from the Hippocratic *Prognostics*, which states the general principle that tears flowing from the eye are a bad sign if there is no underlying disease affecting the eye that serves as a cause for the tears.³⁵ Galen says that "this is because if tears flow for no reason and involuntarily it indicates that there is a weakness in the retentive faculty."³⁶ To close his commentary on this aphorism, Galen

35. Galen appears to be referring to the *Prognostics*, Book 2 (Hippocrates, *Hippocrates Volume II*, trans. W. Jones (Cambridge, Mass.: Harvard University Press, 1923), II.11): "For if they shun the light, or weep involuntarily [ἢ δακρύωσιν ἀπροαιρέτως], or are distorted, or if one becomes less than the other, if the whites be red or livid or have black veins in them, should rheum appear around the eyeballs, should they be restless or protruding or very sunken, or if the complexion of the whole face be changed—all these symptoms must be considered bad, in fact fatal."

36. Galen, *Commentary on the Hippocratic Aphorisms*, ed. Taro Mimura, 66: "*li-anna al-dam' idhā jarā min ghayr 'illa min al-ʿayn wa-ʿan ghayr irāda fa-huwa yadullu ʿalā ḍaʿf min al-quwwa al-māsika.*"

observes that the elative “worse [*arda*]” is out of place in the texts upon which he bases his *Aphorisms*-commentary, observing that “other books [*kutub ukhar*]” have the unqualified adjective “bad [*radī*].”

Of the text of Galen’s commentary that Ibn Riḍwān includes in his notebook, he copies only the single sentence from the *Prognostics* in which Galen identifies the underlying cause for the involuntary and “uncaused” flow of tears with a weak retentive faculty: “If tears flow without cause and involuntarily from the eye, this indicates that the retentive faculty is weak.”³⁷ It is important to note that (1) Ibn Riḍwān is concerned with the aetiology of the disease that Galen provides; (2) he does not mention that the text he copies is from the *Prognostics*; and (3) the philological question of whether the paradigm manuscript had the elative “worse” or “bad” does not concern him. Finally, it is also important to notice that (4) Ibn Riḍwān does not venture outside the text of Galen’s commentary to speculate at any length on possible objections to Galen’s interpretation. He does not, for example, allocate any space to addressing Rāzī’s strenuous objections to Galen’s commentary on *Aphorisms* iv.52, which focus on the very sentence from Galen’s commentary that Ibn Riḍwān copied into his notebook.

Galen said: *because this indicates that the retentive faculty is weak.*

37. Ibn Riḍwān, *Notes of Lessons from Hippocrates’ Aphorisms with Galen’s*

Commentary (Ta’ālīq fawā’id kitāb al-fuṣūl li-Abuqrāṭ tafsīr Jālīnūs), ed. Taro Mimura and Aileen Das: “al-dam ‘idhā jarā min ghayr ‘illa min al-‘ayn wa-‘an ghayr irāda fa-huwa yadullu ‘alā ḍa’f min al-quwwa al-māsika.” Note that Ibn Riḍwān’s quote is copied nearly verbatim from Ḥunayn’s Arabic translation.

This reasoning comes to nothing, for it is well-known that the eye's retentive faculty retains a portion of the nutriment that reaches the eye; and it is well-known that the amount of tears is greater than that. Thus, these tears do not happen for this reason. What is more, if this faculty in the eye became weak, there would be no great danger in that, and if it became weak in the brain, the flow from the nose ought to be greater. And if this faculty became weak in the whole body, a large amount of superfluities in all the passageways ought to flow out of the body. This, then, is not the reason why this symptom is bad.

The reason, rather, is that when the muscle of the eye next to the brain has a spasm, it becomes difficult for [the eye] to blink. When blinking becomes difficult and it becomes unbearable for the eye to remain open, tears flow. This is owing to the fact that when the gland that is located in the large tear duct, which is the well-known cause for watery eye, is severed or decays until it dissolves, [tears, sc. *al-dumū*] rise and flow from its location when the brain is extremely dry and when it [the brain] is, for example, baked when it is extremely hot.³⁸

Here, Rāzī presents a clear and plausible alternative to Galen's commentary on iv.52, suggesting that watery eye has to do with dysfunction in the tear ducts. Yet, Ibn Riḍwān does not address Rāzī's objection. Based on the report by Ibn al-Quff about Ibn Riḍwān's defense of Galen against Rāzī, it is not suitable to conclude from this fact that Ibn Riḍwān was not aware or

38. Rāzī, *Doubts*, 196–197.

simply failed to recall this particular criticism of Galen, and that if he had, he would have come to Galen's defense, concurred with Rāzī, or tried to offer an analysis that harmonised the views of both thinkers. To my mind, what is more likely is that Ibn Riḍwān did not feel that engaging in such polemics was suited to the genre of the medical commonplace book, and that the exegetical strategies dictated by this writing genre give precedence to the verbatim reproduction of Galen's text in which the rationale from medical theory is discussed.

The same features that characterise Ibn Riḍwān's abridgment strategies (1-4) are apparent in Nīlī's epitome of Galen's commentary on the Hippocratic *Aphorisms*. (1) Nīlī shares Ibn Riḍwān's focus on aetiology; (2) he does not venture outside Galen's commentary on the *Aphorisms* to other Hippocratic or Galenic works; (3) he is less concerned with questions of philology; and (4) he does not engage in polemic against or defense of Galen's interpretation of the aphorisms. In addition to these features, Nīlī's abridgment strategies include (5) schematising passages so that complex concepts and language in Galen's commentary are glossed over.

For example, consider *Aphorisms* v.62, in which Hippocrates speaks about types of faulty mixtures that affect a woman's womb, all of which leave her unable to conceive. On the other hand, when the womb's mixture is moderate, Hippocrates says that she is able to conceive with ease.³⁹

39. Galen, *Commentary on the Hippocratic Aphorisms*, trans. Ḥunayn b. Ishāq, ed. Taro Mimura: "When the woman's womb is cold and dense she does not conceive [*lam taḥmal*,

Aphorisms v.62 speaks only about women. In his commentary, Galen notes, however, that the principles that Hippocrates sets out in this aphorism are analogous for men. Galen is driven to draw this analogy in v.62 because he believes that *Aphorisms* v.63 is a forgery, yet he appears to agree with the underlying analogy that is drawn in v.63 between the reasons why men and woman go without issue.

[T4] Since Hippocrates devoted all of the earlier discussion [in earlier aphorisms] to women, his discussion [viz. v.62] also includes what we have described in relation to the categories of womb. He did not add anything about the properties of men to it. This is either because he relied on the fact that it would be easy for us to transfer what he mentioned about the immoderate mixture in the womb to the male seed [*al-manī*]; or, because he postponed it for later and then forgot to [return to it], after which someone after him appended another aphorism [viz. v.63] to this aphorism in which the condition of males is discussed, the opening words of which is: “the condition in males is similar.” Yet the major commentators on the *Aphorisms* hold that this aphorism [v.63] falls well short of Hippocrates’ intelligence and

οὐ κυῖσκειν], nor does she conceive when it [the womb] is very moist because the moisture inundates, suppresses, and extinguishes the seed [*tughmiru al-maniyya wa-tukhmiduhu wa-tuṭṭi’hu*, ἀποσβέννεται τὸ γόνος]. Likewise, when it is drier than it ought to be or is burning hot [*kāna ḥārran muḥriqan*, περικαεῖς] she does not conceive because the seed does not have nutriment and so it becomes corrupted. When the temperament of the womb is moderate between the two conditions, the woman has many children.”

eloquence. In analogy with what Hippocrates set down about women we can transfer what he says about them to men.⁴⁰

Based on the principle that there is an analogy between the temperamental causes for the inability for men to produce offspring and women to conceive, Galen says that just as a woman whose mixture is immoderate does not conceive, (1) men whose bodily mixtures are immoderate are unable to produce offspring (*lā yūlad lahu*, τῶν ἀνδρῶν ἔνιοι παντάπασιν ἄγονοι γίνονται). And (2) men who have balanced temperaments are always able to produce offspring, even if the woman who receives their seed has an immoderate temperament. Galen also holds that (3) a man who has a mixture that is immoderately cold, for example, is able to produce offspring only if the woman who receives his seed complements his cold mixture by having an intensely hot mixture.

Rāzī does not dispute the analogy Galen draws between temperament in women and men. Instead Rāzī reports that his clinical experience has shown that (2) and (3) do not hold in every case. As a counterexample to (2), Rāzī reports that he has seen men with moderate mixtures of hot and moist who are unable to produce offspring, and as a counterexample to (3) he reports that his neighbor used to purchase slave girls with hot temperament

40. Galen, *Commentary on the Hippocratic Aphorisms*, trans. Ḥunayn b. Ishāq, ed. Taro Mimura. For the Arabic text, see the Appendix. For the Greek text, see Galen, *Opera Omnia*, ed. Karl Gottlieb Kühn (Leipzig: Car. Cnoblochii, 1821-1833), XVII.b.865–866. My translation is based on the Arabic text.

so that they complemented his cold temperament, yet he was still unable to produce offspring. In short, Rāzī disputes Galen's insinuation that the balanced temperament is the primary factor that dictates the success or failure to produce offspring.

Galen said whoever grasps what has been said in this aphorism knows the reason why men and women are sterile [*kāna al-rajul 'aqīman wa-l-mar'a 'āqiran*]. This is because men with moderate temperament always beget children [*yalidu dā'imān*]. The man who does not have a moderate temperament begets children if he finds a woman who is opposite to him in temperament.

But this is not true for we have infertile men and women [*rijālan 'uqman wa-nisā'an 'awāqira*] the conditions of whose bodies are such that Galen would deem them to have a moderate temperament. Whoever tests this on a large number of these types of people will see that what we have said is true. For we have seen these men try woman after woman out of a desire to father a child [*ṭam'an fī-l-insān*], but to no avail. There are men who buy slave girls for the reasons indicated earlier. What provokes them to purchase them is the fact that they [slave girls] are opposite to them in temperament. I had a neighbor who was still virile, who had a hot and moist temperament, and who did strenuous exercise. He used to exchange one slave girl for another, yet this did not avail him, in spite of the fact that Galen says that this temperament [viz. the hot and moist] is the most

efficacious temperament for begetting offspring.⁴¹

As we have seen, the analogy between the effect of the body's temperament on fertility in men and women is an important part of Galen's commentary. It is a theme that he returns to on several occasions in his commentary on v.62, and it serves as a useful exegetical device that allows Galen to dismiss the *text* of *Aphorisms* v.63 as apocryphal while retaining its *sense* by reading it into v.62. Yet, on the basis of his medical experience Rāzī claims that principles (2) and (3) are false since they are not confirmed by repeated observation. The analogy between the impact of temperament on male and female fertility is not present in Nīlī's abridgment of Galen's commentary. Nīlī abridges Galen's commentary by sometimes copying, sometimes rephrasing a single passage, which focuses on the simple qualities (cold, hot, wet, and dry), an excess of which inhibits conception in the woman's womb.

[T5] [A] The womb becomes dense when coldness predominates to the extent that the [B] openings of the passageways [*al-ʿurūq*] are constricted so that the womb does not connect to the placenta [*mashīma*]. In this condition the woman's menstrual blood is retained or only a small amount flows because [C] the blockage quickly affects these passageways. Similarly, every faulty mixture that overwhelms the womb or the seed prevents implantation [*yamnaʿu al-ʿulūqa*]. [D1] For the seed is burned up by the heat that overwhelms the womb [D2] just as a seed buried in very hot land is burned up. [E1] Excessive

41. Rāzī, *Doubts*, 200–201.

moisture inundates the seed and and suppresses it [*tughmiruhu wa-tukhammiduhu*] [E2] just as what happens to wheat seeds when they are cultivated in land that is inundated with water that is not purified. [F1] Nor is there implantation when there is excessive dryness, [F2] just as hardly any crops grow in arid land. If the seed is not concocted thoroughly because the mixture is cold or moist, it does not generate offspring. The case is similar if it is concocted too much and it is burned up by the very hot mixture. Likewise if it [the seed] is very dry because of a very dry mixture, it does not spread out and so it does not coat the womb, and so implantation does not occur. [G] When the womb's mixture deviates slightly from the moderate mixture and the seed that enters the womb also deviates from moderation but with the opposite quality that the womb deviated, [the seed] become moderate and so it is implanted. However if it deviates from the moderate temperament greatly, it [the seed] hardens and implantation is impossible. [H] A forger made additions here, which are evidently false to the person who scrutinises them.⁴²

In T5 Nīlī reproduces, at time nearly verbatim, a single passage in Galen's commentary on v.62. The structure and forms of reasoning in T5 closely parallel the passage from Galen's commentary.⁴³ In A, Nīlī links infertility to

42. Abū Sahl al-Nīlī, *An Abridgment of the Commentary by Galen on the Aphorisms of Hippocrates*, ed. ARABCOMMAPH [Oxford, Bodleian Library, ms. Huntington 359.1, ff. 19b, l.3-20a, l.7].

having a cold womb. In B, the cold is said to cause the passageways between the womb and the placenta to be constricted so that no nutriment reaches the child. C alludes to the fact that blockages form in the passageways because they have become so narrow from the cold. However, Nīlī omits Galen's discussion about how very hot male seed may moderate the temperament of a cold womb, leading to successful implantation.

In D–F, Nīlī, like Galen, generalises what Hippocrates says about cold to the remaining three qualities. For each quality in excess, the reason Nīlī gives for why the excess qualities in the womb causes infertility [D1, E1, F1] is accompanied by the land-womb/seed-semen analogy [D2, E2, F2]. On the other hand, Nīlī omits somewhat tangential or technical details from his abridgment. Thus, he does not mention Galen's comments about why being dense (*al-takāthuf*) is not a quality of the womb in the same way that the four simple qualities of cold, hot, moist and dry are.

Finally, in G Nīlī reworks a somewhat complex passage, which Galen says is from his book *On Mixtures* (Περὶ κράσεων). Nīlī does not allude to this fact in his abridgment, however.⁴⁴ In this portion of his commentary, Galen speaks about what Hippocrates meant when he somewhat vaguely asserted that women who have wombs whose temperament is “moderate between the two conditions [*mu'tadilan bayn al-ḥālatayn*, ἐξ ἀμφοτέρων τὴν κρᾶσιν ἔχουσι συμμέτρως] have many children. In his discussion, Galen is chiefly

43. See Appendix B.

44. On this text, see Ullmann, *Medizin*, 39.

concerned with providing conceptual and terminological distinctions that allow him to make sense of Hippocrates' text. Galen divides moderate combinations of the qualities into two classes: (a) moderation between cold and hot and (b) moderation between moist and dry. Galen says that conception will fail if there is an excess in either pair. If for example, the womb is moderate between cold and hot but is extremely moist, it is "impossible [*imtinā*]" for the seed to implant in the womb under such conditions. In G, the implication that Nīlī draws from Galen's words is that the male seed may implant in the womb in which there are minor deviations from either class of moderation, but excessive deviations from either class of moderation make implantation impossible. Hence, in G it is clear that Nīlī does not share Galen's desire to introduce classifications of mixtures that justify why Hippocrates said what he did. Rather, his aim is to give a succinct and simplified account of Galen's words, which is consistent with the causes and rationales stated in Galen's commentary.

Nīlī and Ibn Riḍwān are the chief representatives of the reception of the text of Galen's commentary on the Hippocratic *Aphorisms* in the classical period of medieval Islamic medicine. In their work, we observe that Galen's commentary exerted a commanding influence on how they understood Hippocrates' words. It is noteworthy that instead of writing an independent commentary in the tradition of Rāzī, Nīlī opts to write an epitome of Galen's commentary. We have also seen that Nīlī and Ibn Riḍwān deploy several abridgment strategies. They omit Galen's polemical asides, citations from

other Hippocratic or Galenic works, and philological discussions; they do not pay much attention to Galen's discussion of the textual structure of the *Aphorisms*; Nīlī in particular omits aphorisms such as v.63, which Galen held were apocryphal; they do not introduce material from outside Galen's *Aphorisms*-commentary, neither from other works in the Galenic corpus nor from any other writer. In their abridgments, both authors tend to focus on the causes and rationales that Galen gives for the medical phenomena discussed in each aphorism. They do not engage critically with Galen's text, or speculate about alternative interpretations to Galen's. Both authors seek to systematise and gloss over material in Galen's commentary that involves introducing theoretical classifications and distinctions directed at making sense of Hippocrates' text. Finally, in spite of the fact that Ibn Abī Uṣaybi'a writes that Nīlī composed an abridgment (*talkhīṣ*) of Galen's commentary on the Hippocratic *Aphorisms* "with notes taken from the commentary by al-Rāzī,"⁴⁵ the text of Nīlī's abridgment of Galen's commentary affords no evidence that corroborates Ibn Abī Uṣaybi'a's claim. In fact, given the exegetical strategies that Nīlī employs, his abridgment is an unlikely source for fragments of this lost text by Rāzī.

45. Ibn Abī Uṣaybi'a, *Uyūn al-anbā'*, I.254: "*talkhīṣ sharḥ Jālīnūs li-kitāb al-fuṣūl ma'a nukat min sharḥ al-Rāzī*." Translation by Emilie Savage-Smith, *A New Catalogue of Arabic Manuscripts in the Bodleian Library, University of Oxford Volume I: Medicine* (New York: Oxford University Press, 2011), 6 [Entry 2].

Ibn Abī Ṣādiq and the Fragmentation of Galenic Textual Authority

Ibn Abī Ṣādiq (died after 460/1067)⁴⁶ represents the beginning of the middle stage in the tradition of Arabic commentaries on the Hippocratic *Aphorisms*. His influence on the later *Aphorism*-commentary tradition endured for centuries. Examining Ibn Abī Ṣādiq's commentary on *Aphorisms* ii.6 and vi.11 reveals important trends in his thought.

Ibn Abī Uṣaybi'a notes that Ibn Abī Ṣādiq was thoroughly acquainted with Galen's medical writings.⁴⁷ There is also evidence from his commentary on the Hippocratic *Aphorisms* that shows that he was familiar with other prominent Greek medical authors such as Rufus of Ephesus.⁴⁸ It is also evident from his *Aphorisms*-commentary and from the fact that he authored

46. The dating is based on Ibn Abī Uṣaybi'a's report that he possessed a manuscript of Ibn Abī Ṣādiq's commentary on the Hippocratic *Aphorisms* in the author's hand dated to 460 AH: Ibn Abī Uṣaybi'a, *Uyūn al-anbā'*, II.22–23.

47. Ibn Abī Uṣaybi'a reports (*Uyūn al-anbā'*, II.22) that Ibn Abī Ṣādiq "had great enthusiasm for investigating Galen's books and investigating the recondite points and secrets of the medical art that they contain [*lahu ḥirṣ bāligh fī al-taṭallu' 'alā kutub Jālīnūs wa-mā awda'ahu fīhā min ghawāmiḍ ṣinā'at al-ṭibb wa-asrārihā*]."

48. See Ibn Abī Ṣādiq's commentary on *Aphorisms* ii.6 (see below) and vii.40. For the Arabic sources, see Rufus of Ephesus, *On Melancholy*, ed. Peter E. Pormann (Tübingen: Mohr Siebeck, 2008); idem., "New Fragments from Rufus of Ephesus' *On Melancholy*," *Classical Quarterly* 64/2 (2014): 649–656. The text that Ibn Abī Ṣādiq cites in ii.6 and in greater detail in vii.40 is very close to the brief case history cited in **F24** in Rufus, *On Melancholy*, ed. Pormann, 42–43 from the work by Muḥammad b. 'Alī b. 'Abd Allāh al-Tawahhumī entitled *al-Kitāb al-Wāḍiḥ al-dalīl fī mudāwāt al-'alīl*.

an independent treatise entitled *Resolution to Rāzī's Doubts* (*Ḥall shukūk li-l-Rāzī*) that Ibn Abī Ṣādiq devoted extraordinary efforts to defending Galen against Rāzī's criticisms.⁴⁹ Indeed, in his introduction to his commentary on the Hippocratic *Aphorisms* Ibn Abī Ṣādiq praises Galen's commentary and says that the objective (*gharaḍ*) of his own commentary is merely to "exploit what [Galen's commentary] said and to supplement what it neglected with what we have inferred from other places in his books."⁵⁰ Yet, Ibn Abī Ṣādiq's professed filial piety must not make us lose sight of the fact that his commentary on the Hippocratic *Aphorisms* introduces several textual novelties into the Arabic commentary tradition on the *Aphorisms*. These textual novelties arise from the *ampliative* exegetical strategies he uses. These strategies represent substantial departures from those used by Nīlī and Ibn Riḍwān in their work on the *Aphorisms*.

49. Ibn Abī Uṣaybi'a, *Uyūn al-anbā'*, II.23.

50. Ibn Abī Ṣādiq, *Commentary on the Hippocratic Aphorisms*, ed. ARABAPHCOMM.

Ibn Abī Ṣādiq displays less filial piety in the introduction to his commentary on Galen's *On the Usefulness of the Parts of the Body*, which is recorded in Ibn Abī Uṣaybi'a, *Uyūn al-anbā'*, II.22: "For our part, we have made the meanings in this book precise in a way that clarifies what is recondite but shortens what is extra, that brings together what is scattered and supplements it with additional material I found in the writings of Galen and other authorities [*muḥaṣṣilīn*] who wrote on this topic. We organised every book [*maqāla*] lesson by lesson [*ta'īman ta'īman*]. And at the end of each section and lesson, we appended what anatomy [*al-tashrīḥ*] makes evident about each body part that is included in that section in order to make it easy to dissect any body part [*uḍw*] or the use of any part [*juz'*] of it that we observe within it."

In spite of the fact that Ibn Abī Šādiq admired Galen greatly, he was willing to depart from him. This is especially true when this departure is authorised by a criticism of Galen by Rāzī. Ibn Abī Šādiq refers frequently to his *Solutions to Rāzī's Doubts about Galen* in his commentary on the Hippocratic *Aphorisms*.⁵¹ From these references, we understand that Ibn Abī Šādiq generally adopts a conciliatory or even defensive posture with regard to Rāzī's criticisms in the *Doubts*. Yet, his loyalty to Galen's interpretations of the *Aphorisms* is not uncritical.

For example, in Ḥunayn b. Isḥāq's translation of *Aphorisms* vi.11,⁵²

51. Unfortunately, this book is lost. Ibn Abī Šādiq addresses problems raised by Rāzī in *Doubts* in his commentary on *Aphorisms* i.14, 17; ii.18, 20; iv.11, 52; v.48, vi.11, 27.

52. With regard to vi.11, it is clear that the transmission of Galen's commentary text and Hippocrates' *Aphorisms* text to Ḥunayn was different from the transmission of the Greek manuscripts upon which modern editions of these works are based. In Greek, vi.11 says: "it is good when those with melancholy and *nephritis* develop haemorrhoids [Τοῖσι μελαγχολικοῖσι καὶ τοῖσι νεφριτικοῖσιν αἰμορροῖδες ἐπιγενόμεναι ἀγαθόν]," whereas the Arabic manuscripts and Ḥunayn's notes about how he translated this aphorism leave no doubt that in place of τοῖσι νεφριτικοῖσιν Ḥunayn had τοῖσι φρενιτικοῖσιν. Before translating Galen's commentary, Ḥunayn writes the following note (Galen, *Commentary on the Hippocratic Aphorisms*, trans. Ḥunayn b. Isḥāq, ed. Taro Mimura): "By 'melancholy [*al-wiswās al-sawdāwī*]' the physicians mean the mental confusion caused by black bile that is not accompanied by fever. In Greek it is named '*mālikhūliyā*.' By 'phrenitis [*al-birsām*]' they mean a fever that is caused by swelling in the brain's membrane or in the diaphragm, which is necessarily accompanied by mental confusion. In Greek it is named '*farānītis*.' By 'haemorrhoids [*al-bawāsīr*],' they mean openings in the passageways in the buttocks have

Hippocrates says that it is a good sign when people with melancholy and phrenitis develop haemorrhoids. In Ḥunayn's translation of Galen's commentary, Galen says that the salubrious effect of haemorrhoids on phrenitis and melancholy is owing to the fact that having haemorrhoids is a condition that purges the body of black bile, which is suspended in the blood like "dregs of wine."⁵³ It is, says Galen, "no surprise" that melancholy and phrenitis are cured by haemorrhoids.⁵⁴

Rāzī stridently disagrees with Galen's view, which, according to Rāzī, identifies the cause of both phrenitis and melancholy with excessive amounts of black bile suspended in the blood.⁵⁵

ruptured so that blood flows. This is similar to when this type of blood sometimes flows from healthy people on a recurrent basis. In Greek, the word for haemorrhoids is 'amruwaydis.'"

53. Galen, *Commentary on Hippocratic Aphorisms*, trans. Ḥunayn b. Isḥāq, ed. Taro Mimura: "ḥukum fī al-dam hukm al-durdī fī al-khamr and min al-dam bi-manzilati al-ʿakir."

Galen, *Opera Omnia*, ed. Kühn, XVIII.21: "οἷαν περ ἐν τοῖς οἰοῖς τρυῖξ."

54. Galen, *Commentary on Hippocratic Aphorisms*, trans. Ḥunayn b. Isḥāq, ed. Taro Mimura: "fa-laysa huwa bi-ʿajab an yabraʿa al-wiswās wa-l-birsām bi-l-bawāsīr." Galen, *Opera Omnia*, ed. Kühn, XVIII.21: "ὥστ' οὐδεν θαυμαστόν καὶ μελαγχολίαν καὶ νεφρίτιν ἰᾶσθαι διὰ τῶν αἰμορροῖδων."

55. Rāzī's criticism of Galen in vi.11 is fair. Galen says that haemorrhoids evacuates black bile, which for Galen causes melancholy, not phrenitis, or, for that matter, nephritis, both of which are caused by corrupt yellow bile. Galen, *Commentary on the Hippocratic Aphorisms*, trans. Ḥunayn b. Isḥāq, ed. Taro Mimura: "Galen said: it is not the case that haemorrhoids cure these diseases by means of evacuation. Rather, haemorrhoids cure them owing to the quality [kayfiyya] of what is evacuated. For the blood that is evacuated by

Galen said: *since haemorrhoids evacuate blood that has become corrupt, it is not surprising that they cure melancholy and phrenitis*. He erred in placing phrenitis and melancholy together as to their cause. For phrenitis is a hot illness that is not caused by viscid blood that has become corrupted, but by blood that is thin and that becomes inflamed, most of which is composed of yellow bile. Thus, the swelling that is caused by it around the brain is erysipelas [*humra*]⁵⁶ rather than *falighmūnī*.⁵⁷

Rāzī criticises Galen for saying that the causes of melancholy and phrenitis are identical. According to Rāzī, melancholy is caused by viscid blood that becomes corrupted. Melancholy would qualify, then, perhaps on Galen's division of types of swelling in *Method of Medicine* 13.2, as a type of inflammation (φλεγμονή).⁵⁸ On the other hand, Rāzī says that phrenitis comes

haemorrhoids is naturally replete with black humour, which is [suspended] in the blood in the same way that dregs are [suspended] in wine. It is not surprising, then, that melancholy and phrenitis are cured by haemorrhoids because haemorrhoids naturally evacuate the part of the blood that is like dregs."

56. See Manfred Ullmann, *Wörterbuch zu den griechisch-arabischen Übersetzungen des 9. Jahrhunderts* (Wiesbaden: Harrassowitz, 2002), 269 ["έρυσίπελας"] and 441["ξανθός"].

57. Rāzī, *Doubts*, 200–201.

58. Galen, *Method of Medicine*, ed. and trans. Ian Johnston and G.H.R. Horsley (Cambridge, Mass.: Harvard University Press, 2011), III.320: "So then, it has been shown that every inflammation arises through an influx of blood that in some cases is immediately hotter than accords with nature [Δέδεικται γάρ τοι πάσα φλεγμονή δι' ἐπιρροὴν αἵματος

about when blood that is composed mainly of yellow bile becomes inflamed. Rāzī appears to believe, then, that phrenitis is a species of erysipelas (ἐρυσίπελας), the aetiology of which in *Method of Medicine* 14.1 Galen identifies with the flow of yellow bile.⁵⁹ In Books 13 and 14 of *Method of Medicine*, Galen tries to distinguish between the different species of swelling (ὄγκος). In Book 13.2, he states that the divisions of swelling are made according to the “nature of the inflow [τῇ τῶν ἐπιρρεόντων φύσει].”⁶⁰ Thus, inflows of yellow bile are identified with erysipelas, and inflows of viscid humour are called “melancholic [μελαγχολικός].” Thus, Rāzī’s criticism is based to a large extent on Galen’s classification of swelling (ὄγκος) in *Method of Medicine*, Books 13 and 14. Thus, despite his seemingly forceful objections to Galen, Rāzī’s main contention is simply that Galen’s interpretation of vi.11 wrongly insinuates that phrenitis is a kind of swelling

γιγνομένη τισὶ μὲν εὐθέως θερμοῦ πλέον ἢ κατὰ φύσιν ἢ θερμόν].”

59. Ibid., 427: “When the color is red [ἐρυθρὰς] [doctors] call the affection inflammation [φλεγμονήν] whereas, when it is pale, or yellow [ξανθῆς], or a color like mixture of pale and yellow, [they call it] erysipelas. But throbbing too is a specific symptom of a major inflammation, and it also occurs more in deep locations, just as erysipelas occurs more in the skin than in deep locations because the humor of yellow bile is thin in consistency, so it flows readily to the skin [...].” In *Method of Medicine* 13.4, Galen says (ibid., 327) that “more inflammatory swellings arise whenever the inflow is of blood; erysipelatoid swellings arise whenever the humor is yellow bile [φλεγμονωδέστεροι δέ, ὅταν ἡ [sc. ἐπιρρεόντα] τοῦ αἵματος. ἐρυσίπελατώδεις δὲ ὅταν ὁ τῆς ξανθῆς χολῆς χυμός].”

60. Ibid.

caused by the inflammation of viscid black bile rather than by inflamed yellow bile.

To a certain extent Ibn Abī Ṣādiq agrees with Rāzī. In his commentary on vi.11, he says that yellow bile-rich “blood that becomes inflamed serves as the disease matter for the phrenitis.”

[T6] Hippocrates said: If people with melancholy and phrenitis develop haemorrhoids, this is a good sign in them.

Commentary: [1] In his commentary Galen says that evacuating the blood in haemorrhoids is beneficial during melancholy and phrenitis because the corrupted blood is evacuated thereby. [2] Rāzī opposed this view, saying that phrenitis is not caused by thick blood. Rather [phrenitis is caused] by thin blood that is inflamed, most of which is caused by yellow bile. So how should the evacuation of haemorrhoids-blood be beneficial? [3a] In our solution to [Rāzī’s] doubt about [Galen’s interpretation], we said that the inflamed blood, which serves as the matter for phrenitis, burns so quickly that sometimes the face of someone with phrenitis becomes black. A person with such a condition benefits from the blood evacuated by haemorrhoids. [3b] Additionally, if nature opens up the veins’ openings and the superfluous blood is pushed toward them, all of the matter will flow in that direction, and the person with phrenitis will benefit from this also.

[4] In an anonymous translation [of this aphorism] in place of “people

with phrenitis” I found [the phrase] “pain in the kidney.” The whole aphorism ran as follows: “whoever has the illness caused by black bile and *pain in the kidneys*, which is then followed by the bursting of haemorrhoids-blood, this is good.” Thus, if the original copyist [*al-nāsikh al-awwal*] was inattentive, copying “phrenitis” into the exemplar [*al-dastūr*] rather than “kidney pain,” it is evident that for the most part kidney pain is caused by thick humour and that the evacuation of haemorrhoids-blood purges these humours.⁶¹

Rāzī’s comments in the *Doubts on Galen* dictate the structure and content of Ibn Abī Šādiq’s commentary. It is no surprise that in T6 Ibn Abī Šādiq turns immediately to address the question, which was originally posed by Rāzī, of whether melancholy and phrenitis share the same aetiology. After (1) briefly stating Galen’s interpretation of the aphorism, followed by (2) a summary of Rāzī’s criticism, in (3a) Ibn Abī Šādiq agrees with Rāzī that blood that is rich in yellow bile when it is burned serves as the disease matter for phrenitis. Ibn Abī Šādiq believes, in other words, that phrenitis is a species of erysipelas.

Yet, in (3a) Ibn Abī Šādiq also appears to be obliquely searching for a way to excuse Galen for his failure to make it clear in his commentary that inflamed blood that is rich in yellow bile causes phrenitis, and that this blood

61. Ibn Abī Šādiq, *Commentary on the Hippocratic Aphorisms*, ed. ARABCOMMAPH [Dublin, Chester Beatty Library, ms. Ar. 3802, ff.167b, l.9–168a, l.14; Istanbul, Beyazid Devlet Kütüphanesi, ms. Veliyeddin Efendi 2508, f.68a.u–68b, l.13]. For the Arabic text, see the Appendix.

is different in kind from the blood that causes melancholy. Moreover, in spite of the fact that in his commentary on vi.11 Galen says, in effect, that haemorrhoids only evacuate black bile, in T6 Ibn Abī Šādiq is searching for a mechanism that allows haemorrhoids to evacuate other types of corrupt bile from the blood, especially yellow bile.

In fact, the tasks that Ibn Abī Šādiq sets for himself are not easy to reconcile with other passages in Galen's works. Though Galen draws a distinction between the aetiologies of erysipelas and inflammation (φλεγμονή) in Book 13 of *Method of Medicine*, by the time he reaches Book 14, Galen appears dissatisfied with his attempts to distinguish between the two ailments at the symptomatic level. At the beginning of Book 14, therefore, Galen says that the difference between them lies primarily in the color of the affected part: if it is red it is called "inflammation, whereas when it is pale, or yellow, or a colour like a mixture of pale and yellow" it is called "erysipelas." Yet, focusing on the colour of the affected part leads Galen to problems when it comes to distinguishing melancholy and phrenitis. On the one hand, since at least the time of Rufus of Ephesus, a well-known symptom of melancholy was having a dark or even black countenance.⁶² On the other hand, in *Method of Medicine* book 14, Galen remarks that erysipelas is

62. E.g. Rufus of Ephesus, *On Melancholy*, ed. Pormann, 37: in **F14** in the *Comprehensive Book* Rāzī writes that patients with melancholy have a "dark complexion [*adm al-alwān*];" and in **F11** (ibid., 35) in the long passage from the *Medical Book*, Aëtius writes that their skin becomes "black [*μελανόχροες*] owing to the [melancholic] humour being poured out."

“severe in respect of burning heat [σφοδράν ἔχον τὴν φλόγῳσιν],”⁶³ and if the condition is not cooled quickly the affected part becomes “livid or altogether black [ἦτοι πελιδνὸν ἢ καὶ παντάπασι μέλαν γενέσθαι].”⁶⁴

It seems quite likely, then, that in (3a) Ibn Abī Šādiq is likely referring to Galen’s discussion of the aetiology and symptoms of inflammation and erysipelas in *Method of Medicine*. His reason for mentioning the fact that the face of someone with phrenitis becomes black is to identify the source of Galen’s purported confusion. In Ibn Abī Šādiq’s view, observing the blackened countenance of the person with melancholy and phrenitis, Galen must have come to the mistaken conclusion that their aetiologies are the same, viz. viscid blood with an over abundance of melancholic humour that has become corrupted. In (3b) Ibn Abī Šādiq goes further to exculpate Galen by introducing the mechanism that allows haemorrhoids to evacuate more than just black bile. Perhaps Galen was imprecise about the aetiology of phrenitis, concedes Ibn Abī Šādiq, but this does not vitiate the fact that evacuating blood through the passageways opened up by the haemorrhoids has a therapeutic effect on both conditions. Whether they evacuate viscid blood that is rich in black bile or thin blood rich in yellow bile, haemorrhoids serve equally as the therapeutic mechanism for relieving patients suffering from melancholy and patients suffering from phrenitis because they are the route that the body’s natural faculty uses to expel disease matter of any

63. Galen, *Method of Medicine*, III.431.

64. Ibid., 433.

sort.⁶⁵

Finally, in (4) Ibn Abī Šādiq notes that the older Arabic translation of the *Aphorisms* has the word “kidney pain [*wajaʿ al-kulya*]⁶⁶” in the place of “phrenitis [*al-sirsām*].”⁶⁷ By mentioning that there is an alternative version of vi.11 to Ḥunayn’s, Ibn Abī Šādiq does more than simply allude to the fact that the transmission of the aphorism in Greek is unstable. For one, Ibn Abī Šādiq implies that the link Hippocrates draws between the evacuation of blood by haemorrhoids and bilious diseases such as melancholy is valid on either reading of the aphorism. In short, Hippocrates’ dictum is true regardless of whether Hippocrates was speaking about phrenitis or nephritis. Second, Ibn Abī Šādiq is also suggesting that in one sense Rāzī’s talk about phrenitis is moot since Hippocrates and Galen may not have been speaking

65. Ibn Abī Šādiq is probably recalling the following text from Galen’s *Method of Medicine* 13.2. In it Galen says (Galen, *Method of Medicine*, ed. and trans. Ian Johnston and G.H.R. Horsley (Cambridge, Mass.: Harvard University Press, 2011), III.320) that all the medical sects agree that “every inflammation arises through an influx of blood [πᾶσα φλεγμονὴ δι’ ἐπρροήν αἵματος γιγνομένη],” and so (ibid.) “the aim of treatment which is actually common to all [sects], is the evacuation of the excess blood in the inflamed part.”

66. For the translation of νεφρίτις as kidney pain (*wajaʿ al-kulya*), see Ullmann, *Wörterbuch zu den griechisch-arabischen Übersetzungen*, 435. For the translation of φρενίτις as *al-sirsām* or *al-birsām*, see ibid., 742.

67. If Ibn Abī Šādiq is indeed referring to al-Bīṭrīq’s (fl. 750) translation of the *Aphorisms*, it seems that the manuscripts al-Bīṭrīq used to execute his translation correctly transmitted τοῖσι νεφριτικοῖσιν rather than τοῖσι φρενιτικοῖσιν in the manuscript tradition Ḥunyan relied on.

about phrenitis in the first place. Finally, Ibn Abī Šādiq points out that, in spite of Rāzī's claims to the contrary, Galen's interpretation of vi.11 can be salvaged, whether we take the aphorism to speak about "people with nephritis," with the majority of the Greek manuscripts, or "people with phrenitis," with the manuscript tradition used by Ḥunayn. If we accept Ibn Abī Šādiq's claim that haemorrhoids evacuate black bile as well as yellow bile, Galen's interpretation is correct if Hippocrates was really speaking about nephritis. For according to Galen, drugs that purge yellow bile are prescribed in cases of disease in the area of the kidneys and the spleen, and the natural purging brought about by haemorrhoids acts in a way that is exactly analogous to purging induced by drugs.⁶⁸

Thus, while it is true that Ibn Abī Šādiq quotes Galen's commentary on vi.11 nearly word for word and he appears to side with Rāzī against Galen, Ibn Abī Šādiq introduces a variety of interpretive strategies to exculpate Galen from serious error. In his commentary on *Aphorisms* vi.11 Ibn Abī Šādiq employs several ampliative strategies that are absent from Ibn Riḍwān

68. For example, in *On Simple Drugs* 6, Galen discusses (Galen, *Opera Omnia*, ed. Kühn, XI.812) the therapeutic properties of anchusa (ἡ ἀγχούσα). He notes that this drug "is beneficial for people with jaundice, for those with pain in the spleen, and for those with pain in the kidneys. It cools considerably, and applying it as a poultice with barley groats is beneficial for cases of erysipelas [οὕτω τέ τοι καὶ ἰκτερικοῖς καὶ σπληνικοῖς καὶ νεφριτικοῖς ὠφέλιμος ὑπάρχειν. ἔστι δὲ καὶ ψύχειν μὲν ἱκανῇ καὶ καταπλασσομένη γε σὺν ἀλφίτοις ἐρυσσιπέλατα ὠφελεῖ]." See Ullmann, *Wörterbuch zu den griechisch-arabischen Übersetzungen*, 435 and 96.

and Nīlī. (1) He engages in *direct polemic*, in this case, with Rāzī against Galen; (2) he *quotes directly* from texts outside Galen’s commentary, viz. Rāzī’s *Doubts on Galen*; (3) he *refers indirectly* to Galenic medical theory that does not appear in Galen’s commentary on vi.11, viz. he refers to Galen’s classification of swellings into inflammation and erysipelas in *Method of Medicine*; and (4) he shows his interest in *philological problems with the Aphorisms as a text*,⁶⁹ viz. he is clearly aware of the fact that the Hippocratic *Aphorisms* is an unstable text with variant readings and translations, and that taking these variants into consideration is an important element in exegesis of the Hippocratic lemma. These strategies lead to a situation in which out of a desire to vindicate Galen’s interpretation of vi.11, Ibn Abī Šādiq introduces a substantial amount of material from *outside the text* of Galen’s commentary.

Ibn Abī Šādiq’s commentary on *Aphorisms* ii.6 reveals further elements of his commentary strategy. In ii.6 Hippocrates says: “if a part of a person’s body is in pain but in most conditions he does not sense the pain, then his intellect is deranged.” Galen’s commentary on ii.6 is a short, rather pedestrian affair. In it Galen highlights the fact that Hippocrates often uses the expression “pain” to refer to the underlying condition that causes the

69. No other author in the Arabic *Aphorisms* commentary tradition evinces as much interest in the textual variants contained in al-Biṭrīq’s early Arabic translation as Ibn Abī Šādiq. In addition to *Aphorisms* vi.11, Ibn Abī Šādiq also discusses the “anonymous translation [*naql majhūl*]” in v. 41, vi. 5, 7, 16, 26, vii. 6, and 12. I am grateful to Taro Mimura and Nicola Carpentieri for their help in locating and understanding these texts.

pain (*nafs al-ḥāl allatī ya'riḍu minhā al-waja'*), such as, for example, a fracture (*al-sharkh*), a dislocation (*al-faskh*) or an inflammation (*humra*). If a part of the patient's body is affected by such a condition, yet he does not feel it, we can conclude, says Galen, that this is owing to the fact that his intellectual capacities are not functioning properly.⁷⁰

Ibn Abī Ṣādiq's commentary on ii.6 reproduces some of the main ideas in Galen's commentary on that aphorism. He also refers to Galen's commentary on *Aphorisms* ii.46, where Hippocrates says that intense pain will conceal less intense sensations of pain. There are *Galenic elements* in Ibn Abī Ṣādiq's commentary, which he draws from other texts in the Galenic corpus. There are quotes taken from Rufus of Ephesus' *On Melancholy*. And finally, there are perhaps Ibn Abī Ṣādiq's own medical observations, which have no clear precedent in Galen.⁷¹ Thus, Ibn Abī Ṣādiq explains that what

70. Galen, *Opera Omnia*, XVII.b.460.

71. It is possible this observation is derived from the Islamic hagiographical literature. The following story (reported in Muḥammad b. al-Ḥasan b. Abd Allāh al-Wāsiṭī (d. 776 AH), *Majma' al-aḥbāb wa-tadhkirat ūlī al-albāb*, eds. Muḥammad Ibrāhīm al-Khiḍr, Muḥammad Zakarīyā Qāsim al-Miqdār, Muḥammad Muṣṭafā al-Khaṭīb and 'Abd Allāh 'Abd al-Salām Ḥumaydān (Jedda: Dār al-Minhāj, 2008), I.568) about the amputation of 'Urwa b. Zubayr's (d. 94 AH) leg is well-known. "When gangrene affected his foot, they advised that it should be amputated, and they warned him about ignoring it. He responded, saying: 'God has ennobled me with this [trial].' But when it [gangrene] reached his shin, they said, 'if it reaches your knee it will kill you.' Thus, he gave his permission to have it amputated out of piety, fearing that [if he allowed it to spread further] it would be counted as suicide [which is a grave sin in the Islamic legal tradition]. The physician [*al-ṭabīb*] recommended that he take

Hippocrates says in this aphorism

[T7] this [viz. the principle stated by Hippocrates in ii.6] is not true in every case of derangement. For madmen have deranged intellects, but they sense pains in their bodies. So this [aphorism] is observed to be true [*yu'tabaru*] in cases of derangement affecting the psychic faculties, in which the intellect is preoccupied by something that is more urgent than sensing, such swelling in the brain and the diaphragm. For even if sense is not *through* the intellect [*bi-l-'aq*], the locations from which the activities of sense and the activities of the intellect arise are the same. Thus, in a case of mental derangement whenever the psychic faculties are preoccupied by something that is more urgent than sensing, after which the body is affected by a condition that causes pain such as inflammation, a wound, bruise or a fracture, the person does not sense it. If the injury [*āfa*] is very great—as Hippocrates mentions in the aphorism “whoever’s brain is shaken

a medication [*al-dawā*] so that he would not feel the pain of the amputation. He said, ‘I am not the type of person who denies himself the reward of something that God has decreed for me (*sic*).’ It was said, ‘one of your children ought to take hold of you so that you remain firm.’ He responded, ‘Pleasure with what God has destined prevents me from doing such a thing.’ Thus, with [the Umayyad caliph] Walīd b. ‘Abd al-Malik and his retinue gathered round while the physician was cutting, [‘Urwa] kept saying ‘there is no God but God [*yuhallilu*],’ and ‘God is great [*yukabbiru*]’ and invoking God until it [the leg] was amputated. Yet, his demeanor [*hāluhu*] did not change, and those present only heard the hissing of the oil [which was boiled to cauterise the leg].”

violently, he gets apoplexy at the location”—he loses sensation and the ability to move because, at that moment, all the psychic faculties become inoperative and unstable. Yet, a person may be affected with a condition that is similar to the one Hippocrates describes [in this aphorism, viz. not sensing pain] whilst his intellect is completely sound [*aʿqal mā yakūn*]. For the godly person [*al-mutaʿallih*] is unaware of what pains him when he is worshipping. So he does not feel [pain] in spite of the fact that his intellect is sound. Also grave events may befall a person, which distract him from sensing intense pain because the sense faculty is preoccupied from sense by something that is more urgent than sensing. A condition similar to the one we are discussing may affect madmen [*al-majānīn*], for if the psychic pneumas become thick and turbid because of thick, melancholic vapours, they [psychic pneumas] do not permeate to the body parts as they should. They do not, then, feel many of the pains that affect them. The great Rufus mentioned that a person with melancholy [*al-mālinkhūliyā*] did not feel when his body was pricked or bruised, and that when he was cauterised on his forearm, he did not admit that he was being cauterised until a healthy part [of his body] was burned up.⁷²

72. Ibn Abī Šādiq, *Commentary on the Hippocratic Aphorisms*, ed. ARABCOMMAPH [Dublin, Chester Beatty Library, ms. Ar. 3802, ff.26b.u–27b, l.9]. This is a second version of Ibn Abī Šādiq’s commentary on *Aphorisms* ii.6. There are two independent recensions of his

In this passage, Ibn Abī Šādiq confirms Galen's distinction in ii.6 between the *sensation* of pain and the *condition* (*ḥāla*) that causes the pain. He also uses the same examples, such as inflammation, wounds, bruises, and fractures to illustrate the kinds of conditions in the body that typically produce pain. Ibn Abī Šādiq uses the *Galenic* principle that both sense and mental faculties originate in the brain to justify Hippocrates' inference that the person's intellectual capacities are not operating naturally from the fact that he does not sense pain.⁷³ Yet, most of the content in Ibn Abī Šādiq's commentary is

commentary in one manuscript tradition of Ibn Abī Šādiq's commentary on the Hippocratic *Aphorisms*. This second version is introduced with a note by a scribe (possibly the scribe of the paradigm of this manuscript tradition): "the copyist of the exemplar [*kātib al-aṣl*] mentioned that when he was collating [the exemplar manuscript] he found another commentary on this aphorisms that is not in the exemplar. It runs as follows [...]" It is not clear what the relationship between the two versions is, but it is plausible that the second, which is contained in the Chester Beatty ms. Ar. 3802, preserves a revised recension of an earlier draft of the commentary on ii.6. There is a third commentary attributed to Ibn Abī Šādiq, which is nearly identical in content to the *Aphorisms* commentary preserved in the Dublin and Istanbul mss. In this version, however, Ibn Abī Šādiq has rearranged the aphorisms thematically and added a brief preface where he justifies his decision to rearrange Hippocrates' book. In this preface, Ibn Abī Šādiq's remarks recall Rāzī's introduction to his medical aphorisms in *The Guide or Aphorisms* (*al-Murshid aw al-fuṣūl*); see Rāzī, *Guide or Aphorisms*, 17.

73. That Galen held sensation to originate in the brain is a well-known principle of Galen's anatomy. That this same location is also where pain is sensed is stated in Galen, *On the affected parts*, trans. Rudolph Siegel (London: Wiley, 1967), 67. That the rational faculty is located in the brain is Galen's famous doctrine, which he argues for at length in *Doctrines*

not located in the *text* of Galen's commentary. The reference to Rufus' *On Melancholy* is only the most obvious. The report that religious ascetics do not feel pain when they are worshipping is a novelty that may originate from Ibn Abī Šādiq himself.⁷⁴

of Hippocrates and Plato.

74. Or it may not. In his commentary on *Aphorisms* ii.6, Stephen of Athens, like Ibn Abī Šādiq in T7, speaks about what the phrase “on the whole [τὰ πολλὰ]” means. Stephen says (Stephen of Athens, *Stephani Atheniensis in Hippocratis Aphorismos commentaria*, ed. L.G. Westerink (Berlin: De Gruyter, 1985), I.150): “the point arises what ‘on the whole’ means in the present aphorism. The answer is *generally* [πᾶν] or *mostly* [πολύ], since the statement applies to most affectations. For it should be observed that the purity of a soul which is not much preoccupied with the body may be the reason why the patient is not aware of his ailment or of the pain, because his mind is engrossed by some sublime subject of contemplation [δεῖ γὰρ εἰδέναι, ὅτι διὰ καθαρότητα ψυχῆς ἤττον περὶ τὸ σῶμα ἀναστρεφόμενης ἐνδέχεται μὴ συναισθάνεσθαι τοῦ πάθους ἥτοι τῆς ὀδύνης τὸν κάμνοντα διὰ τὸ περὶ τινα θεωρίαν ὑψηλὴν ἀσχολεῖσθαι τὸν νοῦν].” The idea that contemplation and important matters can distract someone from feeling pain is echoed in Palladius’ commentary on *Aphorisms* ii.6 also. Most of Palladius’ commentary on ii.6 is lost. But his discussion of what “on the whole” means is preserved. He says (Palladius, *Commentary on the Hippocratic Aphorisms*, ed. Hinrich Biesterfeldt and Taro Mimura [Beirut, Lebanon/Arizona, USA, private collection of Dr. Farid Sami Haddad]: “[pain?] does not reach these people accompanied by numbness. He [Hippocrates] said it about people whom pain reaches but they do not feel it. People who are distracted from feeling the pain by invoking God are very few, whereas Hippocrates was speaking about the majority of people [α/-‘amma]. When he taught us that ‘they do not feel *most* pains’ and not ‘they do not feel every pain’ he was making an exhaustive statement in order to give numbness a place [viz. in the scope of the principle stated in aphorism], and distraction caused by invoking God, as well

More significant, however, is the fact that his interpretation of ii.6 opposes Galen's in important ways. In his commentary, Galen in no way suggest that ii.6 has a limited scope of applicability. Yet, for Ibn Abī Šādiq cases of madmen who feel pain and worshipful ascetics who do not entails that the exact relation between pain and the mind needs to be reexamined. According to Ibn Abī Šādiq, the connection between sensing pain and mental derangement is only necessary in the way stated by Hippocrates in cases in which the brain itself is affected by a disease such as phrenitis. Ibn Abī Šādiq reads the aphorism as saying that *if* there is an underlying pathology in the brain, then insensibility to pain is a sign that the mental faculties are affected by disease. If there is not some underlying pathology in the brain, insensibility to pain must be accounted for by some other cause, which is not necessary pathological. Ibn Abī Šādiq believes that the insensibility to pain displayed by melancholic patients is a pathology that is caused by melancholic vapours affecting the brain. On the other hand, the insensibility to pain displayed by

as other concerns that preoccupy the soul from the fact that the body feels pain, and also in order to inform us that there are kinds of pain that are so severe that neither numbness nor preoccupation prevent the body from feeling them. Then, owing to his profound insight and because he desired that his discussion should omit nothing, he formulated this into an aphorism." For literature, see Hinrich Biesterfeldt, "Palladius on the Hippocratic Aphorisms," in *The Libraries of the Neoplatonists*, eds. Cristina D'Ancona (Leiden: Brill, 2007), 385–397. At the XV^e Colloque hippocratique 2015 Peter E. Pormann and his research group at the University of Manchester presented evidence that the commentary preserved in the Beirut ms. is not an Arabic translation of Palladius' Greek commentary; see the article by Pormann et al. in this volume.

ascetics in worship and people who are overcome by some catastrophic event, for example, is *not* a sign that their mental faculties are diseased. Ibn Abī Ṣādiq argues that the reason that such people do not sense pain lies in the fact that the faculty responsible for sense and the faculty responsible for intellection are found in the same location in the brain. As a consequence, sensations of pain vie with other intense sensations for attention from the faculties of perception. Generalising aphorism ii.46, Ibn Abī Ṣādiq concludes that ascetics in worship and the person struck by some catastrophe, both of whose sense faculties are wholly preoccupied by the intense emotions associated with worship or by intense worry and fear, will not sense painful conditions because their sense faculties are absorbed entirely with other states.

These are substantial departures from the text of Galen's *Aphorisms*-commentary. I should remark that Ibn Abī Ṣādiq in no way repudiates Galen's interpretation of ii.6, nor does he criticise him for leaving Hippocrates' lemma unexplained or vague in the way that Rāzī does in *Doubts*. In comparison with Nīlī's strategems for abridgment, Ibn Abī Ṣādiq's commentary strategies lead to a situation in which the text of Galen's *Aphorism*-commentary is bypassed. These strategies include (5) referring to and expanding on other aphorisms without necessarily relying on Galen's interpretation, (6) citing pre-Galenic authors, (7) blending different elements in Galenic medical theory, which are presented elsewhere in the Galenic corpus, and (8) justifying departures from Galen's interpretation by appeals

to medical experience. Naturally, these commentary strategies are very much *Galenic* in spirit. But Ibn Abī Šādiq deploys them in his commentary on the Hippocratic *Aphorisms* in such a way that the text of Galen's commentary becomes largely irrelevant to his understanding of the aphorism.

Whence Galen? Ibn Sīnā and ‘Abd al-Raḥīm al-Ṭabīb

The representative of the third stage in the Arabic commentary tradition is ‘Abd al-Raḥīm al-Ṭabīb (hereafter called “Ṭabīb”).⁷⁵ Little is known about him save for the fact that he wrote a commentary on an epitome of the Hippocratic *Aphorisms* by the equally obscure ‘Izz al-Dīn Ibrāhīm al-Kīshī (hereafter called “Kīshī”).⁷⁶ On the basis of a manuscript copied in 753/1352, which is an abridgment of Book 1 of Ibn Sīnā's *Canon* authored by someone also bearing the name ‘Izz al-Dīn al-Kīshī, Joosse and Pormann infer that Kīshī “must have been born at least a few decades before this date,” so in the first quarter of the fourteenth century.⁷⁷ On the other hand, we can date Ṭabīb's period of activity and the year of his death with a fair degree of

75. See Pormann and Joosse, “Commentaries on the Hippocratic *Aphorisms* in the Arabic Tradition,” 245.

76. Pormann and Joosse call Kīshī's work entitled *Means to Arrive at the Questions about the Aphorisms* (*Wasā'il al-wuṣūl ilā masā'il al-fuṣūl*) a “commentary,” following Carl Brockelmann's characterization of Kīshī's work as a commentary and Ṭabīb's work as a gloss; see *GAL* S II.1029. This judgment now appears to be incorrect, see n.81 below.

77. Pormann and Joosse, “Commentaries on the Hippocratic *Aphorisms* in the Arabic Tradition,” 245.

certainty. There is an Istanbul manuscript of Ṭabīb's gloss (*ḥawāshin*) at the end of which the anonymous scribe says that he is copying from Ṭabīb's apograph, which Ṭabīb wrote out in the "last ten nights of Ramaḍān" 785/1383, and which the scribe copied exactly four (lunar) years later in the "last three nights" of Ramaḍān 789/1387.⁷⁸ The manner in which the scribe speaks about Ṭabīb indicates that by 1387 Ṭabīb was already dead. So Ṭabīb died between 1383 and 1387.

Ṭabīb's *Aphorisms*-commentary is not based on Ḥunayn's translation of the lemmata. but on Kīshī's epitome.⁷⁹ In the introduction to his epitome,

78. 'Abd al-Raḥīm al-Ṭabīb, *Commentary on* [Ibrāhīm al-Kīshī's (d. ca. 1350)] *Means to Arriving to Issues in the Aphorism* [*Wasā'il al-wuṣūl ilā masā'il al-fuṣūl*], Istanbul, Süleymaniye Kütüphanesi, ms. Ayasofia 3670, f.68a.

79. Pormann and Joosse, "Commentaries on the Hippocratic *Aphorisms*," 245–246. There is evidence that Kīshī wrote his abridgment of the *Aphorisms* using Ibn Abī Ṣādiq's commentary as a guide. In *Aphorisms* ii.30, Hippocrates says: "at the beginning and at the end, everything [πάντα] is weaker, at the climax it is stronger." Galen understands "πάντα" to refer to all the *symptoms* (τὰ συμπεύματα, *al-a'rāḍ*); cf. Jones' translation in Hippocrates, *Hippocrates, Volume IV: On the Universe*, trans. W. Jones (Cambridge, Mass.: Harvard University Press, 1931 [reprint 1998]), IV, 115; Galen, *Opera Omnia*, ed. Kühn, XVII.b.524). And Ḥunayn translates "πάντα" noncommittally as "everything [*jamī' al-ashyā*]." In his commentary, Ibn Abī Ṣādiq follows Galen, saying that in this aphorism Hippocrates is speaking about the "symptoms [*a'lām*]." Of the four types of symptoms that Ibn Abī Ṣādiq discusses, he says that in this aphorism Hippocrates is speaking about those symptoms that serve as the essential properties for the disease [*al-a'lām al-muqawwama li-l-maraḍ*]. Following Ibn Abī Ṣādiq's gloss, which is derived from the Aristotelian theory of definition,

Kīshī reports that in spite of the fact that the *Aphorisms* was widely recognised as a valuable medical reference, students often found that the book's language obscured Hippocrates' meaning. As a consequence, Kīshī's epitome is typically nothing more than a simplification of the language of Ḥunayn's commentary.⁸⁰

This fact becomes evident when we compare Ḥunayn's translation of *Aphorisms* ii.6 with Kīshī's, in which the latter has Hippocrates say that the person who does not sense pain in most instances has an intellect that is deranged. As far as I can tell, this summary sidesteps the problem identified by Galen, where Hippocrates says "pain" but in reality refers to the *condition that causes* the pain. It does this by simply eliminating the opening few words of the aphorism.

This truncation seems innocuous. It is not. Galen's commentary,

Kīshī abridges Ḥunayn's "everything [*jamī' al-ashyā'*]" in the Hippocratic lemma with the phrase "what serves as an essential property of the disease [*muqawwam al-maraḍ*]."

80. 'Izz al-Dīn Ibrāhīm al-Kīshī, *Missives for Arriving to Issues in the Aphorism* [*Rasā'il al-wuṣūl ilā masā'il al-fūṣūl*], ed. Author [Vienna, Österreichische Nationalbibliothek, ms. Codex Vindobonensis Palatinus Mxt 1408, f.57b, ll.6–13]: "Having observed that a group of the medical students keeping my company who are dear to me were dedicating themselves to learning Hippocrates' *Aphorisms*, and appreciating that this book contains excellent lessons and many benefits, but that [the reader] bores [of it] and its words and expressions are ponderous for students, even if its luminous meaning and the concise expressions should impress them, I have seen it fit to abridge it slightly so that it is half its former size or less in such a way that not a single meaning it contains is lost or distorted while also inserting what clarifies its abstruse language and including what makes evident its intention and aim."

which focused exclusively on this portion of the lemma, now becomes entirely irrelevant to understanding what Hippocrates said. The *nature of pain* and its relation to the sense is what attracts Ṭabīb's attention.

[T8] Hippocrates said: whoever does not sense what pains him in most instances has an intellect that is deranged.

I say: pain is sensing what is contrary insofar as it is contrary. We say 'insofar as it is contrary' because what is contrary may possess properties [*aḥwāl*] that are agreeable from a certain perspective. For if the opposite suits [the patient] from this perspective, [the patient] will find pleasure in the opposite. This is like someone who finds pleasure when he drinks cold water during an illness in which water harms him; or like someone who eats harmful fruit, which causes a faulty mixture [*sū' mizāj mukhtaliḥ*] or disrupts continuity [*tafarruq al-ittiṣāl*] in an unnatural way.

Whenever physicians say "intellect" and "mind," they mean the speculative faculty [*al-quwwa al-mufakkira*].

The meaning of the aphorism is that someone who has something, which in the eyes of the doctor should [*min sha'nihi an*] cause pain such as a wound, a faulty mixture, or a hot swelling, but the patient does not feel the pain, his intellect is deranged. For if pain comes about in the body but the intellect is not aware of it [*wa-lam ya'rifhu al-'aql*] and the senses do not perceive it, this indicates that they [the intellect and mind, sc. *al-'aql wa-l-dhihn*] may be inoperative [*qad*

baṭulā]. He said ‘most instances’ because sometimes the patient is occupied by something that makes him happy, or he is occupied from it [viz. pain, sc. *al-waja*] by something else, or he has two pains, one of which is stronger, in which case he will sense the stronger sensation rather than the weaker one.⁸¹

Of course, Ṭabīb’s commentary stands firmly in the Galenic medical universe. The definition of pain as sensing what is contrary is inspired by Plato’s *Timaeus*, but is used in a strictly medical context by Galen in, for example, *On the Causes of Symptoms*.⁸² It is well-known too that Galen classified diseases into those caused by a faulty mixture of the active qualities (δυσκρασία) and those that are caused by the dissolution of continuity (συνεχείας or ἐνώσενς, and λύσις, διαφθορά, or διαίρεσις).⁸³ It is clear too that a portion of Ṭabīb’s commentary is copied from Ibn Abī Šādiq’s

81. ‘Abd al-Raḥīm al-Ṭabīb, *Commentary on* [Ibrāhīm al-Kīshī’s (d. ca. 1350)] *Means to Arriving to Issues in the Aphorism* [*Wasā’il al-wuṣūl ilā masā’il al-fuṣūl*], ed. Author [Leiden, Universiteitsbibliotheek, ms. 58, ff.10b, l.16–11a, l.15; Istanbul, Süleymaniye Kütüphanesi], ms. Ayasofia 3670, ff.12a, l.15–12b, l.6]. For the Arabic text, see the Appendix.

82. Ian Johnston, *Galen: On Diseases and Symptoms*, (Cambridge: Cambridge University Press, 2006), 220: “Common is what Plato also says in the *Timaeus*, writing thus: ‘An affectation contrary to nature occurring in it violently [βιαιῶς] and intensely is pain; the return to the natural state on the other hand, when it is intense, is pleasure. What is slow and slight is not perceived.’” The quote is from Galen’s *On the Causes of Symptoms*, Book 1.

83. Phillip De Lacy, “Galen’s Concept of Continuity,” *Roman and Byzantine Studies* 20/4 (1979): 355–369, 356.

commentary on ii.6. Yet the classification of *pain* into that which is caused by a faulty mixture and a dissolution of continuity is Avicennian.⁸⁴

In an introductory discussion on the causes of pain (*asbāb al-awjāʿ*) in the *Canon of Medicine*, Ibn Sīnā says that not every faulty mixture (*sūʾ mizāj*) causes pain, but only the type of faulty mixture that disrupts the present mixture (*sūʾ mizāj mukhtalif*) in the body part. Thus, Ibn Sīnā holds that faulty mixtures that gradually (*bi-l-tadrīj*) take root in the body part do not cause pain because it is “as if the faulty mixture has taken the place of the body part’s original mixture (*al-mizāj al-aṣlī*). Ibn Sīnā’s emphasis on the fact that gradual alterations in the body’s composition are not perceived by the senses recalls the quote from the *Timaeus* cited by Galen in *On the Causes of Symptoms*. However, where Ibn Sīnā takes the change to refer to a gradual alteration in the body’s mixture (κρᾶσις), in *On the cause of symptoms 1*, Galen takes the change to refer to a gradual dissolution of continuity. Thus, with respect to the sense of touch, Galen says cold is “painful by disrupting substance [ἀλλὰ καὶ αὐτὸ τῷ διασπᾶν τὴν οὐσίαν ὀδυνηρὸν γίνεσθαι];”⁸⁵ for taste, “sharp, bitter, harsh and pungent things [ὑπο τῶν ὀξέων καὶ πικρῶν καὶ στρυφνῶν καὶ δριμύνων]” cause pain because each “divides continuity [διαίρει τὸ συνεχές];”⁸⁶ about smell Galen says that

84. Galen’s discussion of the causes of pain in *On the Causes of Symptoms 1* relies exclusively on the notion of disruption of continuity; see below.

85. Johnston, *Galen: On Diseases and Symptoms*, 220; for the Greek, see Galen, *Opera Omnia*, ed. Kühn, VII.116.

“the flowing vapours of the humours [...] are distressing to olfaction because they also disrupt continuity [ἀναιροὶ δὲ εἰσι καὶ κατὰ τὴν ὄσφρησιν οἱ τῶν εἰρημένων χυμῶν ἀπορρέοντες ἀτμοί, διότι καὶ οὗτοι διασπῶσι τὸ συνεχές]”;⁸⁷ “harsh, loud, very rapid sounds [ἐν ἀκοῇ δὲ ἢ τε τραχεῖα καὶ ἡ μεγίστη καὶ ἡ ταχίστη φωνή]” and thunder cause “disruption [διαπασθῆναι]” in the organ of hearing; and “extreme brightness of sunlight may at once distress and destroy vision by causing separation to the greatest extent [καὶ μέντοι γε καὶ τὴν ὄψιν αἱ λαμπρόταται τῶν αὐγῶν ἀνιωσί τε ἅμα καὶ δαφθείροθι τῷ δακρύνειν ἐπὶ πλεῖστον].” Ibn Sīnā’s text follows this passage from Galen’s *On the Causes of Symptoms* closely.

Pain is sensing what is contrary. The causes of pain fall into two categories. The type that changes alters the mixture [*al-mizā*] at once, which is the faulty mixture [*sū’ al-mizāj al-mukhtalif*]. The other type dissolves continuity [*yufarriqu al-ittiṣāl*]. By “faulty mixture” I mean that there is constant mixture in the substance of the parts of the body, after which an unnatural mixture that is contrary supervenes so that it [the mixture] is hotter or colder. The sense faculty [*al-quwwa al-ḥāssa*] senses that the contrary [mixture] has arrived, after which it feels pain, for feeling pain is to sense that the contrary impression as a contrary. The faulty mixture that is graduated does not cause pain nor is it

86. Johnston, *Galen: On Diseases and Symptoms*, 221; for the Greek, see Galen, *Opera Omnia*, ed. Kühn, VII.117.

87. Ibid.

sensed. For example, a bad mixture [*mizāj radī*] may take root in the substance of body parts to the extent that it eliminates the original mixture [*al-mizāj al-aṣlī*], so that it is as if it were the body part's original mixture. This [type of faulty mixture] does not cause pain because the sense [*al-ḥāss*] must be impressed by the sensory object [*al-maḥsūs*]. However, the thing that is impressed is not affected by the condition that is constant and does not alter any condition in it [the object that is impressed, viz. sense], rather it is affected by a contrary that supervenes upon it in such a way that it is altered to condition that it had not previously possessed [...]

Having understood this, we say: even if one of the kinds of thing that cause pain is the faulty mixture, not every faulty mixture causes a disruption. For that which is hot by its essence and which is cold by its essence and the dry from an accident and the moist do not cause pain. For hot and cold are active qualities whereas dry and moist are passive qualities whose substance does not have a nature such that a body is affected by them.⁸⁸

The reason why Ibn Sīnā highlights the fact that faulty mixtures cause pain by disturbing the body part's current mixture is because he believes that Galen wrongly reduces all the causes of pain to the dissolution of continuity. Or, said differently, the ability to cause pain is not, according to Ibn Sīnā's

88. Ibn Sīnā, *Canon of Medicine [al-Qānūn fī al-ṭibb]*, ed. Qāsim Rajab (Baghdad: Maktabat al-Muthannā, [ca. 1970]), I.108, II.6–27.

reading of Galen, an intrinsic property of faulty mixture. It is, rather, an accidental consequence of the fact that a faulty mixture that disturbs the body part's current mixture brings about dissolution of continuity. Citing the same examples that Galen uses in *On the Causes of Symptoms* 1, Ibn Sīnā thinks that this doctrine leads to the absurd conclusion that every sensation, even a mundane sensation such as seeing black or white causes pain.

If Galen's doctrine is examined critically, it reduces to [the claim that] the only essential cause of pain is dissolution of continuity. So heat causes pain because it dissolves continuity. Likewise, cold causes pain because it is attended by the dissolution of continuity. For owing to the fact that cold thickens and condenses, it is necessarily accompanied by the [disparate] parts being attracted to a place in which they condense, and so [continuity] dissolves from the direction from which it [the cold] was attracted. Galen carried on in this way to the extent that in one of his books he gives the impression that all sense objects cause harm in such a way; I mean, that they cause harm by dissolving or condensing, which are accompanied by dissolution. For among the visible objects, black things cause pain owing to the fact that they condense strongly,⁸⁹ and white [causes

89. Cf. Johnston, *Galen: On Diseases and Symptoms*, 222: "one presumes black also would be pleasant, whereas it is not, for being opposite to the substance of vision it draws together [συνάγει] more violently than [allows it to] return to its nature." Galen, *Opera Omnia*,

pain] owing to the fact that it dissolves strongly.⁹⁰ Among objects of taste, bitter, salty and sour cause pain because they dissolve to an extreme degree, as does the astringent taste because it severely constricts, so dissolution follows it necessarily. The same is true of smells and loud noises, viz. they dissolve continuity because the movement of the air is violent when they [loud noises] come into contact with the auditory meatus [*ṣimākh*].

Ibn Sīnā refers to a text that is very similar to *On the Causes of Symptoms*.⁹¹ Yet, he takes the conclusion that seeing white and black causes pain as an absurd consequence of what he sees as Galen's doctrine that pain is caused exclusively by dissolution of continuity. Ibn Sīnā takes this *reductio* argument to authorise his doctrine that pain is also caused by the sudden alteration of the body part's current mixture. Ibn Sīnā considers this to be especially true in cases of pain that involve the active qualities.

What is remarkable in the evolution of this textual tradition on ii.6 is the

ed. Kühn, XVIIb.119.

90. Cf. Johnston, *Galen: On Diseases and Symptoms*, 221: "Next to these in what is distressing is white, whilst in what is pleasant is grey. The former [white] acts through a simultaneous separation and dissolution of its substance [τὸ μὲν γὰρ τῷ διακρίνειν τε ἄμα καὶ διαλύειν τὴν οὐσίαν αὐτῆς] [...]. Galen, *Opera Omnia*, ed. Kühn, XVII, Part 3, 119.

91. He is probably summarising from an Alexandrian summary, which in Arabic is entitled *Kitāb al-ʿilal wa-l-aʿrāḍ*. According to Manfred Ullmann (*Medizin*, 42), *On the Causes of Symptoms* (Περὶ αἰτίων συμπτωμάτων) occupies Parts 4–6 of the summary, which corresponds to VII.85–272 of Kühn's edition.

fact that in his commentary on this aphorism Ṭabīb apparently feels no obligation to reconcile, harmonise or even allude to the fact that the division he adopts for understanding the aetiology of pain in ii.6 conflicts with basic Galenic doctrines touching on the causes and nature of pain. On the one hand, in large part owing to the fact that Ṭabīb is commenting on Kīshī's epitome of the *Aphorisms*, Galen's commentary on ii.6 is largely irrelevant. The main focus of Ṭabīb's commentary is still pain, but he is not interested—as Galen is—in Hippocrates' tendency to refer to the causes of pain by the word “pain.” The nature and aetiology of pain is what interests Ṭabīb in this commentary. Yet, even here, it is clear that Ṭabīb does not feel the need to pore over Galen's works to find answers to these questions. He merely adopts the definition and classification of pain given by Ibn Sīnā in the *Canon*, Book 1, Fann 3. Indeed, a standard feature of Ṭabīb's exegetical repertoire is to give definitions for the main terms in the aphorism, which are often derived from the *Canon*. Then, on the basis of the definition, he provides a gloss of what the aphorism means, followed by a rationalisation derived from Galenic medical theory for why the aphorism is true. In the case of ii.6, we have seen that adopting this definition and classification of pain into the pain that is caused by faulty mixtures that disturb the body's current mixture and the pain that is caused by dissolution of continuity is part of an extended criticism mounted by Ibn Sīnā against Galen in the *Canon*. Yet, Ṭabīb makes no attempt to address the differences between Ibn Sīnā and Galen on this issue. Echoes of Galen's commentary in Ṭabīb's persist merely

in Ṭabīb's comment that physicians use the words "mind" and "intellect" to refer to the speculative faculty; and the fact that wounds and inflammation are two examples of conditions in the body that cause pain. Ṭabīb's commentary on *Aphorisms* ii.6 is, thus, remarkable owing to the fact that (1) Ibn Sīnā's *Canon of Medicine* is the main source of medical theory, and that (2) while the influence of Ibn Abī Ṣādiq's commentary is evident, (3) the text of Galen's commentary on the *Aphorisms* has been supplanted.

Conclusion

In this article, I reassess Galen's medical legacy in medieval Islamic medicine. Rather than attempting to pinpoint departures and disputes with Galen in the Arabic commentaries on the Hippocratic *Aphorisms*, I sought to identify exegetical strategies that were used by medieval physician-commentators writing in Arabic. I concluded that late antique textual practices make it difficult to assess the impact of Rāzī's criticisms of Galen on Ibn Riḍwān and Nīlī. The abridgments of Galen's commentary by Nīlī and Ibn Riḍwān are constructed using what I called *closed* exegetical strategies, which these author inherited from late antique medical scholasticism. What we observe to be Galen's powerful influence on how these authors understood Hippocrates is, I argued, a consequence of the closed exegetical strategies whose use is dictated by the medical abridgment and medical commonplace writing genres.

Ibn Abī Ṣādiq's commentary represents a transitional stage in the

influence of Galen's commentary on the Arabic commentary tradition on the Hippocratic *Aphorisms*. Ibn Abī Šādiq adopts a number of what I called *ampliative* exegetical strategies, which ironically lead to a situation in which the text of Galen's commentary on the *Aphorisms* is supplemented and even overshadowed by material from Rāzī, Rufus of Ephesus, and Islamic hagiography or perhaps late antique commentators such as Palladius (fl. ca. 550). By the time of the late fourteenth century author 'Abd al-Raḥīm al-Ṭabīb, the text of Galen's commentary on the *Aphorisms* plays almost no role in how Ṭabīb understands the Hippocratic lemma. I have suggested that only part of the reason for this absence is that Ṭabīb is commenting on an epitome of the *Aphorisms* rather than Ḥunayn's ninth-century translation. Ṭabīb's use of Ibn Sīnā is noteworthy. In his commentary on *Aphorisms* ii.6, Ṭabīb uses a classification of pain that Ibn Sīnā puts forward in the *Canon*. In the *Canon* Ibn Sīnā argues for this division in direct and explicit opposition to Galen. Yet, Ṭabīb apparently feels no compulsion to harmonise these authors' views. By the late fourteenth century of the Christian era, Ibn Sīnā's opinion alone on the matter apparently sufficed.

Appendix A

This section contains the Arabic texts from unedited Arabic manuscripts. Unless otherwise specified, editions were prepared by the author, Taro Mimura, Emily Selove, Nicola Carpentieri, and Aileen Das.

[T1] Ibn Riḍwān, *Notes of Lessons from Hippocrates' Aphorisms with Galen's*

Commentary [Ta'ālīq fawā'id kitāb al-fuṣūl li-Abuqrāṭ tafsīr Jālīnūs], ed. Taro Mimura and Aileen Das, 1 [Cambridge, University Library, ms. Cantabr. Dd. 12.1, ff. 51a, ll.1-13]:

إنّما رتّب جالينوس كتاب الفصول تالياً لكتاب الموضع والمياه والأهوية الذي هو كتاب أبقراط في الأمراض البلدية، لأنّه عرّف في كتاب الأمراض البلدية كيف يتعرّف الأمراض العامية في بلد بلد حتّى يتحرّز منها ويتأتّى لبرء ما حصل منها وينبغي أن يصل إلى ذلك بالقول في الأمراض المختلفة التي يختصّ بواحد واحد منها واحد واحد من الناس، وهذه لا يعلم أمرها ويتعرّف على ما ينبغي حتّى يتقدّم العلم بقوانين صناعة الطبّ، فيرى لذلك أن يصل كتاب الأمراض العامية بكتاب الفصول ثمّ يصل كتاب الفصول بكتبه في الأمراض المختلفة ثمّ يصل ذلك بكتابه في الأمراض الوافدة.

[T2] Abū Sahl al-Nīlī, *An Abridgment of the Commentary by Galen on the Aphorisms of Hippocrates*, ed. ARABCOMMAPH [Oxford, Bodleian Library, ms. Huntington 359.1, f.1b, ll.1-11]:

إنّ الذي دعاني إلى تلخيص تفسير جالينوس لفصول أبقراط مع قصور الوسع والإقرار عن الإتيان بمثل ذلك من النظم في الحسن والبيان ممّا رأيت من تكاسل الأصحاب عن النظر في الكتب الطويلة وقصورهم وميلهم إلى المختصرات القصار لسرعة ملالهم وفتورهم وتقديرًا منهم بأنّ السادي إذا حظي بما حضرته الكتب الموجزة، أغنته عن مشاركة البساط وكانت له فيها مندوحة عنها. ولعمري، إنّ تلخيص المبسوط وحصره بالفصول الموجزة أعظم الأشياء عونًا على الحفظ ومن تسرعه المطالعة عند طريان النسيان. ولذلك قال بعض الأوائل: قلّل للحفظ وكثّر للدرس. وهو الذي دعا الفاضل أبقراط إلى وضع الكتاب على طريق الفصول. لكنّ قراءة البسائط هي التي تهجم بالمرء على حقائق المعاني وتفضي به إلى الوقوف عليها ويمكّنه من جودة التصرف فيها. ولذلك دأب جالينوس وتعب في المعاني الطّبية وأطال شرح القول فيها. ولكلّ منهما فيما نحا نحوه غرض محمود وسعى. وقد استخرت الله تعالى في تلخيص هذا التفسير والاقتصار على ذكر النكت.

[T3] Ibn al-Quff, *Commentary on the Hippocratic Aphorisms*, ed.

ARABCOMMAPH [London, British Library, ms. Or. 1348 Suppl, 63a, ll.27–36; Istanbul, Yeni Camii, ms. 919, f.110b, ll.19–28]:

أجاب ابن رضوان بجواب وحاصله أنه مأخوذ مما ذكره الرازي بعد أن خاطبه بخطاب لا يليق بمثل ابن رضوان في حق الرازي الذي لا يماثله ولا يقاربه في علم الطب ولا غيره، وهو أن الرازي ذهب عليه معرفة هذا الفصل فإنه قال الكهول في أكثر الأمر يمرضون أقل مما يمرض الشباب أي بالأمراض الحادة لا بالأمراض مطلقاً وإلا فهم أكثر أمراضاً من الشباب لضعف حرارتهم وكثرة رطوباتهم الغريبة، ولذلك قال أبقرط في أكثر الأمر. وإلا فالكهول قد يمرضون أمراضاً حادة لكن في الأقل. وهذا الجواب مأخوذ من كلام الرازي فإنه ليس لذلك علة سوى أن حدة المرات قد انكسرت في أبدانهم ومع ذلك فهي قليلة المقدار.

[T4] Galen, *Commentary on the Hippocratic Aphorisms*, trans. Hunayn b. Ishāq, ed. Taro Mimura:

وأبقرط لما كان جميع ما تقدّم من كلامه إنّما كان في النساء، جمع كلامه أيضاً هذا الذي وصفناه في أصناف مزاج الرحم، ولم يلحق من صفة أمر الرجال شيئاً إمّا اتكالاً منه على أنّه قد يسهل علينا أن ننقل ما ذكره من أصناف المزاج المفرط في الرحم إلى المنى وإمّا أن يكون آخر ذلك ليذكره بعد ونسيه. وقد جاء بعده إنسان فالحق بعد هذا الفصل فصلاً آخر وصف فيه أمر الذكورة أوله: والحال في الذكورة على شبيه بذلك، وقد يقول الأئمة من المفسرين لكتاب الفصول في ذلك الفصل أنّه ينقص نقصاناً بيّناً عن مقدار عقل أبقرط وعن قوّته في العبارة. وقد يمكنّا على قياس ما وصف أبقرط من أمر النساء أن ننقل ما وصفه فيهن إلى الرجال.

[T5] Abū Sahl al-Nīlī, *An Abridgment of the Commentary by Galen on the Aphorisms of Hippocrates*, ed. ARABCOMMAPH, [Oxford, Bodleian Library, ms. Huntington 359.1, ff. 19b, l.3–20a, l.7]:

التكاثر يعرض للرحم إذا غلبت البرودة حتّى تنضمّ أفواه العروق فلا يمكن أن يتّصل به المشيمة ويحتبس طمث المرأة في هذه الحالة أو لا يجري إلّا يسيراً لأنّ التسدّد يتسارع إلى هذه العروق. وكذلك كلّ سوء مزاج يغلب على الرحم بإفراط أو على المنى فإنّه يمنع العلوق. فإنّ مع الحرارة الغالبة على الرحم يحترق المنى كما يحترق البذر في الأرض الحارّة جدّاً والرطوبة المفرطة تغمر المنى وتخمدّه كبذر الحنطة إذا ألقى في مستنقع

ماء لم يذك. ولا يكون مع اليبوسة المفرطة علوق وكما لا يذكر الزرع في الأرض الصحيرية. فأما المني فإنه إن لم ينضج نضيجاً بليغاً بسبب برودة المزاج أو رطوبته لم ينجب، وكذلك إن جاوز النضج واحترق بسبب المزاج الحار جداً، وكذلك إذا ببس جداً بسبب ببس المزاج حتى عدم الامتداد فلم ببسط في الرحم لم يكن علوق. ومتى كان خروج مزاج الرحم عن الاعتدال يسيراً واتفق المني الذي وقع في الرحم إن كان خروجه عن الاعتدال يسيراً في ضدّ الجهة التي خرج إليها الرحم اعتدل فكان علوق. وإن كان الخروج عن الاعتدال كثيراً أحمد <و>لم يمكن أن يكون علوق. وقد ألحق بعض المدلسين هاهنا فضلاً وهو ظاهر الكذب لمن تأمله.

[T6] Ibn Abī Ṣādiq, *Commentary on the Hippocratic Aphorisms*, ed. ARABCOMMAPH [Dublin, Chester Beatty Library, ms. Ar. 3802, ff.167b, l.9–168a, l.14; Istanbul, Beyazid Devlet Kütüphanesi, ms. Veliyeddin Efendi 2508, f.68a.u–68b, l.13]:

قال أبقرط: أصحاب الوسواس السوداوي وأصحاب السرسام إذا حدث فيهم البواسير كان ذلك دليلاً محموداً فيهم.

التفسير: ذكر جالينوس في تفسيره هذا الفصل أن استفراغ دم البواسير ينفع المايخوليا والسرسام لأنّ الدم العكر يستفرغ به. وناقضه الرازي قائلاً بأنّ السرسام لا يكون من الدم الغليظ بل من الدم الرقيق الملتهب، وأكثر ذلك يكون من الصفراء، فكيف ينفع منه خروج دم البواسير؟ وقد قلنا في حلّنا شكوكه أنّ الدم الملتهب الذي هو مادّة السرسام يحرق سريعاً حتى قد يصير الوجه والرأس من المرسمين أسود، فينتفع صاحبه باستفراغ دم البواسير وأيضاً فإن الطبيعة إذا فتحت أفواه العروق في البواسير ودفع الدم الفضلي إليها، مالت الموادّ بأجمعها إلى تلك الناحية فينفع صاحب السرسام بذلك. ووجدت في نقل مجهول بدل أصحاب السرسام وجع الكلية، وجملّة الفصل هكذا: من كان به مرض من المرّة السوداء ووجع في كليته فتبع انفجار دم البواسير فهو خير. فإن كان الناسخ لأوّل سهى ينقل السرسام من الدستور بدل وجع الكلية فإن من البين أن أوجاع الكليتين على الأكثر يكون من كيموس غليظ وخروج الدم من البواسير يستفرغ أمثال هذه الكيموسات.

[T7] Ibn Abī Ṣādiq, *Commentary on the Hippocratic Aphorisms*, ed. ARABCOMMAPH [Dublin, Chester Beatty Library, ms. Ar. 3802, ff.26b.u–27b,

[9]:

هذا لا يصحّ في كلّ اختلاط فإنّ المجانين مختلطو العقل ومحسّو الأوجاع في أبدانهم. لكن هذا يعتبر في الاختلاط الذي يعرض معه للقوى النفسانية أن تشتغل بما هو أهمّ من الإحساس كالحال في ورم الدماغ والحجاب. فإنّ الحسّ، وإن لم يكن بالعقل، كان المحلّ الذي يبتدآن منه بتصرّف واحد. فمتى عرض للقوى النفسانية أن تشتغل بما هو أهمّ من الحسّ في اختلاط العقل ثمّ وجد للبدن حالة توجب الألم كالورم والجرح والرضّ والشدخ، بقي الإنسان عادماً للحسّ به. وإن كانت الآفة أعظم كما ذكر أبقراط في قوله من تزعزع دماغه، أصابه على المكان سكتة بقي عادماً للحسّ والحركة معاً لأنّ القوى النفسانية تسكن كلّها عن التصرّف وتمكين في مثل ذلك الوقت. وقد تعرض للإنسان وهو أعقل ما يكون حالة شبيهة بما ذكر أبقراط، فإنّ المتألّه يغفل عن وجعه في أوقات تعبده فلا يحسّه مع وفور عقله. ويرد على الإنسان من المهمّ ما يلهيه عن وجع شديد كان به لأنّ القوى الحسّاسة تتصرّف في ذلك الوقت عن الإحساس وتشتغل بما هو أهمّ منه. وقد تعرض للمجانين حالة أخرى شبيهة بما نحن فيه. وذلك أنّ الأرواح النفسانية إذا غلظت وتكدّرت فيهم بالأبخرة الغليظة السوداوية، امتنعت من النفوذ إلى الأعضاء على ما ينبغي. فلا يحسّون بأوجاع كثيرة تعرض لهم. فقد ذكر روفس الكبير أنّ واحداً من أصحاب المالخوليا لم يكن يحسّ بما ينخس من بدنه أو يرض وأنّه كوي في ساعده، فلم يصدق بالكي إلى أن احترق منه شيء صالح.

[T8] 'Abd al-Raḥīm al-Ṭabīb, *Commentary on [Ibrāhīm al-Kīshī's (d. ca. 1350 CE)] Missives for Arriving to Issues in the Aphorism [Rasā'il al-wuṣūl ilā masā'il al-fuṣūl]*, ed. Author [Leiden, Universitetsbibliotheek, ms. 58, ff.10b, l.16–11a, l.15; Istanbul, Süleymaniye Kütüphanesi, ms. Ayasofia 3670, ff.12a, l.15–12b, l.6]:

قال أبقراط: من لا يحسّ بوجعه في الأكثر فعقله مختلط.

أقول: الوجد هو الإحساس بالمنافي من حيث هو منافي. وإنّما قلنا من حيث هو منافي لأنّ الشيء المنافي قد يكون له أحوال ملائمة من جهة ما. فإذا أحسن من تلك الجهة التّدّ به كمن يلتدّ بشرب الماء البارد في المرض الذي يضرب فيه الماء وكمن يأكل الفواكه الضارّة وتسببه سوء مزاج مختلف أو تفرّق اتّصال غير طبيعي.العقل

والذهن كلّما قالت الأطباء أرادوا به القوّة المفكرة.

ومعنى الفصل أنّ من له شيء من شأنه أن يوجع في ظنّ الطبيب كجراحة أو سوء مزاج مختلف أو ورم حارّ ونحوها ولم يحسّ المريض بوجعه فعقله مختلط لأنّ الوجع إذا حدث في البدن ولم يعرفه العقل ولم يدركه الحسّ فإنّه يدلّ على أنّهما قد بطلا. وإنّما قال في الأكثر لأنّ المريض في بعض الأوقات يشغل بأمر مفرح أو يشغل عنه بأمر آخر أو كان له وجعان أحدهما أقوى فإنّه يحسّ بالأقوى دون الأضعف.

Appendix B

Galen, *Commentary on the Hippocratic Aphorisms*, trans. Hunayn b. Ishāq, ed. Taro Mimura. The Greek text is in Galen, *Opera Omnia*, ed. Karl Gottlieb Kühn, 20 vols. (Leipzig: Car. Cnoblochii, 1821-1833), XVII.b.863-865.

فإذا غلبت على الرحم برودة مفرطة حتّى يصيرها إلى حال تكاثف، كانت أفواه العروق التي تنتهي إلى الرحم ضيقة في غاية الضيق، وكانت المرأة عاقراً من قبل أنّه لا يمكن أن تتصل بأفواه تلك العروق مشيمة ولا لو كان ذلك يكون كان يمكن أن تغذي الطفل على ما ينبغي، لأنّ الطمث إمّا أن لا يجري بثة من المرأة إذا كانت هذه حالها أو يكون ندرأ قليلاً جدّاً ويكون مع ذلك رديئاً، لأنّه إمّا يخرج منها ما كان من الدم أرقّ وأقرب إلى المائية فقط. فإنّ من بلية هذه العروق أيضاً أنّه يسرع إليها السدد لضيقها ولأنّ الدم الذي يجتمع في بدن المرأة التي هذه حالها يكون أكثر ذلك إلى البلغم أقرب، لأنّ حال بدنها كلّ في أكثر الأمر يكون شبيهاً بحال رحمها. وقد يمكن أيضاً أن يبرد مني الذكر في الرحم إذا كانت هذه حاله إلّا أن يكون في طبعه على غاية من الحرارة. فأول ما ذكر أبقراط المزاج البارد فقال متى كان رحم المرأة بارداً متكاثفاً لم تحبل. ولم يقل ذلك وهو يريد أن يركّب البرد مع الكثافة كما لو أضاف إلى البرد بيبساً أو رطوبة، لأنّ كلّ واحدة من هاتين الكيفيتين ليس تلزم البرد دائماً ولذلك قد يركّب مع إحداها مرة ومع الأخرى أخرى. وأمّا الكثافة فلا بدّ من أن يكون مع برودة الرحم المفرطة التي بسببها يمتنع الحمل كما قال. فينبغي أن يفهم ما قال في هذا الفصل على هذا المثال: متى كان رحم المرأة بارداً لم تحبل، وذلك لتكاثف جوهره. وترك أن يصف السبب الذي من أجله صارت الكثافة تقاوم الحمل وتمنع منه، لأنّه علم أنّنا نقدر أن نفهمه بفهمنا لما وصف: ومتى كان الرحم أيضاً رطباً مفرطاً

الرطوبة لم تحبل صاحبتها، لأنّ تلك الرطوبة المفرطة تغمر المني وتخد ما فيه من القوة وتطفئها كما يصيب الحنطة والشعير وما أشبهها من البزور إذا زرعت في أرض يستنقع فيها الماء. ومتى كان الرحم أيضاً يابساً مفرط اليبس أو حاراً مفرقاً لم تحبل صاحبتها لنقصان الغذاء. فإنّه يعرض للمني في الرحم اليابس بمنزلة ما يعرض للبزور إذا زرعت في رمل أو في أرض غير معتملة أو صحيرية، ويعرض للمني في الرحم المفرط الحرارة بمنزلة ما يعرض للبزور إذا لقيت في أرض حارة جداً مثل حالها تكون بعد طلوع الشعري العبور. وعلى هذه الصفة ذكر أبقراط الكيفيات الأربع ووصف قوة كلّ واحدة منها على حدتها حتّى تعرف قوتها إذا تركبت بعضها مع بعض. ثمّ قال بعد هذا «ومتى كان مزاج الرحم معتدلاً بين الحالين كانت المرأة كثيرة الولد». وليس يعني «بالحالين» الكيفيات لأنّ الكيفيات أربع ، وإنّما يعني «بالحالين» حال التضادّتين الحرارة والبرد وحال التضادّتين الرطوبة واليبس. فقد بيّنا في كتاب المزاج أنّه قد يكون من الاعتدال ضرب بمخالطة البارد للحرّ على اعتدال ويكون منه على ضرب آخر بمخالطة الرطب لليابس على اعتدال، ويمكن أن يكون الرحم في إحدى هاتين الحالتين التين كلّ واحدة منهما بين ضدّين معتدلة المزاج، وفي الحال الأخرى مفرط المزاج. وقد يكفي في امتناع الحمل أحد هذين النوعين من المزاج المفرط. وليس يمكن أن تكون المرأة كثيرة الولد دون أن يجتمع في الرحم نوعا الاعتدالين كلاهما.

[A] If excessive cold overwhelms the womb [*al-raḥim*] to the extent that it becomes dense, [B] the openings of the passageways that lead to the womb become extremely narrow and the woman is sterile since it is not possible for the placenta [*al-mashīma*] to connect to the passageways [in the womb]. Nor would the child receive suitable nutriment if this were the case, either because the menstrual blood [*al-ṭamth*] does not flow from the woman at all if this were her condition. Or it flows in very rare instances, but when it does, it is bad because the blood that exists from her is fine and very watery. [C] Another unfortunate property of this of these passageways is that blockages form in them quickly because they are narrow and also because most of the

blood that collects in them tends to be phlegm, since the condition of her whole body resembles the condition of her womb. It is also possible that the male seed becomes cold in the womb if this is its [the womb's] condition unless [the male seed] is by nature extremely hot.

Thus, Hippocrates first mentions the cold temperament. He said “when the woman’s womb is cold and dense, she does not become pregnant [*lam taḥmal*].” He did not say this, however, intending thereby to combine cold with dense in the same way that dry or moist are added to cold, since it is not the case that these qualities always accompany cold. For sometimes one of them may combine with [cold], and at other times another [may combine with cold]. On the other hand, being dense [is a condition] that always accompanies a womb that is cold, which is the reason why he [Hippocrates] says what he does in this aphorism in this way “when the woman’s womb is cold, she does not become pregnant,” because, as he said, she cannot conceive [*yamtani‘u min al-ḥaml*]. Thus, it is necessary to understand that [the womb's] substance becomes dense. He omits speaking about the reason [*al-sabab*] why the fact that the womb is dense opposes conception and prevents it since he knew that we would be able to grasp it [the cause, sc. *al-sabab*] owing to what we understood of what he described earlier. [C1] “...and likewise when the womb is excessively moist, the woman does not become pregnant” because this excessive moisture inundates the seed [*al-manī*] and suppresses the strength [*al-quwwa*] in it and extinguishes it, [C2] similar to what happens to what happens to wheat and barley seeds

[*al-buzūr*] when they are cultivated in land that is inundated by water [*fī arḍ yastanqīʿu fīhā al-mā*]. [D1] Likewise, when the womb is excessively dry or dry so that it dissolves, the woman does not become pregnant because nutriment is in short supply. For what happens to the seed in a dry womb [D2] is similar to what happens to seeds that are cultivated in sand or land that has not been tilled, or that is arid. [E1] What happens to the seed in the excessively hot womb is [E2] similar to what happens to seeds that are cultivated in very hot land, such as the condition they have after Sirius passes its ascendant.

After this, he said “when the temperament of the womb is in a moderate state between the two conditions [*bayn al-ḥālatayn*], the woman produces many children.” By “the two conditions” he does not mean the pair of opposite conditions, hot and cold and wet and dry. For we have shown in the *Book on the Temperament* that there is a kind [*ḍarb*] of moderate [mixture] in which (a) cold mixes with hot in a moderate way and there is another kind of moderate [mixture] in which (b) moist mixes with dry in a moderate way. In either of these two conditions (a, b) it is possible for the womb to have a moderate temperament, but to have an excessive temperament in the other condition [e.g. the womb is moderate between hot and cold but excessively moist]. For conception to be impossible, it is sufficient for there to be one of the two kinds of excessive temperament, nor is it possible for the woman to have many children unless both kinds of moderate temperament (a, b) are in the womb.

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