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The Emergence of Verification ($ta hq \bar{q}q$) in Islamic Medicine: The Exegetical Legacy of Fahr al-Dīn ar-Rāzī's (d. 1210) Commentary on Avicenna's (d. 1037) *Canon of Medicine*

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Abstract

In this article, I discuss the legacy of Faḥr al-Dīn al-Rāzī's commentary on Avicenna's *Canon of Medicine* in Islamic medical commentary after 1100. I argue that Fahr al-Dīn's legacy lies in the exegetical pratices, the method of verification ($tahq\bar{t}q$) he introduced into Islamic medical scholarship through his commentary on the *Canon*. I first argue that the features that characterise the method of verification in works such as Faḥr al-Dīn's commentary on Avicenna's *Pointers and Reminders* are present in the commentary on the *Canon*, even if Faḥr al-Dīn's introduction to the latter work does not allude to these practices in the way that the introductions to his later works do. Based on an analysis of Galen's prescription about exegetical best-practice in his Hippocratic commentaries and Muḥammad ibn Zakarīyā al-Rāzī's (d. ca. 925) introduction to *Doubts on Galen*, I argue next that Faḥr al-Dīn's introduction of the verification method into the Islamic medical discourse was a watershed moment in the tradition. I use Ibn al-Quff's (d. 1286) commentary on the Hippocratic *Aphorisms* to show how these methods were imitated by later medical commentators. The final section illustrates the enormous exegetical interest that the *Canon of Medicine* attracted, suggesting other promising trajectories for research into Faḥr al-Dīn medical legacy.

Keywords: $tahq\bar{q}q$; Islamic medicine; Fahr al-Dīn al-Rāzī; Ibn al-Quff; Galen; Avicenna; Canon of Medicine

1 Introduction

Abū al-Faraǧ ibn Yaʻqūb ibn Isḥāq Ibn al-Quff (d. 1286) is not much known outside the field of medieval Islamic medicine. He was born in 1233 and was raised in a Melkite Christian family in Karak

^{1.} For his life and scholarly upbringing, see Ibn Abī Uṣaybi'a, 'Uyūn al-anbā' fī ṭabaqāt al-aṭibbā', ed. Augustus Müller (Königsberg: self-published, 1884 [reprinted Hants, UK: Gregg International, 1972]), 2:273–4. The standard biography is Sami Hamarneh, *The Physician, Therapist and Surgeon: Ibn al-Quff* (Cairo: Atlas Press, 1974). For his other works, see *GAL* I, 649 and *GALS*, I,

in Greater Syria. He came from a scholarly medical family, and it is obvious from his writing that he had a very rigorous education, not only in medicine, but in philosophy, Arabic philology and literature. He was the student of several important physicians, among them the great biobibliographer Ibn Abī Uṣaybiʻa (d. 1270) and the physician Ibn al-Nafīs (d. 1288). He eventually moved with his family to Damascus, where he continued to study medicine and worked as a physician for the Ayyūbid rulers. He wrote monographs on surgery and therapeutics, and massive commentaries on the Hippocratic *Aphorisms* and Avicenna's *Canon of Medicine*.

Ibn al-Quff's erudition is apparent in his commentary on the Hippocratic *Aphorisms*, where he cites a huge number of Greek and Arabic authors on a wide variety of topics. Aside from Galen and Hippocrates, there are numerous citations from the physics, especially the psychology, of Avicenna's *The Healing* (al-Šifā'). Take for example Ibn al-Quff's long commentary on the *Aphorisms*, Book Two, aphorism one, in which Hippocrates speaks about pains that occur during sleep.

Έν ῷ νοσήματι ὕπνος πόνον ποιεῖ, θανάσιμον ἢν δὲ ὕπνος ὡφελέῃ, οὐ θανάσιμον.

899 and Ullmann, *Die Medizin im Islam* (Leiden: Brill, 1970), 176–7.

- 2. Ullmann, Medizin, 176.
- 3. For instances in which Ibn al-Quff cites from the *Book on Demonstration* (*K. al-Burhān*) in the *Logic* of *The Healing*, see Kamran I. Karimullah, "Avicenna and Galen, Philosophy and Medicine: Contextualising Discussions of Medical Experience in Medieval Islamic Physicians and Philosophers," *Oriens* 45 (2017): 105–49.
- 4. Greek: Caroline Magdelaine, *Histoire du texte ed édition critique, traduite et commentée des* Aphorismes *d'Hippocrate* (PhD diss., Université de Paris-Sorbonne IV, 1994) 2:386. Arabic: Galen, *Tafsīr Ğālīnūs li-Fuṣūl Abuqrāṭ*, trans. Ḥunayn ibn Isḥāq, ed. Taro Mimura (The University of Manchester, 2012–2017), doi: 10.3927/51689327.

Hippocrates said: During a certain illness when sleep causes pain, that is one of the signs of death. If sleep is beneficial, this is not one of the signs of death.

Ibn al-Quff divides his commentary on this and all other aphorisms (there are around 350 of them in total) into a number of "investigations (mabāḥit)," each of which covers a variety of different topics that Ibn al-Quff believes are necessary for explaining Hippocrates often cryptic words.⁵ In most cases, the first investigation is given over to explaining the connection (sila) between the current aphorism and the one that precedes it. Before commenting on the Hippocratic text, Ibn al-Quff normally devotes several investigations to basic definitions, philosophical questions, and some medico-philosphical debates. He divides his commentary on Aphorims ii.1 into ten investigation, and before he launches into an explanation of this aphorism on the relation between pain and sleep, he discusses topics such as what sleep is (haqīqat al-nawm), how it comes about (kayfīyat ḥudūtihi), the reason why there is a need for it (al-ḥāǧa ilā al-nawm) and its relation to pain. Additionally, several other investigations are committed to clarifying the nature of pain (al-wağa') and its aetiology. Throughout, Ibn al-Quff draws mainly on Galen. In the long sections in the commentary treating the nature and causes of pain, he makes extensive use of Galen's idea that pain is caused by dissolution of continuity (tafarruq al-ittiṣāl, for example, a broken arm or a cut) or a noxious or unhealthy mixture of the primary qualities cold, hot, moist, and dry $(s\bar{u}'al-miz\bar{a}g', pain)$ in fevers and a painful swelling).6 In the fifth investigation, in which he explains the import of the phrase "...when sleep causes pain...," Ibn al-Quff first mentions what Galen had to say on this

^{5.} A preliminary description of the structure of Ibn al-Quff's commentary may be found in Franz Rosenthal, "Life is Short, the Art is Long': Arabic Commentaries on the First Hippocratic Aphorisms," *Bulletin of the History of Medicine* 40 (1966): 226–45, 241–4. Now see 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), 211–49, 235–40.

^{6.} For the Greek tradition, see Phillip H. De Lacy, "Galen's Concept of Continuity," *Greek, Roman, and Byzantine Studies* 20 (1979): 355–69.

phrase in his commentary on this aphorism. A number of other sources from among the "recent scholars (*al-muta'hhirīn*)," however, are mentioned also.⁷

اعلم أوّلًا أنّ هذه العبارة فيها مسامحة فإنّ النوم ليس هو المحدث للوجع والضرر بل المحدث لذلك إمّا تفرّق الاتّصال بذاته على ما يراه الفاضل جالينوس بحسب المشهور عنه. ومن المتأخّرين صاحب الكامل وأبو سهل المسيحي، وإمّا هو وسوء المزاج المختلف بذاته على ما ذهب إليه الإمامان فخر الدين بن الخطيب والقاضى أبو الوليد بن رشد.

Know, first, that there is some inaccuracy in this statement [by Hippocrates], for it is not sleep that causes pain and harm. Rather what causes that is either the dissolution of continuity in itself as Galen holds according to what is well-known of his doctrine, as well as the author of the *Complete* [*Book of Medicine*, 'Alī ibn 'Abbās al-Māǧūsī] and Abū Sahl al-Masīḥī; or it is caused by [both dissolution of continuity] and an irregular noxious mixture according to what the Šayḫ al-Raʾīs held; or it is caused by the noxious irregular mixture in itself according to what the *imāms* Faḥr al-Dīn ibn al-Ḥaṭīb and the Judge Abū al-Walīd Ibn Rušd held.

Galen, 'Alī ibn 'Abbās al-Maǧūsī, Abū Sahl al-Masīḥī, Avicenna—these are authors who are famed for their contributions to Arabic medicine. Even Averroes' modest contributions to the field are well-known because of his *Book of General Principles*.⁸ On the other hand, Faḥr al-Dīn al-Rāzī is hardly a name that one would expect to find in a list of major medical figures. How does Faḥr al-Dīn find his way into a list of august medical authorities in a late thirteenth-century medical commentary in late Ayyūbid-early Mamlūk Damascus?

This text raises two questions that require consideration. First, based on what we currently know about Faḥr al-Dīn's contributions to logic, theology, philosophy, physics and Qur'ān exegesis, as well as what is known about his scholarly career, patronage, writings and intellectual interests,

^{7.} Ibn al-Quff, *al-Uṣūl fī šarḥ al-Fuṣūl*, ed. акавсоммарн (The University of Manchester, 2012—2017), doi: 10.3927/52131995.

^{8.} Manfred Ullmann, *Medizin*, 166. See Emilie Savage-Smith and Peter E. Pormann, *Medieval Islamic Medicine* (Edinburgh: Edinburgh University Press, 2007), 166.

we would not guess that his medical thought would rank with the likes of Avicenna, Galen or al-Maǧūsī in the mind of a thirteenth-century physician such as Ibn al-Quff.⁹ Why does Faḥr al-Dīn warrant such respect in Ibn al-Quff's eyes?

Second, there is a sense in which Faḥr al-Dīn's actual medical doctrines are not important to Ibn al-Quff. His commentary is more than a quarter of a million words long, and Ibn al-Quff cites dozens of medical authorities hundreds of times. Yet, Faḥr al-Dīn's commentary on the *Canon* is cited only twice: once on the subject of swelling, and once on the topic of pain. And on neither occasion does Ibn al-Quff agree with Faḥr al-Dīn's medical viewpoint. In what ways was Faḥr al-Dīn important to Ibn al-Quff if not from the perspective of medical doctrines?

To my mind, the first question is somewhat easier, and will be addressed in what remains of this section. The second is more difficult. It will be considered in the remaining sections.

Gerhard Endress has collected bio-bibliographical, codicological and prosopological evidence that details how how Avicenna's philosophical and medical thought was received and studied in different parts of the medieval Islamic world.¹⁰ Endress presents compelling evidence for

^{9.} For example Faḥr al-Dīn al-Rāzī appears nowhere in Peter E. Pormann and Savage-Smith's *Medieval Islamic Medicine*. In Manfred Ullmann's *Die Medizin im Islam* he is mentioned as the author of a text on medical hygiene, of a short treatise on poisons (Ullmann, *Medizin*, 191, 339) and as the intellectual adversary of 'Abd al-Laṭīf al-Baġdādī (d. 1231) (ibid., 171). By contrast, Faḥr al-Dīn's "uneven" legacy in logic is well-known; see Khaled El-Rouayheb, *Relational Syllogisms and the History of Arabic Logic*, 900-1900 (Leiden: Brill, 2010); in theology, see Ayman Shihadeh, "From al-Ghazali to al-Razi: 6th/12th Century Developments in Muslim Philosophical Theology," *Arabic Sciences and Philosophy* 15 (2005): 141–79; in philosophy and physics, see Bilal Ibrahim, "Faḥr al-Dīn al-Rāzī, Ibn al-Hayṭam and Aristotelian Science: Essentialism versus Phenomenalism in Post-Classical Islamic Thought," *Oriens* 41 (2013): 379–431; for Qur'ān exegesis, see Tariq Jaffer, *Rāzī: Master of Quranic Interpretation and Theological Reasoning* (Oxford: Oxford University Press, 2014), especially Chapter Two. For his life and patronage, see Frank Griffel, "On Fakhr al-Dīn al-Rāzī's Life and the Patronage He Received," *Journal of Islamic Studies* (2007): 313–44.

^{10.} Endress, "Reading Avicenna in the Madrasa."

Faḥr al-Dīn's influence on the development of the rational sciences between the Nile and the Oxus and into Transoxiana. He sees the famed commentaries, refutations, and arbitrations on Avicenna's philosophical and medical works written in the thirteenth and fourteenth centuries and later as inspired by Faḥr al-Dīn al-Rāzī's critical but appreciative attitude toward Avicenna's philosophy. Endress shows how the "reading of Avicenna, his commentators, epitomators, and theological critics," which became an integral part of madrasa education between the Nile and the Oxus, was greatly influenced by the "school of Fahr al-Dīn." With regard to medicine, Fahr al-Dīn's commentary on the Canon inaugurated a tradition of philosophical interest in Book One (the Generalties, Kullīyāt) of the Canon of Medicine, a tradition which proved to be long-lived in the Central and Eastern regions of the medieval Islamic world. About the philosophers who took interest in and wrote commentaries on the Canon, Endress says that "we find them reading and commenting upon Ibn Sīnā's *al-Qānūn fī l-Ṭibb*, mostly, it is true, confining themselves to the part on theoretical medicine, al-Kullīyāt. The jurists and theologians who were facinated by his writings of philosophical theology, criticising while commenting, and struggling with the obstacles it presented for the faith, found in the *Qānūn* a welcome exposition of natural and medical sciences. A long sequence of 'philosophers', philosopher-scientists and philosopher-jurists, staring from Ibn Sīnā's own pupils, wrote commentaries, epitomes and quaestiones on his physiological and medical theory."¹²

The interest shown in the *Canon* among members of what Endress calls Faḥr al-Dīn's "school" was an important element of Faḥr al-Dīn's legacy to madrasa educational praxis. For it seems that some of Faḥr al-Dīn's pupils were as fond of challenging Faḥr al-Dīn's authority as much as Faḥr al-Dīn enjoyed challenging Avicenna's. ¹³

In the *Sharḥ al-Kullīyāt*, I found him give precedence to al-Masīḥī whilst Ibn al-Khaṭīb [that is, Faḥr al-Dīn al-Rāzī] favours the *Shaykh* Abū 'Alī ibn Sīnā. These are his own words: [Abū Sahl] al-Masīḥī is more knowledgeable about the art of medicine, and our teachers

^{11.} Ibid., 397.

^{12.} Ibid., 391–2.

^{13.} Ibid., 405–6.

used to give him precedence over many others, who they deemed more competent than $Ab\bar{u}$ 'Al \bar{i} in this art. He also said: The expression of al-Mas \bar{i} h \bar{i} is clearer and more lucid than the discourse of the Shaykh.

The above is an assessment of Avicenna's *Canon of Medicine* by one of Faḥr al-Dīn's most distinguished students, Quṭb al-Dīn Abū al-Ḥāriṭ Ibrāhīm ibn 'Alī ibn Muḥammad al-Sulamī al-Miṣrī al-Maġribī (d. 1221). It is clear that in addition to finding more to esteem in al-Masīḥī's medical thought than Avicenna's, Quṭb al-Dīn al-Miṣrī also faults Faḥr al-Dīn's inordinate devotion to all things Avicennian.

The report of Qutb al-Dīn al-Miṣrī's words is by Ibn Abī Uṣaybi'a (d. 1270), recorded in the his Sources of Lore on the Ranks of the Physicians ('Uyūn al-anbā' fī ṭabaqāt al-aṭibbā'), one of the best historical sources on the development of the commentary tradition on the Avicenna's Canon. Ibn Abī Uṣaybi'a was a physician-historian who was keenly aware of the influence Faḥr al-Dīn exerted on medical discourse in the late thirteenth century. As it happens, Ibn Abī Uṣaybi'a was also one of Ibn al-Quff's medical teachers, and, along with Naǧm al-Dīn ibn al-Minfāḥ (d. ca. 1252), Muwaffaq al-Dīn Ya'qūb al-Sāmirī (d. 1282) and Ibn al-Nafīs, all of whom wrote commentaries on the Canon, exerted a great influence on Ibn al-Quff after he moved with his father to Damascus. Ibn Abī Uṣaybi'a records that Ya'qūb al-Sāmirī wrote a commentary on the Generalities of the Canon, "in which he included what Ibn al-Ḥaṭīb [Faḥr al-Dīn] al-Rāzī had said in his commentary on the Generalities, as well as what al-Quṭb al-Miṣrī had said in his commentary on it, and also what others had said, laying out in detail the topics requiring investigation in their statements (waḥarrara mā fī aqwālihim mina l-mabāḥit)." Ibn Abī Uṣaybi'a records too that al-Sāmirī wrote a book that "solves Naǧm al-Dīn ibn al-Minfāḥ's doubts on the Generalities of the Canon." He writes

^{14.} Ullmann, Medizin, 176.

^{15.} Ibn Abī Uṣaybi'a, 'Uyūn al-anbā', 2.273.

^{16.} Ibid. This recalls the earlier, lost work by Ibn Abī Ṣādiq entitled *Resolving Rāzī's Doubts on Galen*'s *Books* (Ḥall šukūk al-Rāzī ʻalā kutub Čālīnūs), in which he responds to Muḥammad ibn Zakarīyā's doubts on Galen's medical and philosophical works. See Ibn Abī Uṣaybi'a, 'Uyūn al-

that Ibn al-Minfāḥ wrote a commentary entitled *Book on the Omissions in the Book of the Generalites (Kitāb al-muhmalāt fī Kitāb al-Kullīyāt)*, though it is unclear whether this is identical to the book of Ibn al-Minfāḥ's "doubts" on the *Generalities* mentioned in al-Sāmirī's entry later in *'Uyūn al-anbā'*. What is more, according to Ibn Abī Uṣaybi'a, in his early years in Karak, the city of his birth, Ibn al-Quff studied philosophy with Faḥr al-Dīn's notable student Šams al-Dīn 'Abd al-Ḥamīd ibn 'Īsā al-Ḥusrawšāhī (d. 1254). Ibn Abī Uṣaybi'a knew al-Ḥusrawšāhī personally, and relates the following story: 19

One day, I [Ibn Abī Uṣaybiʻa] saw him [al-Ḥusrawšāhī] when a Persian scholar brought him a book written in a subtle hand, in Baghdādī size and Muʻtazilī cut. When he opened it, he proceeded to kiss it and put it upon his head. I asked him about this, and he said: This is the handwriting of our *shaykh*, the Imām Fakhr al-Dīn, son of the *khaṭīb*, may God have mercy on him. My esteem for him grew because of his reverence for his *shaykh*.

This, then, represents the intellectual milieu in which Ibn al-Quff studied medicine and philosophy. Between the middle and the end of the thirteenth century, far from being a marginal medical authority, Faḥr al-Dīn had become important to medieval medical discourse between the Nile and Oxus through his outstanding students, who evidently revered him, and imitated his analytical method in their medical writings. It is not surprising, then, that Faḥr al-Dīn should be mentioned in the same breath as, say, Abū Sahl al-Masīḥī, 'Alī ibn 'Abbās al-Maǧūsī or even Avicenna and Galen.

 $anb\bar{a}$ ', 2.23, l.2. Ayman Shihadeh classifies books of this kind as sub-genre of "counter-aporetic texts" that "emerged in parallel to aporetic texts"; see Ayman Shihadeh, *Doubts on Avicenna* (Leiden: Brill, 2016), 47.

^{17.} Ibn Abī Uṣaybi'a, 'Uyūn al-anbā', 2.266.

^{18.} Ibid., 2.273, l. 26; The entry on al-Ḥusrawšāhī is in Ibid., 2.266.

^{19.} Arabic: Ibn Abī Uṣaybiʻa, *'Uyūn al-anbā'*, 2.173, ll.8–12. The translation is Endress': Endress, "Reading Avicenna in the Madrasa," 406–7.

So much for the first question. Let us turn to the second. The above considerations show that Faḥr al-Dīn's thought rapidly gained traction in Muslim and non-Muslims scholarly circles. ²⁰ Yet, Ibn al-Quff cites Faḥr al-Dīn's commentary on the *Canon* twice, and never with approval. What

²⁰ Faḥr al-Dīn's philosophical works influenced theological debates among Coptic and Syriac Orthodox Christian in the thirteenth century. Barbara Roggema has pointed to the late thirteenthcentury Jewish philosopher Ibn Kammūna (d. 1284) and to the Christian Ibn al-'Ibrī's (a.k.a. Barhebraeus, d. 1286) critiques of Faḥr al-Dīn's arguments for the veracity of Muḥammad's claim to prophethood. Ibn al-Quff's own writings clearly demonstrate how influential Fahr ald-Dīn had become in medical circles among thirteenth century Easter Christian scholarly communities. And manuscript evidence also points to the concern that medieval Jewish scholars and scribes had for Rāzī's medical works. For example, in Paris in the Bibliothèque nationale de France, there is a medieval manuscript (dating to around the 15th century) of Fahr al-Dīn's commentary on the Canon of Medicine written in Mashait Judeo-Arabic. The manuscript serves as a faithful record of Fahr al-Dīn's commentary on the Canon, though the scribe has seemingly taken liberties with portions of the text that too strongly recall Islamic religious symbols and pious formulas and prayers (see Tzvi Langermann, "Criticism of Authority in the Writings of Moses Maimonides and Fakhr al-Dīn al-Rāzī," Early Science and Medicine 7 (2002): 255-74). So the solution to the second riddle is that by the end of the thirteenth century, it appears that Fahr al-Dīn's medical and philosophical thought was not, in fact, restricted to Muslim learning institutions, but was embraced with enthusiasm in Christian and Jewish scholarly circles, even if his actual theological and philosophical doctrines were not accepted. See Hidemi Takahashi, "Reception of Islamic Theology among Syriac Christians in the Thirteenth Century: The Use of Fakhr al-Dīn' al-Rāzī in Barhebraeus' Candelabrum of the Sanctuary," Intellectual History of the Islamicate World 2 (2014): 170-92; Gregor Schwarb, "The 13th Century Copto-Arabic Reception of Fakhr al-Dīn al-Rāzī: Al-Rashīd Abū l-Khayr Ibn al-Ṭabīb's Risālat al-Bayān al-Azhar fī l-radd 'alā man yaqūlu bi-l-qaḍā' wal-qadar," Intellectual History of the Islamicate World 2 (2014): 143-69. Barbara Roggema, "Ibn Kammūna's and Ibn al-ʿIbrī's Responses to Fakhr al-Dīn al-Rāzī's Proofs of Muḥammad's Prophethood," Intellectual History of the Islamicate World 2 (2014): 193–213.

is more, no other post-classical commentator on the Hippocratic *Aphorisms* cites Faḥr al-Dīn's medical or philosophical views. In short, how do we reconcile the mounting historical evidence that Faḥr al-Dīn was highly influential in Muslim and non-Muslim medical, philosophical and theological circles with the fact that post-classical medical authors turned a deaf ear to his medical doctrines themselves?

The answer lies, in my view, in looking at not what medical authors say but how they say it. In this article, I shall argue that Faḥr al-Dīn's legacy on post-classical Islamic medicine lies in the fact that he was the first to introduce the exegetical methods of verification ($taḥq\bar{t}q$) into medieval Islamic medical discourse. I argue, too, that the vehicle for bringing the methods of verification to medical authors was Faḥr al-Dīn's influential commentary on Avicenna's *Canon of Medicine*.

Recent studies in the history of Arabo-Islamic medicine and philosophy have highlighted the importance of commentary as a venue for authors to explore and debate topics that were relevant to philosophy and medicine. Robert Wisnovsky has pointed out that in the post-classical period, philosophical commentary served a "wide variety of functions," only one of which was explaining what the author said and suggesting reasons that compelled him to say it. Central to the commentary activity that thrived in the post-classical period of Islamic intellectual history stands "verification (taḥq̄q̄)." For commentators, verification was both an exegetical method as well as normative ideal. In other words, "verification" picks out a set of exegetical activities that commentators after 1100 practiced when commentary on philosophical texts. Yet, as time progressed verification served as a rubric prescribing how commentators ought to approach exegetical activity.

What is more, verification was not a method that was restricted to philosophical exegesis. Nahyan Fancy has shown how philosophical and theological considerations played an important role in Ibn al-Nafis' commentary on Avicenna's *Canon of Medicine*, where, for example, he made novel contributions to the anatomy of human respiration.²² Fancy has also drawn attention to how

^{21. &}quot;Medical Commentaries: A Preliminary Examination of Ibn al-Nafīs's Shurūḥ, the *Mūjaz* and Commentaries on the *Mūjaz*," *Oriens* 41 (2013): 525–545.

^{22.} Nahyan Fancy, Science and Religion in Mamluk Egypt: Ibn al-Nafīs, Pulmonary Transit and

these scientific innovations were received by commentators on the *Canon* and epitomes of the *Canon* such as the *Epitome* (al-Mūǧiz or al-Mūǧaz). Yet, Fancy has suggested that Ibn al-Nafīs was an active participant in the post-classical tradition of verification, ²³ an exegetical method as well as an attitude toward textual authority that is not normally associated with *medical* commentary but with the traditions of *philosophical* exegesis that originated in the lands East of Baghdad and in Transoxiana after 1100, and which coalesced from critical engagement with Avicenna's philosophical texts. ²⁴ Basing their observations on the commentary tradition growing out of the critical reception of Avicenna's *Pointer and Reminders*, Robert Wisnovsky and Ayman Shihadeh have concluded that Faḥr al-Dīn al-Rāzī played a prominent role in promulgating the verification method in philosophical circles, documenting at length the complex, centuries-long factors that give rise to the exegetical tradition of verification after 1100. Wisnovsky has identified a "spectrum" of methods that characterise verification, all of which were common commentary practice prior to Faḥr al-Dīn. Likewise, Shihadeh has tirelessly recorded the numerous intellectual debts that Faḥr al-Dīn owed his predecessors such as Avicenna (d. 1037), Muḥammad ibn Zakarīyā al-Rāzī (d. ca. 925), Ibn al-Hayṭam (d. 1039), Abū Ḥāmid al-Ġazālī (d. 1111) and Abū al-Barakāt al-Baġdādī (d. before

Bodily Resurrection (New York: Routledge, 2013).

^{23.} Nahyan Fancy, "Womb Heat versus Sperm Heat: Hippocrates against Galen and Ibn Sīnā in Ibn al-Nafīs's Commentaries," *Oriens* 45 (2017): 150–75.

^{24.} On *taḥqīq* in the early period, see Robert Wisnovsky, "Avicennism and Exegetical Practice in the Early Commentaries on the *Ishārāt*," *Oriens* 41 (2013): 349–78. Ayman Shihadeh, "Al-Rāzī's (d. 1210) Commentary on Avicenna's Pointers: The Confluence of Exegesis and Aporetics," in *The Oxford Handbook of Islamic Philosophy*, eds. Khaled El-Rouayheb and Sabine Schmidtke (New York: Oxford University Press, 2016), 296–325. For the early modern period, Khaled El-Rouayheb, "Opening the Gate of Verification: The Forgotten Arab-Islamic Florescence of the 17th Century," *International Journal of Middle East Studies* 38.2 (2006): 263-81. El-Rouayheb, Islamic Intellectual History in the Seventeenth Century: Scholarly Currents in the Ottoman Empire and the Maghreb (Cambridge: Cambridge University Press, 2015), especially Chapter One. See Chapter Two of Shihadeh, *Doubts on Avicenna*, 44–9.

1164–1165), as well as his less famous contemporaries, such as Šaraf al-Dīn al-Maʿūdī (d. before 1208) and Ibn Ġaylān al-Balḫī (d. ca. 1194).²⁵ Nevertheless, Wisnovsky and Shihadeh single out Faḥr al-Dīn as the most important post-Avicennian scholar to practice verification in his commentary on the *Pointers and Reminders* and to embody it as an ideal to be mimicked by later exegetes.

Albert Iskander and Gerhard Endress have shown that Faḥr al-Dīn's commentary on Avicenna's *Canon of Medicine* was crucial for determining how Avicenna's medical thought was received in medical and philosophical circles in the thirteenth and fourteenth centuries.²⁶ In his autobiographical remarks in his introduction to his commentary on the *Canon of Medicine*,²⁷ Quṭb al-Dīn al-Širāzī (d. 1311) observes that early commentaries on the *Canon* by those "eminent scholars who emulated his [Faḥr al-Dīn's] writings (al-šurūḥu l-latī li-l-muqtafīna āṭāruhu mina l-fuḍalā') such as Quṭb al-Dīn al-Miṣrī, Afḍal al-Dīn al-Ḥūnaǧī, Rafī' al-Dīn al-Ğīlī (d. 641/1244)²⁸ and Naǧm al-Dīn al-Naḥǧawānī (d. 1252) did not add anything of substance to what the Imam [Faḥr al-Dīn al-Rāzī] had written. They wrote what he had written, and were silent about what he omitted, save for trifling, paltry things of no value (allāhumma illā ma huwa nazrun yasīrun laysa lahu qadrun).²⁹

^{25.} Shihadeh, *Doubts on Avicenna*, Chapter One. Shihadeh, "From al-Ghazālī to al-Rāzī: 6th/12th Century Developments in Muslim Philosophical Theology," *Arabic Sciences and Philosophy* 15 (2005): 141–79.

^{26.} See the introduction to Albert Z. Iskander, *A Catalogue of the Arabic Manuscripts on Medicine and Science in the Wellcome Historical Medical Library* (London: The Wellcome Historical Medical Library, 1967), 33–50. Endress, "Reading Avicenna in the Madrasa."

^{27.} Paraphrased in John Walbridge, *The Science of Mystic Lights: Quṭ al-Dīn Shīrāzī and the Illuminationist Tradition in Islamic Philosophy* (Cambridge, Mass.: Harvard University Press, 2002), 7–18. I am grateful to Nahyan Fancy for bringing this passage to my attention and correcting errors I had made in its interpretation.

^{28.} Ibn Abī Uṣaybi'a, 'Uyān al-anbā', 2.171-2.

^{29.} Quṭb al-Dīn al-Šīrāzī, *Durrat al-tāǧ li-ġurrat al-Dubāǵ*, ed. Muḥammad Miškāt (Tehran: Maǧlis, 1938–1942), *dāl*, ll.16–19 (texts begins on *hā*, n.2).

Endress, on the other hand, focuses primarily on the reception of the *Canon* prior to Faḥr ad-Dīn's commentary by the likes of Ibn al-Tilmīḍ (d. 1165), who "introduced the Ibn Sīnā's *Qānūn* into the study of medicine," Ibn Ğumayʿ (d. 1198) and Ibn Ġaylān al-Balḥī, all of whom composed critical glosses on selected passages, confined themselves mainly to philological problems relating to the different recensions of the *Canon of Medicine* originating from Ibn al-Tilmīḍ's medical circle or lexicographical problems having to do with names of drugs and parts of the body. None of these authors are recorded to have written full, lemmatic commentaries on any single book.³⁰ Endress says: "While the physicians," such as Ibn al-Tilmīḍ and Ibn Ğumayʿ, "took to reading Ibn Sīnā's *Qānūn*, the philosophers, and the philosopher-physicians starting with Fakhr al-Dīn al-Rāzī, in their turn started reading theoretical medicine in the *kullīyāt* of Avicenna's ever more popular handbook."

The evidence adduced by Endress and Iskander suggests that the *Canon*, like Avicenna's philosophical works, went through a complex process of critical reception. Both authors, too, conclude that Faḥr al-Dīn played an important role in shaping the medico-philosophical commentary tradition on the *Canon*. Yet, despite the fact that Endress and Iskander have highlighted the central role Faḥr al-Dīn played in the *Canon* commentary tradition, there has been no effort to qualify the types of exegetical methods Faḥr al-Dīn employed in his commentary or how these methods and his text influenced physicians after the twelfth century. Both shortcomings will be righted in the following pages.

In Section Two, I turn to the question of whether the set of exegetical techniques and norms located by Wisnovsky and Shihadeh in Fahr al-Dīn's *Pointers* commentary, all of which fall

^{30.} Endress, "Reading Avicenna in the Madrasa," 384–5. See Daniel Nicolae's valuable dissertation: Daniel S. Nicolae, "A Medieval Court Physician at Work: Ibn Jumay's Commentary on the *Canon of Medicine*" (PhD diss., Oxford University, 2012); Ayman Shihadeh, "A Post-Ghazālian Critic of Avicenna: Ibn Ghaylān al-Balkhī on the Materia Medica of the *Canon of Medicine*," *Journal of Islamic Studies* 24 (2013): 135–74.

^{31.} Endress, "Reading Avicenna in the Madrasa," 383.

under the term *verification*, and which Faḥr al-Dīn played such an important role in promoting across the medieval Islamic world in Avicennian *philosophical discourse* after the twelfth century, are present in Faḥr al-Dīn's commentary on the *Canon*. The evidence I consider falls into two categories. I first analyse the language of Faḥr al-Dīn's introduction to the commentary on the *Canon*. In later works such as the commentary on *Pointers*, Shihadeh has argued that Faḥr al-Dīn deliberately uses terms such as "gleaning (*taḥṣīl*)," "verification (*taḥqīq*)" and "painstaking investigation (*istiqṣā*')" to refer to different aspects of his method of analysis which he uses in composing commentaries and original philosophical works.³² While several of these terms appear in the introduction to the *Canon* commentary, they retain their lexical meanings; they are not used as technical terms alluding to exegetical strategies to be employed in the commentary. When we compare, however, what Shihadeh has called the "macrostructure" of the *Pointers* with the macrostructure of Faḥr al-Dīn's *Canon* commentary, as well as the exegetical techniques Faḥr al-Dīn employs *in practice* in both works, it becomes clear that the methods falling under the broad rubric of verification that underlie Faḥr al-Dīn's mode of analysis and composition in the *Pointers* commentary are evidently at work in the commentary on the *Canon* .

In Section Three, I analyse the precursors to Faḥr al-Dīn's methods of verification at work in the *Canon* commentary, seeking to gauge to what extent they existed in Islamic *medical* discourse prior to Faḥr al-Dīn. This question boils down to how prescriptions about how to do commentary in the Islamic medical tradition existed before 1100. In the medical tradition, the main source was Galen, whose influence on medieval Islamic medical and philosophical discourse was immense. There are several passages in Galen's Hippocratic commentaries that we know were translated into Arabic in which Galen broaches the topic of "metacommentary," and in which he makes explicit prescriptions (and proscriptions) about how to do medical commentary. After analysing the relevant passages, I conclude that while many if not all the individual elements of the verification method were used by commentators prior to Faḥr al-Dīn, the unification of these elements, these diverse exegetical practices into a unified method for medical writing was wholly

^{32.} Shihadeh, "Al-Rāzī's Commentary," 299–300.

new in the Islamic medical commentary tradition. On the other hand, the analysis of these texts from Galen makes me doubt that the vaguely exegetical techniques used by Abū Bakr Muḥammad ibn Zakarīyā al-Rāzī in *Doubts on Galen (Kitāb al-Šukūk ʻalā Čālīnūs)* were ever regarded by Islamic physicians as a model for carrying out exegesis in medical texts. Even the exegetical strategies used by the great eleventh-century commentator Ibn Abī Ṣādiq (d. after 1067) in his commentary on the Hippocratic *Aphorisms* are strongly beholden to Galen's prescriptions about what counts as good exegesis. I conclude that Faḥr al-Dīn's venture into the Islamic medical discourse in the form of his commentary on the *Canon* was unprecedented.

Finally, in Section Four I claim that this relatively brief venture would prove to be pivotal, shaping Islamic medical discourse and and textual traditions until at least the seventeenth century. I offer a detailed analysis of the two instances in which Ibn al-Quff cites Faḥr al-Dīn's commentary on the *Canon*. I highlight the many features shared by the exegetical techniques and ways of structuring the commentary that are present both in Ibn al-Quff's commentary on the *Aphorisms* commentary and in Faḥr al-Dīn's commentary on the *Canon*. I argue that Ibn al-Quff's commentary on the *Aphorisms* represents a more mature, refined and elegant embodiment of verification techniques in post-classical Islamic medical discourse. This observation suggests that by the end of the thirteenth century verification in the medical discourse was not only a collection of techniques, but a model to be imitated.

2.1 Comparison of Faḥr al-Dīn's Introduction to the Commentaries on the *Canon* and *Pointers*

According to Altaş, Faḥr al-Dīn's commentary on the *Canon of Medicine* is possibly the first lemmatic commentary he composed on a work by Avicenna.³³ Altaş dates the commentary 573–574/1177–1178, which is well before the date assigned to it by Emilie Savage-Smith and others, who follow Ibn al-Qiftī's account of Faḥr al-Dīn's career in dating it to 580/1184.³⁴ Altaş says the

^{33.} Altaş, Eşref, "Fahraddin er-Râzî'nin Eserlerinin Kronolojisi," in *Islâm Düşüncesinin Dönüşüm Çağında*, eds. Ömer Türker and Osman Demir (Istanbul, ISAM, 2011), 91–164, 103.

^{34.} Emilie Savage-Smith, *A New Catalogue of Arabic Manuscripts in the Bodleian Library, University of Oxford Volume I: Medicine* (Oxford: Oxford University Press, 2011), 245 [Entry No. 56].

following:

Written between 573–574/1177–1178. Written in Saraḥs before the *Mabāḥiṭ* and *Mulaḥḥaṣ*. This work, which in the text itself is called Šarḥ muškilāt al-Kitāb al-Qānūn (sic), but to which Rāzī refers in different ways, is a commentary on the first two fanns of the theoretical part of Ibn Sīnā's medical work the *Canon*. Whilst Rāzī was a guest of the physician Tiqat al-Dīn 'Abd al-Raḥmān ibn 'Abd al-Karīm al-Saraḥsī, this work was a result of research and discussion between them, and was dedicated to him on account of [al-Saraḥsī's] hospitality. Ibn al-Qifṭī says that Rāzī was his guest in Saraḥs during his journey to Bukhara in about 580/1184, and wrote it for him. However, Rāzī's debates in Bukhara mention that Nūr al-Dīn al-Ṣābūnī died 16 Safar 580/30 May 1184 and, since *Mabāḥiṭ* and *Mulaḥḥaṣ* were written around 575/1179 prior to his sojourn to Transoxiana, the most suitable date for the work is between 573–574/1177–1178. There are references to the commentary on the *Canon* as one of "our great books," "our great book" and also *al-Firāsa* is mentioned.

Thus, in support of his chronology, Altaş cites the fact that the commentary on the *Canon* is cited in the *Investigations in the East* (*al-Mabāḥiṭ al-Mašriqīya*), which Altaş says was written around 574–575/1178–1179,³⁵ and in the *Précis of Logic and Philosophy* (*al-Mulaḥḥaṣ fī l-manṭiq wa-l-ḥikma*), which Altaş says was written no later than 580/1184.³⁶ Evidence for the *Canon* commentary being composed before 574–5785/1178–1179 lies in a citation of the commentary in a discussion of the meaning of the balanced (*al-i'tidāl*) and imbalanced mixture of the primary qualities hot, cold, wet and dry.³⁷

Ibn al-Qifṭī, *Tārīḥ al-ḥukamā*', eds. Augustus Müller and Julius Lippert (Leipzig: Dieterich'sche Verlagsbuchhandlung, 1903), 291.

^{35.} Altaş, "Kronolojisi," 109.

^{36.} Ibid., 112.

^{37.} Faḥr al-Dīn al-Rāzī, *al-Mabāḥiṭ al-mašriqīya fī 'ilm al-ilāhīyāt wa-l-ṭibī'īyāt* (Hyderabad: Maṭba'at majlis dā'irat al-ma'ārif al-Niṭamīyah, 1343 [1924 or 1925]), 2:159, l.20–160, l.11. I am

وإذا عرفت معنى المعتدل عرفت أيضا معنى غير المعتدل. فنقول: "الخارج عن الاعتدال إما أن يكون خارجا في كيفية واحدة فقط أو في الكيفيتين معا. أما القسم الأول وهو أن يكون معتدلا في أحد المتضادين وخارجا عن الاعتدال في أحد المتضادين الأخريين فلنفرض الاعتدال حاصلا في الرطوبة واليبوسة فتكون الغالبة حينئذ إما للحرارة أو للبرودة. فهذان قسمان. ولنفرض الاعتدال حاصلا في الحرارة والبرودة فتكون الغلبة حينئذ للرطوبة أو اليبوسة. فهذان قسمان آخران. وإما أن يكون خروجه عن الاعتدال في الكيفيتين، فلنفرض كون الحار غالبا فإما أن يكون الغالب معه الرطوبة أو اليبوسة، وهذان قسمان. ولنفرض كون البارد غالبا، فإما أن يكون الغالب معه الرطوبة أو اليبوسة، أقسام للخارج عن الاعتدال. أما المعتدل فهو قسم واحد. فالأمزجة معه الرطب أو اليابس، هذان قسمان آخران. فهذه الأقسام الثمانية أقسام للخارج عن الاعتدال. أما المعتدل فهو قسم واحد. فالأمزجة إذا تسعة. فهذا ما يليق بالحكمة من البحث عن أمر المزاج. وأما ما وراء ذلك فقد ذكرناه في شرح القانون."

Having recognised the meaning of the balanced mixture, you know, then, the meaning of the imbalanced mixture. We say: "What deviates from the balanced mixture deviates either in one quality or in two qualities together. The first kind is balanced in relation to one [pair of qualities] that are opposed to each other, but deviates from the balance in relation to the other [pair of qualities] that are opposed to each other. Let us suppose, then, the dry and the moist are balanced, and thus, what predominates shall be either the hot or the cold, and these, then, are two kinds [of imbalanced mixture]. Now suppose that there is a balance between hot and cold, what predominates shall be either the dry or the moist. These are two further kinds of [imbalanced mixture]. As for the deviation from the balance in two qualities, suppose that the hot predominates, in which case the quality that will predominate with it shall be either the moist or the dry. That is two further kinds [of imbalance]. Let us suppose that the cold predominates, in which case the quality that will predominate with it shall be either the moist or the dry. That is two more kinds [of imbalance]. These eight kinds are the kinds of deviation from the balance. As for what is balanced, it is a single kind. The mixtures, then, are nine." This investigation into the the nature of the mixture is the amount that is appropriate to mention in relation to philosophy. What exceeds this I have discussed in the commentary on the *Canon*.

Assuming that these insertions were not made in later drafts of the commentary—an admittedly tendentious assumption — this allows us to date the *Canon* commentary to quite early in Fahr al-

grateful to Bilal Ibrahim for supplying me with a copy of this text.

Dīn's career.³⁸ Altaş's early dating of the *Canon*, however, sits uneasily with the idea suggested by Ibn al-Qiftī—an idea which Altaş appears to second—that the commentary on the *Canon* was written during the early part of Faḥr al-Dīn's purported sojourn into Transoxiana. Frank Griffel has expressed strong reservations about the extent and accuracy of Ibn al-Qiftī knowledge of Faḥr al-Dīn's early career.³⁹ Indeed, if it were written as early as Altaş says, I find somewhat suspicious Faḥr al-Dīn's references to 'Abd al-Karīm al-Saraḥsī as the patron for the *Canon* commentary who helped him during and after his stay in Saraḥs. For it was purportedly his stay at Saraḥs that marked the opening stages of Faḥr al-Dīn's sojourn to Bukhara. Faḥr al-Dīn must have been in Transoxiana some time prior to Nūr al-Dīn al-Ṣābūnī's death on 16 Safar 580/30 May 1184, since this event is mentioned in the *Munāṣarāt*. Yet, the story about Saraḥsī does not seem to me to provide reliable evidence for dating the commentary on the *Canon* or for the conditions under which it was composed.

We can conclude, then, that the commentary on the *Canon* was probably written before 574–575/1178–1179, much earlier in Faḥr al-Dīn's career that previously thought.⁴⁰ In fact, several features of this commentary bear out this conclusion. Faḥr al-Dīn's introduction to the commentary on the *Canon* breaks from late antique models for writing prolegomena prior to beginning to read or write a commentary.⁴¹ Nevertheless, in the the brief remarks in the introduction to the

^{38.} Ibid., 103. Though rejecting the dating of the *Canon* commentary to 580/1184, Altaş accepts that Faḥr al-Dīn wrote the commentary for 'Abd al-Karīm al-Saraḥsī whilst in Saraḥs on his way to Transoxiana.

^{39.} Frank Griffel convincingly shows that most of al-Qifṭī's account of Faḥr al-Dīn's earlier career is flawed, and that, in general, we have very little reliable information about this period in Faḥr al-Dīn's life. See Frank Griffel, "On Fakhr al-Dīn al-Rāzī's Life."

^{40.} See Savage-Smith, "A New Catalogue," 245. Ayman Shihadeh, *The Teleological Ethics of Fakhr al-Dīn al-Rāzī* (Leiden: Brill, 2006), 8.

^{41.} Kamran I. Karimullah, "Assessing Avicenna's (d. 428/1037) Medical Influence in Prolegomena to Post-Classical (CE 1100-1900) Medical Commentaries: Ibn Abī Ṣādiq (d. after 460/1067), 'Abd al-Laṭīf al-Baġdādī (d. 629/1231), Faḥr al-Dīn al-Rāzī (d. 606/1209)," *Mélanges de*

Canon commentary that touch on metacommentary, it is evident that Fahr al-Dīn struggles to articulate what exactly the distinctive features of his exegetical practice are. Based on an analysis of the introduction to the commentary on *Pointers and Reminders*, Shihadeh presents a Faḥr al-Dīn who was at a stage in his career in which he was able to clearly articulate the key elements of his exegetical and philosophical method that he as a matter of course brought to bear on philolosophical debates based on Avicenna's writings. On the other hand, in the introduction to the *Canon* we see a Fahr al-Dīn who struggles to identify what aspects of his commentary method he believes are novel. Shihadeh observes that Faḥr al-Dīn deliberately employs terms such as "gleaning (taḥṣīl)," "critical investigation," "verification ($tahq\bar{\iota}q$)," "blind imitation ($taql\bar{\iota}d$)," "painstaking investigation (istiqṣā')," "in depth probing (ta'ammuq)," "certainty (yaqīn)," "doubt (šakk)," "procedure (tartīb)" and "well-organised compilation (talfiq)" not as merely rhetorical flourishes by which he seeks to commend himself and his work to his patron, but as a constellation of terms that pick out the elements that Fahr al-Dīn recognised as forming the backbone of his method of exegesis and his philosophical method more generally. Shihadeh shows that by around 578–580 when Faḥr al-Dīn was composing the commentary on *Pointers* as well as the early philosophical works such as *Précis* and Investigations in the East, Fahr al-Dīn was able to assign these terms a precise meaning in relation to his exegetical method. For example, Faḥr al-Dīn describes the process of "gleaning (taḥṣīl)" in detail:42

of gleaning $(tah,\bar{s}il)$ what we have found in the books of our predecessors...in such a way that we select the pith $(lub\bar{a}b)$ from each topic, avoiding excessive prolixity and concision...and opting instead to provide lucid discussions. Our procedure is to separate problems from one another, then either confirm or disconfirm each, then discuss problematic objections and difficult counterarguments, and, if we are able, provide satisfactory solutions and conclusive answers.

l'institut domincain d'études orientales 32 (2017): 93-134.

^{42.} Shihadeh, "Al-Rāzī's Commentary," 300.

Likewise, the ordering of the book or commentary he describes as follows:⁴³

our novel ordering (*tartīb*) and synthesising, which demands that whoever commits himself to it to consider all possible objections and counterarguments, while avoiding pointless interpolation and undue prolixity.

And Fahr al-Dīn characterises what he names "painstaking investigation" as follows:⁴⁴

the painstaking investigation ($istiqs\bar{a}$) of questions and answers, and the in-depth probing (ta'ammuq) of the oceans of problems in such a way that the proponent of each thought-system ($ma\underline{d}hab$) may find this book of mine more beneficial than books written by proponents of that very thought-system. For I will provide from each discussion its best part (zubda).... If I do not find any worthwhile discussion in the sources of the proponents of that thought-system to support their views, I will myself come up with the best defense possible to affirm these views.

In these introductions, the process of gleaning from the books of earlier authors refers to a method of analysis that unfolds in a definite order: (a) first, to identify and separate out conceptual problems in the text to be dealt with in turn; and (b) then to survey possible solutions to these problems, discarding the false and retaining those that are true. Of the possibly true doctrines, (c) each is subjected to further criticism. Finally, should any solution remain standing after being subjected to thorough vetting, (d) Faḥr al-Dīn provides a conclusion to the problems under discussion. This step-by-step procedure is what the terms "ordering $(tart\bar{\iota}b)$ " and "synthesising (talfiq)" in the process of compiling or commenting on a book refer to. In similar fashion, "painstaking investigation $(istiqs\bar{a}')$ includes certain, well-defined elements. It involves, first, impartially surveying doctrines offered by different schools about a particular problem under discussion. Each viewpoint is rehashed in such a way that they are presented in the best possible light, supported by the best arguments that Faḥr al-Dīn can find or can supply on his own on the basis of the proponents' own

^{43.} Ibid.

^{44.} Ibid.

principles. If arguments are weak or none are forthcoming from the text, Faḥr al-Dīn sees supplies arguments that proponents of a doctrine would have agreed with had they supplied them.

Thus, in works written around 573/1178 or thereafter, such as the commentary on *Pointers*, *Précis, Investigations in the East* and *Frontiers of the Intellects* (*Nihāyāt al-'uqūl*), Faḥr al-Dīn is conscious of and able to give clear expression to what he saw as the key elements in his exegetical procedure. This is not the case in the commentary on the *Canon of Medicine*. To be sure, Faḥr al-Dīn uses "taḥṣīl," "tartīb," "ta'ammuq," "lubāb" and other words that frequently accompany the light/dark, climbing/descending, knowledge/ignorance, rhetorical/demonstrative, enlightened patron/social-climbing ignoramus, poverty/wealth and the other common motifs in Faḥr al-Dīn's prolegomena to his early philosophical works. These words, however, are used with their lexical meanings; they do not allude to aspects of Faḥr al-Dīn's commentary method. Bemoaning the privations that genuine scholars in his day suffered owing to the fact that ignorant patrons are not able to distinguish the true scholar from the counterfeit, Faḥr al-Dīn, speaking about himself in the third-person, says:

These days knowledge has become a burden for those who possess it and a curse on those who love it and pursue it. You see that the man [Faḥr al-Dīn is referring to himself] who has spent his years acquiring it [that is, knowledge, sc. al-'ilm'] and has distinguished himself from his contemporaries and his peers by the fact that he has provided solutions to unclear matters in the sciences and has brought to light in them secrets that had been hidden—[you shall see this man] barred from every desirable thing and prevented from all wishes and pursuits.

In this text *taḥṣīl* simply means to acquire something—in this case, philosophical knowledge—whereas in later texts *taḥṣīl* refers to a procedure for reading, writing and commenting on books, mainly by Avicenna.

Likewise, in the introduction to the commentary on the *Canon*, we see that Faḥr al-Dīn uses *tartīb* with its lexical meaning of *ordering*:

Divine help having aided me in composing this book, refining it, drafting it and <u>arranging</u> it, I dedicated it to the the eminent *šaylı*, the verifying philosopher who embodies religion's trust and Islam's nobility, the master of the philosophers and the physicians 'Abd al-Karīm al-Saralışsī.

In this passage, *tartīb* does not refer to the step-by-step process of surveying earlier authorities, subjecting them to criticism, retaining what is left and offering conclusions; the idea of arranging simply appears in the list of activities Faḥr al-Dīn says were steps in the physical task of writing the book, from its initial write-up (*talhīṣihi*⁴⁵) to putting in its final arrangement ("arranging it (*tartībihi*)").

Similarly, "pith ($lub\bar{a}b$)" and probing deeply (ta'ammuq)" appear in the introduction to the Canon commentary. Here, however, they are simply used for their rhetorical value, in a sentence in which Faḥr al-Dīn begins to describe how his initial interest in medicine was the spark that led him to eventually read Avicenna's Canon with the diligence and critical acumen for which he would become famous.

Having understood the fact that this science [namely, medicine, sc. *al-ţibb*] is perfect, that it is useful, and has a lofty rank, I desired to plunge into its waves, advance to the farthest limits of reaching its <u>pith</u>, <u>plunge deeply</u> into its depths, and ascend to its lights.

^{45.} For this meaning of *laḥḥaṣa/talḥīṣ*, see Manfred Ullmann, *Wörterbuch der klassischen arabischen Sprache*, vol. 2/1 (Wiesbaden: Harrassowitz, 1983), 428 [*laḥḥaṣa*], 429 [*talḥīṣ*].

The closest we get to a description of the methodology Faḥr al-Dīn says he will follow in the commentary on the *Canon* is the sentence immediately following the one cited above:

ولما كان كتاب القانون للشيخ الرئيس أحسن كتاب صنف في هذا الباب باتفاق أولي الألباب ثم أن الكتاب الأول منه تميز عن سائر كتبه باللطائف الحكمية والدقائق العلمية والنكت الغربية والأسرار العجيبة التي حارت أذهان أبناء الزمان عن إدراكها وخارت قواهم عن الوصول إلى دري أفلاكها صرفت نهاية وكدي وثنيت غاية وهمي وهمي إلى تفسير عيونه وشرح متونه واستيضاح مشكلاته واستخراج معضلاته والاعتذار عن مساهلاته إن وقعت في أثناء كلماته وامتحانات لعقول المتعلمين ضمنتها في سياق عباراته.

The scholars being in agreement that the *Canon* by *al-Šayḥ al-Raʾīs* is the best book written on this subject [namely, medicine], and, further, the first book being distinguished from all the other books in it [that is, the other four books of the *Canon*] by the fact that it contains philosophical subtitles, scientific intricacies, strange anecdotes and astonishing secrets that the minds of ordinary people are a loss to grasp and their faculties are too feeble to reach the glittering lights of their [secrets'] stars, I directed my ultimate purpose, exerted every effort and gave my whole mind and attention to interpreting its principal sections, commenting on its main parts, making what is problematic in it clear, bringing out the things in it that present difficulties, finding excuses when there is inaccuracy should it appear in the midst of the discussion; and I appended tests for students' intellects as the statements proceed.

In this sentence Faḥr al-Dīn distinguishes the primary or main portions ('uyūn, mutūn) of the the Canon from those that are, for him, secondary. In some ways recalling the method used by Šaraf al-Dīn al-Ma'ūdī in his commentary on Pointers but also Ibn Ğumay's glosses on the Canon, Faḥr al-Dīn commentary on Canon, Book One proceeds faṣl-by-faṣl. At no point does Faḥr al-Dīn say that he will consult with earlier medical or philosophical authorities, glean their books for solutions for problems in Avicenna's text, or even resolve the difficulties (muˈdilāt) in the text. Far from engaging in an impartial survey of every known authority and systematically vetting the true from the false, Faḥr al-Dīn adopts (or says he will adopt, the reality is quite different, see below) a somewhat Galenic exegetical attitude in the commentary on the Canon. Far from committing himself to "gleaning," "critical verification," or "painstaking investigation" Faḥr al-Dīn merely says that he will

bring difficulties and problems in the text to light so that they can be made the subject of special discussion; he does not propose to provide solutions.

2.2 Commentary Strategies in Fahr al-Dīn's Commentary on the *Canon*

This is what Faḥr al-Dīn says; what he does in the commentary on the Canon is quite another story. That is, after analysing Faḥr al-Dīn's introduction and comparing it to the exegetical strategies that he uses in the commentary on the Canon, it seems to me that there is a gap between Faḥr al-Dīn's ability to speak about his exegetical method and the commentary techniques he uses in practice. As we shall see, the techniques he uses in the commentary on the Canon are in line with those identified by Shihadeh and Wisnovsky in his later commentary on Pointers and Reminders and in his later philosophical writings such as Investigations in the East, Frontiers of the Intellects and the Précis of Logic and Philosophy. To my mind, this is adds further evidence to the claim that the commentary on the Canon was written well before 580/1184. For it seems that by the time Faḥr al-Dīn sat down to compose the Canon commentary, many of the analytical techniques he would use in later works were present in his exegetical repertoire in practice. Yet, it appears that they had not by this time coalesced in his mind in a way that permitted him to speak about them in definite terms as he would in later writings.

In short, I claim that the analytical techniques in the commentary on the *Canon* closely resemble those used in *Pointers* despite the fact that in the introduction Faḥr al-Dīn barely alludes to this fact. I shall substantiate this claim by examining how Faḥr al-Dīn comments on a chapter (faṣl) on compound diseases (al-amrāḍ al-murakkaba) in his commentary. Following Shihadeh, I first examine how Faḥr al-Dīn imposes his understanding of the chapter's *structure* by lemmatising the text into separate "research topics (abḥāṭ, mabāḥiṭ, buḥūṭ sg. baḥṭ)." After this, I shall examine the various techniques Faḥr al-Dīn employs to interpret what Avicenna's *says* on compound diseases.

The following table provides a summary of Avicenna's discussion of compound diseases in the *Canon* and shows how Fahr al-Dīn partitions the chapter.

Avicenna, Canon of Medicine, vol. 1, ed. Rağab, 1:76-7.

Definition of compound diseases; examples; swellings (awrām, sg. waram); every kind of disease is found in cases of swelling; wherever there is swelling there is dissolution of continuity (tafarruq al-ittṣāl)

Parts of the body are affected by swelling; bones are affected by swelling; food can cause body parts to swell;

Definition of catarrh (nazla);

Causes of swelling; swellings are prone to having natural and unnatural discharges;

Swelling can be classified according to its properties (fusūl, sg. fasl); best division of swelling based on the matter that causes it; matter that causes swelling is the four humours (black bile, yellow bile, phlegm, blood), watery fluids (al-mā'īya) and air (al-rīḥīya); division of swelling into hot swelling and swelling that is not hot; hot swelling caused by phlegm conventionally called flagmūnī; hot swellings caused by yellow bile conventional called erysipelas (humra); abscesses ($hura\check{q}$) and plague ($t\bar{a}$ ' $\bar{u}n$); how hot swellings appears at the beginning, middle and end; swelling resolves either by dissolving (taḥullul), or it suppurates (tagayyuh), pus gathers (ğam' midd), or a the swelling transforms into a tumour (*istiḥāla ilā l-ṣalāba*)

Swellings that are not hot are caused by black bile, Block F: "He turns once again to division, commencing phlegm, watery fluid and air; three kinds of swellings caused by black bile; tumours, cancer (al-saratān) and 1. Scrofula and leprous growths are not black bilious but swellings in the glands (al-ġudud) such as scrofula (alhanāzīr) and leprous growths (al-sula'); distinction between tumours and cancer

Two kinds of swellings caused by phlegm: hard swellings Block G: "...and the rest of the section is obvious (wa-bāqī land light leprous growths; swellings caused by phlegm faşli zāhir)." differ based on whether the phlegm that causes them is soft or hard; swelling caused by water; dropsy (al-istisqā'); swelling caused by air; dissolution of continuity in the body's passageways does not suppuration in bodies that have a balanced mixture; dissolution of continuity causes suuppuration when the body parts are affected by swelling, for example dropsy or elephantiasis (al-ǧuḍām); abscesses in the summer time are gangrenous when they last for a long time; you shall a full treatment of dissolution of continuity in the books that delve into the details (kutub al-tafsīl)

Faḥr al-Dīn al-Rāzī, Commentary on the Canon of Medicine

Block A: "This discussion calls for four investigations (mabāhit):"

- 1. Divisions of diseases that are in aggregate (al-amrāḍ al-muğtami'a)
- 2. How a single disease comes about from a number of diseases in aggregate
- 3. The reality of swelling
- 4. Clarifying that swelling is a compound disease

Block B: "Having brought the exposition on the reality of swelling to an end to a close, he (Avicenna) begins the exposition on the body parts that are affected by swelling."

Block C: "This begins the division of swellings."

Block D: "The purpose of this discussion is to search for not the conditions of swelling, but for certain rulings about the cause of swelling."

Block E: "Now he turns to explain the division of swellings."

with the division of cold swellings, which are four..."

phlegmatic.

The *Canon*, Book One was well-known for its divisions, subdivisions, and sub-subdivisions, and increasingly minute structure. ⁴⁶ Indeed, the fact that it is well-structured is considered by some to be its only redeeming quality. ⁴⁷ Nevertheless, Faḥr al-Dīn's division of this chapter into seven blocks introduces further structure into the chapter (faṣl), which is the smallest unit in *Canon*, Book One. In the case of the chapter on compound swellings, he devotes four investigations to issues of definitions and accounting for the fact that Avicenna devotes all of a chapter on compound diseases in general exclusively to kinds of swelling. As in the *Pointers*, he introduces the first block with an outline of its contents. ⁴⁸ While the rest of the chapter is not divided further into "investigations ($mab\bar{a}hit$)," Faḥr al-Dīn divides the chapter into blocks of text based on how the chapter flows logically from block to block. ⁴⁹

In his commentary on the chapter on compound diseases, Faḥr al-Dīn carries out many of the exegetical tasks that Shihadeh and Wisnovsky identify in the commentary on *Pointers*. Two brief examples from the commentary on the sections on compound diseases suffice to illustrate how much Faḥr al-Dīn's exegetical methods in the *Canon* commentary share with those he employs in the commentary on *Pointers*.

The first example takes us to Block B, in which Faḥr al-Dīn comments about the places in the body that are prone to swelling. Block B is a single sentence, in which Avicenna says: "Swelling affects the soft parts of the body (al-a' $d\bar{a}$ ' al-layyina), and something that resembles swelling in the

^{46.} Pormann and Savage-Smith, Medieval Islamic Medicine, 70. Ullmann, Medizin, 153.

^{47.} Emilie Savage-Smith, "Medicine in Medieval Islam," in *The Cambridge History of Science Volume 2: Medieval Science*, eds. David C. Lindberg and Michael H. Shank (Cambridge: Cambridge University Press, 2013), 139–67, 148. Ullmann, *Medizin*, 154: "So groß dir Wirkung des *Qānūn* in Morgenland und Abendland auch gewesen ist, so liegt doch die Bedeutung des Werkes nich etwa in neuen Erkenntnissen, die es vermitteln könnte, sodern in der Systematisierung und umfassenden Darstellung des damaligen medizinischen Wissens."

^{48.} Shihadeh, "Al-Rāzī's Commentary," 309.

^{49.} Ibid.

^{50.} Shihadeh, "Al-Rāzī's Commentary," 310. Wisnovsky, "Avicennism," 354–7.

bones makes their mass viscid because of it and the moistures in them increase. Nor is it unusual when [body parts] that are prone to increase in size because of receiving nutriment, do, in fact, become enlarged when the [spoiled] nutriment penetrates into them or comes about in them."⁵¹ About which Faḥr al-Dīn has the following to say:⁵²

التفسير: لما فرغ بيان حقيقة الورم شرع في بيان العضو الذي يعرض له الورم. ومن الناس من زعم أن العضو الصلب كالعظم أو اللين كالدماغ فإنه لا يتورم لأنه لا يتمدد وما لا يتمدد لا يتورم. وصغرى قياسهم كاذبة. أما أولا لأن الدماغ والعظم يعرض لهما النمو والنمو لا يكون إلا بالتمدد. وأما ثانيا لأن كل واحد منهما يغتذي. وذلك إنما يكون بنفوذ جوهر الغذاء فيه. فثبت من هذين الوجهين نفوذ الأجزاء الغذائية فيه. فتلك الأجزاء كما أنها قد تصلح فتكون غذاء أمكن أيضا أن تفسد. وإذا فسدت أوجبت التمديد وذلك هو الورم. وأما ثالثا فلأن جوهر الدماغ وإن كان رطبا إلا أن فيه لزوجة والعظم أيضا كذلك فيكون تمددهما من هذا الوجه ممكنا. وأما رابعا فالعظام لو لم تقبل نفوذ الفضلات لما كانت الأسنان تخضر وتسود. فإن ذلك لنفوذ الفضول فيها. وأما خامسا فقد خلقت الأسنان مائلة للنمو أبدا حتى أن السن المحاذية لموضع السن الساقطة تزداد طولا إذ كانت الزيادة ترد عليها ولا يقابلها الانسحاق.

Commentary: Having brought his [Avicenna's] exposition on the reality of swelling to a close, he begins to explain which parts of the body swell. There are some who thought that hard parts of the body, like bone, or soft ones, like the brain, do not swell because they do not expand ($l\bar{a}$ yatamaddadu⁵³), and what does not expand does not swell. The minor premise of their syllogism, however, is false. Firstly because the brain and bones grow and growth happens only when [the body part's bulk] expands. Secondly, [the premise is false]

^{51.} Avicenna, *al-Qānūn fī l-ṭibb*, ed. Qāsim M. Raǧab (Baghdad: Dār al-mut̪annā, ca. 1970), 1:76, ll.23–5. Hereafter cited as: Avicenna, *Canon*.

^{52.} For lemma from the *Canon*, see Avicenna, *al-Qānūn fī al-ṭibb*, 1:76–7.

^{53.} The Journal's reviewer rightly notes that in this instance *yatamaddadu* refers to the expanding that comes about when bulk is added to the body part, not to expanding in the sense of *stretching* like an inflated balloon, for example). For the meaning of *tamaddada* as increasing in size from drawing in or attracting, see Freytag, *Lexicon Arabico-Latinum*, 4.159, c.1: "extendit trahendo rem" and Kazimirski, *Dictionnaire Arabe-Français*, 2.1076, c.1: "Tirer pour allonger, allonger en tirant." Unfortunately, this sense is recorded for *yatamaddadu* when it is used *transitively*, not intransitively as Faḥr al-Dīn uses it here.

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because each of them receives nutriment, which happens when the food's substance penetrates it [brain or bone]. From these two considerations, it is established that the nutritive parts penetrate into it. Just as these parts are healthy and, consequently, they become nutriment, likewise, they spoil, and when they spoil, they necessitate [unhealthy] expanding [of the part's bulk], which is swelling. Thirdly, [it is false] because even though the brain's substance is moist, there is, nevertheless, a viscid quality in it, and similarly in the bones. From this consideration, it is possible for them to expand. Fourthly, [it is false] because if the bones were not liable to being penetrated by superfluities, the teeth would not turn green and black [from rotting], for this happens because the superfluities penetrate them. Fifthly, [it is false] because by nature the teeth grow constantly, such that the tooth that is adjacent to the place where a tooth has fallen out increases in length because it receives the extra [nutriment] that nourishes it, nor does pounding the tooth oppose this [growth].

Faḥr al-Dīn alerts the reader to the fact that in this passage Avicenna transitions from the prefatory remarks about definitions of swelling at the beginning of the chapter. According to Faḥr al-Dīn, this sentence marks the beginning of a new discussion about where in the body swelling can occur. Faḥr al-Dīn, who evidently found nothing to dispute in Avicenna's words, nevertheless seems to have found Avicenna's talk about "something like swelling (šay'un šabīhun bi-l-waram)" that affects the bones worth commenting on at greater length. This is not only because the expression is somewhat obscure, but because Faḥr al-Dīn was aware that a medical authority—he does not say who, but we shall see presently that it is the view of Muḥammad ibn Zakarīyā al-Rāzī—was of the view that bones do not swell, a belief that stands in direct conflict with Avicenna's. The ultimate objective of Faḥr al-Dīn's commentary on this sentence of the chapter on compound diseases and swelling is to defend Avicenna's statement against possible objections by those who hold with Muḥammad ibn Zakarīyā that bones and the brain do not swell. Faḥr al-Dīn pursues this goal in several stages. First, he paraphrases Muḥammad ibn Zakarīyā's argument, placing it in syllogistic form.

Minor Premise: the bulk of bones and of the brain do not expand;

Major Premise: what does not expand in size in this way does not swell.

Conclusion: the bones and brain to not swell.

Next, he identifies the Minor Premise as false, concluding thereby that Muḥammad ibn Zakarīyā's conclusion is false because it does not follow from true premises. Faḥr al-Dīn then produces a battery of arguments, asserting, against Muḥammad ibn Zakarīyā, that the bulk of the bones and the brain do in fact expand as a natural consequence of drawing in nutriment from food. Faḥr al-Dīn does not say so here, but all these concepts are borrowed from Avicenna's *On the Soul* in the physics of *The Healing* (see Section Four below).

Many of these arguments are dialectical, intended primarily to undermine or create doubt about the truth of Muḥammad ibn Zakarīyā's doctrine rather than to refute it outright. One major shortcoming in Fahr al-Dīn's argument is that he misinterprets—most likely deliberately— Muḥammad ibn Zakarīyā's views about how bones and the brain increase in size. In Section Four, we shall see that Muḥammad ibn Zakarīyā does not say that the brain and bones do not increase in size by attracting nutriment to them, which is the sense conveyed by tamaddud in this set of passages. This process is precisely how growth as a natural process of gradually expanding in bulk was understood to occur by medieval Islamic physicians. This sense of expanding was not what Muḥammad ibn Zakarīyā had in mind in the *Outstanding Book*. As the passage is quoted by Ibn al-Quff, Muḥammad ibn Zakarīyā refers to expanding not in the sense of *growth* but in the sense of the bod part's physical qualities (hard and soft), which, according to Muḥammad ibn Zakarīyā, do not permit the body part to expand (tamdīd) in a way that accommodates swelling. Thus, in order to bolster his argument that the brain and bones swell, and in order to undermine Muḥammad ibn Zakarīyā's "minor premise," Faḥr al-Dīn offers a deliberately tendentious interpretation of Muḥammad ibn Zakarīyā's claim. Faḥr al-Dīn ignores, in effect, the fact that Muḥammad ibn Zakarīyā's claim is directed at the physical qualities of the brain and bone that make them unsuited to swelling. Instead, he pretends that arguments about expanding as a form of growth—arguments which Muḥammad ibn Zakarīyā would not have disputed in the first place—were sufficient to undermine Muḥammad ibn Zakarīyā's position.⁵⁴

^{54.} Faḥr al-Dīn's arguments here are less than demonstrative. His claim that he avoids arguments that "are only intended to refute and defeat an opponent," arguments which he

The second example from the chapter on compound diseases reveals other exegetical strategies in the commentary on the *Canon* that are present in the commentary on *Pointers and Reminders*. As we saw in the Table, Block G is the final section of this chapter that Faḥr al-Dīn comments on. The Table shows that Block G is a rather long portion of the chapter, which discusses several different topics. According to Faḥr al-Dīn's understanding of the text's structure, Avicenna's primary aim is to discuss cold swellings, which may be caused by various kinds of matter in the body: phlegm, black bile, air or watery fluid. In the commentary, however, Faḥr al-Dīn gives all his attention to resolving a conflict between Avicenna and earlier medical authorities, 'Alī ibn 'Ab-bās al-Maǧūsī (fl. 4th/10th c.) and Abū Sahl al-Misīḥī (d. 1010), who classified scrofula (*al-ḥanāzīr*) and leprous growths (*al-sula*') as types of swelling caused by phlegm rather than black bile.

التفسير: ثم أنه عاد مرة أخرى إلى التقسيم وشرع في تقسيم الأورم الباردة وهي أربعة: السوداوية والبلغمية والمائية والريحية. ثم قسم السوداوية إلى أقسام ثلاثة: الصلابة والسرطان وأجناس الغدد التي منها الخنازير والسلع. وهاهنا بحث وهو أن الخنية والسلع ليست سوداوية بل بلغمية لأن الشيخ قال في المقالة التي يذكر فيها الأورام الباردة من هذا الكتاب: "الأورام البلغمية إما سادجة بلغمية †كما يعرض لعضو إن يجتمع فيه ماء، وإما مائية † وإما دبيلات لينة كالسلع اللينة، وإما مستحصفة كالخنازير والسلع الصلبة. " وأما المسيحي فإنه قال في آخر كتاب الأورام: والخنازير أورام تحدث عن بلغم غليظ فتصلب عندما يبقى في اللحم. وأما صاحب الكامل فإنه أورد السلع والخنازير في باب الأورام البلغمية، وحصر الورم السوداوي في الجنسين الباقيين. ويمكن أن يقال: الشيخ لم يجعل الخنازير والسلع من الأورام السوداوية بل جعل من هذا الباب الغدد التي منها الخنازير والسلع على معنى أن الغدد التي تشبه الخنازير والسلع داخلة في الأورام السوداوية وهي التي تسمى مسامير فإنه أؤرد في المقالة التي يتكلم فيها على الأورام السوداوية لهذه المسامير فصلا؛ أو يقال: إنه قال في باب السلع إنها دبيلات بلغمية تحوي أخلاطا غليظة بلغمية أو متولدة عن البلغم كلحم أو كعصيدة أو فصلا؛ أو يقال: إنه قال في باب السلع إنها دبيلات بلغمية تحوي أخلاطا غليظة بلغمية المنادلك المصنع، وبالجملة فكلامه في هذا المعنى مضطرب. وقوله: "الأورام الصلبة السوداوية تتدئ في أول كونها عليا الماد منه أن أحد نوعي الورم السوداوي وهو الصلابة قد يكون تكونه عن خلط محدث له ابتداء وقد يكون حدوثه من قبل أن يحصل نوع آخر من الورم ثم أن مادته تغلظ فيصير الورم صلابة وأكثر ذلك إنما يقع في الورم الدموي وقد يكون أيضا في الورم البلغمي، فأما ما ذكره في باب الفرق بين الغدد فيصير الورم ثم أن مادته تغلظ فيصور العالم المدورة وغي باب الفرق بين الغدد

criticises vociferously in the introductions to other works, is here revealed to be more a motif for promoting his work to his colleagues and patrons than historical fact.

^{55.} وتسمى أوراما رخوة وإما مائية كما يعرض لعضو ما أن يجتمع فيه ماء: Ox, P, G: كما يعرض لعضو إن يجتمع فيه ماء، وإما مائية كما يعرض لعضو ما أن يجتمع فيه ماء، وإما مائية كما يعرض لعضو ما أن يجتمع فيه ماء، وإما مائية كما يعرض لعضو ما أن يجتمع فيه ماء، وإما مائية كما يعرض لعضو ما أن يجتمع فيه ماء، وإما مائية كما يعرض لعضو ما أن يجتمع فيه ماء، وإما مائية كما يعرض لعضو ما أن يجتمع فيه ماء، وإما مائية كما يعرض لعضو ما أن يجتمع فيه ماء، وإما مائية كما يعرض لعضو المائية كما يعرض لعضو المائية كما يعرض لعضو ما أن يجتمع فيه ماء، وإما مائية كما يعرض لعضو ما أن يجتمع فيه ماء، وإما مائية كما يعرض لعضو ما أن يجتمع فيه ماء، وإما مائية كما يعرض لعضو المائية كما يعرض لعضو المائية كما يعرض لعضو ما أن يجتمع فيه ماء، وإما مائية كما يعرض لعضو ما أن يجتمع فيه ماء، وإما مائية كما يعرض لعضو المائية كما يعرض لعضو المائية كما يعرض لعضو المائية كما يعرض لعضو المائية كمائية كمائية

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[A] Commentary: he turns once again to classifications [of swelling], commencing with with the classification of cold swellings, which are four: those from black bile, phlegm, watery fluid, and air. Then he divides those from black bile into three: tumours, cancer and kinds of swelling in the glands, among which are scrofula and leprous growths.

[B] At this juncture an inquiry arises, namely, that scrofula and leprous growths are not from black bile, but from phlegm. For in the discourse in this book [namely, in *Canon*, Book One] in which cold swellings are discussed, the *Šaylı* says: "Swellings caused by phlegm are either purely phlegmatic †such as when a body part is affected by water that accumulates in it; or they are from watery fluid†, ⁵⁶ or they are abscesses such as scrofula and hard leprous growths." At the end of the book on swellings, al-Masīlnī says: "Scrofula is swellings that are caused by thick phlegm that hardens when it remains in the flesh." And the author of the *Complete* [*Book of Medicine*], al-Maǧūsī, includes leprous growths and scrofula in the chapter on swellings from phlegm and restricts swellings from black bile to the remaining two categories.

^{56.} As in other instances in which Faḥr al-Dīn quotes the *Canon*, all three manuscripts transmit a corrupt text. My analysis of the transmission history of the commentary on the *Canon* is in its preliminary stages. At this point, it is not clear whether the error was in Faḥr al-Dīn's copy, or whether the all three manuscripts share a corrupt exemplar early in the stemma. The collation evidence suggests the latter scenario is most likely. Compare with the original (Avicenna, *al-Qānūn fī l-ṭibb*, 1:77, ll. 25–26: "...they are called hard swellings; or they are caused by watery fluid, such as when a body part is affected by water that accumulates in it such as dropsy that is localised in it [the body part]..."

- [C] One could say: "The $\check{S}ayh$ did not classify scrofula and leprous growths among the swellings that are from black bile; rather, he included in this category [that is, category of swellings caused by black bile] swellings in the glands, among which are scrofula and leprous growths, the reason for which is that the swellings in the glands, which resemble scrofula and leprous growths, are classified as black bilious swellings, and they are what are called "boils ($mas\bar{a}m\bar{t}r$)." For he [namely, Avicenna] dedicated a chapter to boils, in which he speaks about swellings from black bile."
- [D] Or one could say: "In the chapter on leprous growths, he said that they are abscesses from phlegm that contain viscous humours, or that are generated from phlegm that is like flesh, flour gruel (' $a\bar{s}\bar{\iota}da$)⁵⁷, honey or something hard. It is not implausible that they should be included among the [swellings] from black bile, though we classify them as those from phlegm because the origin of that gruel-like mixture (al-' $a\bar{s}\bar{\iota}d$) is phlegm that has dried, and becomes viscous as a result." These are his words in that passage. In sum, his words on this matter are confused.
- [E] He says: "When they first form, tumorous swellings from black bile begin as hard growths, which sometimes turn into tumours, especially those [tumours] caused by blood, though it sometimes happens also in those caused by phlegm." He means by this that one of the two kinds of swelling from black bile, namely tumours, sometimes come about from humours that generate at the outset, or they come about because there is another kind of swelling [in the body part], after which the matter [in the swollen part] becomes viscous and, as a consequence, the swelling becomes a tumour. This mostly happens in cases of swelling from blood, but sometimes it happens in cases of swelling from phlegm.

^{57.} See Reinhard Dozy, *Supplément aux dictionnaires arabes* (Leiden: Brill, 1881), 2:133, where he says that 'aṣīda and 'aṣīda have the same meaning. Albert Kazimirski, *Dictionnaire Arabe-Français* (Paris: Maisonneuve, 1860), 2:270 ('aṣīda): "a kind of thick gruel made from flour butter mixed with boiled water, and butter or honey (from original French)."

[F] The distinctions he draws between, on the one hand, swelling in the glands and leprous growths and sinewy lumps [on the skin] (ta'aqqud al-'aṣab) on the other are all obvious, the upshot of which is that [when they are palpated] the sinewy lumps do not move to the front or the back but only to the left and right, whereas the leprous growths move to in all directions.

[G] The rest of the chapter is clear.

It is evident that much of Faḥr al-Dīn's commentary is given to explaining the meaning of the text. He does this by means of various strategies. He merely restates Avicenna's words: in A, the division of swellings caused by black bile at the beginning of Block G is rephrased using a slightly different sentence structure.

He paraphrases and digests: in F, Avicenna makes several distinctions between swelling in the glands and leprous growths and sinewy lumps, all of which Faḥr al-Dīn say boil down to the fact that when leprous growths and swellings in the glands are palpated, they can move horizontally or vertically, and they can be compressed, whereas the sinewy knots on the skin can only be shifted from side to side (yumnatan wa-yusratan), but they cannot be compressed when they are palpated.

He expands the text by introducing subdivisions that Avicenna does not: in E, Faḥr al-Dīn divides tumours according to how they are generated, a division which is not in Avicenna's text, but clarifies Avicenna's claim that when tumours are caused by black bile they "begin as hard growths (tabtadi'u fī awwali kawnihā ṣulbatan)." Faḥr al-Dīn says that there are two kinds of tumours, those that immediately form as tumours caused by black bile and others that are caused by other humours but become tumorous after the humours become gradually viscous. Faḥr al-Dīn implies that in E, Avicenna is speaking about the former rather than the latter.

On the other hand, much of the text is given to drawing out doubts in Avicenna's text by referring to earlier medical authorities and to other passages in the *Canon*, Book One. Thus, Faḥr al-Dīn commits an inquiry $(baḥ\underline{t})$ (from sections B to D) to highlighting an inconsistency in the classification of leprous growths and scrofula. In B, Faḥr al-Dīn observers that in the present chap-

ter these diseases are classified under the kinds of swelling that are caused by black bile (al-sawdāwīya). Al-Maǧūsī, al-Masīhī and Avicenna elsewhere in Book One, however, class them as swellings caused by phglem (balġamīya). In sections C and D, Faḥr al-Dīn attempts to find some way of harmonising the inconsistency in Avicenna's classifications. In C, Faḥr al-Dīn says that in this passage, Avicenna only meant to say that swellings in the glands were caused by black bile, and that leprous growths and scrofula merely resemble (tušbihu) swellings in the glands. In D, Faḥr al-Dīn quotes the chapter on leprous growths (al-sula') in the Canon, Book One, in which Avicenna declares that these kinds of growths are "phlegmatic abscesses (dubaylāt balġamīya) that contain humours that are phlegmatic or that are generated from phlegm," after which he immediately adds the hedge that "it is not implausible that they should be included among" black bilious swellings. Unable to find a compelling excuse for Avicenna in C, and citing a text from the Canon in which Avicenna says, in effect, that leprosy and scrofula are phlematic and black bilious swellings, Faḥr al-Dīn, throws up his hands in last sentence of D, saying that Avicenna's classification of leprosy and scrofula is "confused (muḍṭarib)."

A thorough analysis of this chapter, therefore, makes it clear that in spite of the fact that the introduction to the commentary on the *Canon* does not allude to the central elements of Faḥr al-Dīn's exegetical method, *in practice* in the commentary on the *Canon* Faḥr al-Dīn undertakes exactly the same types of exegetical tasks that he does in the commentary on *Pointers and Reminders* and in original philosophical works written prior to 580/1184. As we have seen, what Shihadeh calls the "macrostructure" of the *Canon* commentary is virtually identical to the macrostructure of the commentary on *Pointers*. Faḥr al-Dīn introduces further subdivisions into the *Canon*'s original division into sections; he is makes explicit the logical links between sections, and even between text-blocks in a single chapter; he divides his commentary into investigations (*mabāḥiṭ*), which tend to focus on more philosophical principles; and he prefaces each commentary unit with a division into themes or topics to be pursued.

Furthermore, Shihadeh identifies a handful of "exegetical tasks" that Faḥr al-Dīn performs in the commentary on *Pointers and Reminders.*⁵⁸ They are present in the commentary on the

^{58.} Compare this list with the one in Shihadeh, "Al-Rāzī' Commentary," 310: "1. Identifying the

Canon as well. Among the exegetical tasks that Faḥr al-Dīn performs in this chapter are:

- 1. Explaining the organisation of the chapter and the relationship between its parts;
- 2. Defining the key concepts in the chapter under discussion;
- 3. Highlighting inconsistencies in Avicenna's thought;
- 4. Comparing Avicenna's statements in the *Canon* to the views of earlier medical authorities;
- 5. Explaining Avicenna's words using concepts drawn from *The Healing*;
- 6. Defending Avicenna against criticism;
- 7. Attacking earlier authors whose views conflict with Avicenna's;
- 8. Breaking arguments down into the form of syllogisms;
- 9. Introducing new concepts, terms and divisions to make Avicenna's words clear.

3 The Genesis of *Verification* (taḥqūq) in the Islamic Medical Tradition

3.1 "Metacommentary" in Galen: Rules for Exegetes in Classical Islamic Medicine

In the tradition of medieval Islamic medical commentary, Galen's numerous Hippocratic commentaries, nearly all of which were translated into Arabic by Ḥunayn ibn Isḥāq (d. 873), stood as a model to imitate. Even if Galen's actual practice and written prescriptions were frequently at odds,⁵⁹ there is no doubt that medieval Islamic physicians would have taken Galen's prescriptions

unstated conclusion of an argument (gharad, maqsad, matlab); 2. Identifying an unstated premise of an argument; 3. Expounding the argument in a stricter syllogistic presentation, using plainer language; 4. Expounding the views advanced in the passage, or the broader philosophical theory; 5. Defining philosophical terms; 6. Explaining the broader organization of the text by showing how the views advanced and the argument's premises relate to earlier and later sections; in some cases, the broader discussions in which the section occurs are summarized; 7. Providing relevant additional material from other Avicennan works, especially the Shifa; 8. Contextualizing these views by placing them within wider debates and identifying contrary views, whether or not these are hinted at in Avicenna's text."

59. See Heinrich von Staden, "Staging the Past, Staging Oneself: Galen on Hellenistic Exegetical Traditions," in *Galen and the World of Knowledge*, eds. Christopher Gill, Tim Whitmarsh and John Wilkins (Cambridge: Cambridge University Press, 2009), 132–56, especially 134–5; von Staden, "A Woman Does Not Become Ambidextrous': Galen and the Culture of Scientific

about how and how not to do commentary with the utmost seriousness. A recent study of exegetical strategies in the Arabic commentaries on the Hippocratic *Aphorisms* shows how Ibn Abī Ṣādiq's (d. after 1067) exegetical strategies imitate Galen's actual commentary practice more than Galen's restrictive prescriptions in his Hippocratic commentaries. That is to say, the shifts evident in Ibn Abī Ṣādiq's commentary on the *Aphorisms* do not involve the broad shifts in commentary structure, argumentative style, medical-philosophical authority and discursive strategies that Faḥr al-Dīn's commentary inaugurates, beginning largely with his students in the thirteenth century.

According to classics scholars such as Jonathan Barnes, Jaap Mansfeld and Rebecca Flemming, Galen seems to have given considerable thought to what Barnes refers to as questions of "metacommentary." In addition to devoting two complete works to this question, works which are, unfortunately, lost, Galen scatters remarks touching on metaexegetical issues in his Hippocratic commentaries. Here, we are fortunate to have many of these passages in Greek as well as Arabic. Only by exploring Galen's scattered remarks and comparing them with remarks made by Abū Bakr Muḥammad ibn Zakarīyā al-Rāzī (d. ca. 925) at the opeing of his *Doubts on Galen* (Šukūk 'alā Ğālīnūs) can we appreciate how unorthodox Faḥr al-Dīn's exegetical method in the *Canon* must have appeared to scholastic physicians in the twelfth and thirteenth centuries.

Commentary," in *The Classical Commentary: Histories, Practices, Theory*, eds. Roy Gibson and Christina Shuttleworth Kraus (Leiden: Brill, 2002), 109–39.

^{60.} Kamran I. Karimullah, "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 (2017): 311–58, especially 329–41.

^{61.} Jaap Mansfeld, *Prolegomena: Questions to be Settled Before the Study of an Author or a Text* (Leiden: Brill, 1994), 135–9. Rebecca Flemming, "Commentary," in *The Cambridge Companion to Galen*, ed. Richard J. Hankinson (Cambridge: Cambridge University Press, 2006), 323–54, 336–40. Jonathan Barnes, "Metacommentary," in *Method and Metaphysics: Essays in Ancient Philosophy I*, ed. Maddalena Bonelli (Oxford: Oxford University Press, 2015), 195–210.

Mansfeld, Barnes and Flemming have identified several passages in Galen's Hippocratic commentaries in which Galen speaks about the norms that dictate what good medical exegesis is. These texts are Galen's introduction to his commentary on (1) the Hippocratic *Epidemics*, Book One; (2) the introduction to his commentary on the Hippocratic *Epidemics*, Book Six; a brief introduction to his commentary on the Hippocratic *Aphorisms*, Book Three; and finally, (4) his introduction to his commentary on the Hippocratic *On Fractures*, the latter of which was translated into Syriac by Ḥunyan, but which is no longer extant.⁶²

In brief introductory remarks to the commentary on the *Aphorisms*, Book Three, Galen takes an opportunity to attack an physician named Lukas, who seems to have penned a complete commentary on the *Aphorisms*. Rather than faulting any particular doctrine Lukas held, Galen critcises his peer for failing to comment on Hippocrates' text in the correct way, namely the way that Galen thought commentaries should be written.⁶³

Έν τῷ τρίτῳ τῶν εἰς τοὺς ἀφορισμοὺς ὑπομνημάτων τῷδε περὶ τῶν κατὰ τὰς ὥρας τε καὶ ἡλικίας Ἱπποκράτει γεγραμμένων ἐξηγησόμεθα. μάλιστα μὲν οὖν ὅσον ἐν αὐτοῖς ἀσαφές ἐστι σαφηνίζοντες, ἔργον γὰρ τοῦτο ἴδιον ἐξηγήσεως, οὐ μὴν ἀλλὰ καὶ τὴν ἀπόδειξιν ἑκάστου τῶν ὀρθῶς εἰρημένων προστιθέντες, ἐπειδὴ καὶ τοῦτ' ἔστιν ἔθος ἐν τοῖς ὑπομνήμασιν γίνεσθαι. θαυμάζω δὲ κἀνταῦθα τὴν ἀνωμαλίαν τοῦ Λύκου γράφοντος μὲν, ὡς φησιν, ἐξηγήσεις Κοΐντου τοῦ διδασκάλου, μηδενὶ δὲ τῶν κατὰ τὰς ὥρας καὶ ἡλικίας εἰρημένων προσθέντος πίστιν ἀποδεικτικὴν, ἀλλ' εἰς ἐμπειρίαν καὶ τήρησιν ἀναπέμψαντος ἄπαντα, καίτοι γ' ἄλλους πολλοὺς ἀφορισμοὺς ἐξηγούμενος αὐτὸς ἐπισκέπτεται λογικῶς ὑπὲρ τῆς ἐν αὐτοῖς ἀληθείας, οὐκ

^{62.} John C. Lamoreaux, *Ḥunayn ibn Isḥāq on His Galen Translations* (Provo: Brigham Young University Press, 2017), 96–7 [§95].

^{63.} Arabic: Galen, *Tafsīr Čālīnūs li-fuṣūl Abuqrāṭ*, trans. Ḥunayn ibn Isḥāq, ed. Taro Mimura (The University of Manchester, 2012–2017), http://dx.doi.org/10.3927/51689446. Greek: Galen, *Galeni Opera Omnia*, ed. Karl G. Kühn, vol. 17b (Leipzig: Car. Cnoblicii, 1829), 561–2. Translation is based on the Arabic.

άρκούμενος μόνη τῆ πείρα. ὅτι δ' οὐ δυνατόν ἐστι μόνη τῆ πείρα τοιαύτην ἀθροῖσαι θεωρίαν Ἱπποκράτης τε αὐτὸς ἐνδείκνυται τοῦτο καὶ προδόντος ἐπιδειχθήσεται τοῦ λόγου.

إنّي مفسّر في هذه المقالة الثالثة من تفسير كتاب الفصول ما ذكره أبقراط في هذا الكتاب من أمر أوقات السنة والأسنان. وأكثر قصدي إنّما هو لشرح الغامض من قوله، لأنّ ذلك هو الأمر الخاصّ بالتفسير، وأتكلّف مع ذلك أن أتي بالبرهان على شيء شيء ممّا قاله أبقراط وأصاب به، لأنّه قد جرت العادة بأن يفعل ذلك في التفسير. وإنّ بعض ما أعجب منه من أمر لوقش أنّ أمره ل يشبه بعضه بعضاً في تفسيره لهذا الكتاب، وذلك أنّه كتب تفسيراً لهذا الكتاب أخذه بزعمهم في قوانطس معلّمه ولم يأت على شيء ممّا ذكره أبقراط في أوقات السنة والأسنان بحجّة برهانية، لكنّه اقتصر في جميع ما ذكره فيه على التجربة والرصد على أنّه في تفسيره لفصول أخر كثيرة يبحث عن صحّة ما قبل بطريق القياس ولا يقتصر على التجربة. وقد دلّ أبقراط على أنّه لا يمكن أن يجمع هذا الباب من العلم بالتجربة وحدها دون القياس وسأبيّن ذلك فيما بعد.

[L1] In this third book of the commentary on the Book of the Aphorisms, I shall explain what Hippocrates mentions about the seasons of the year and the ages in the person's life. My primary objective is to explain what is obscure (šarḥ al-ġāmiḍ min qawlihi, ἐν αὐτοῖς άσαφές ἐστι σαφηνίζοντες) in Hippocrates' words because this is what is proper to interpretation (al-amru al-ḥāṣṣu b-t-tafsūr, ἔργον γὰρ τοῦτο ἴδιον ἐξηγήσεως). Consequently, I am unwilling to carry out demonstration for each and every statement that Hippocrates made and was correct about. For that one does this is the convention in interpretation. One of the surprising things about Lukas' commentary on this book [namely, the Aphorisms] is that some parts of his commentary on this book do not resemble other parts. For he composed a commentary on this book, which he took, so they say, from his teacher Quintus, in which he [Quintus] does not supply a demonstrative proof for a single thing that Hippocrates mentioned about the seasons of the year and the ages of people. Rather, whatever is confined entirely to his medical experience and observation. Yet, in his interpretation of many other aphorisms, he searches for the truth of what was said using reason. Yet, Hippocrates has indicated that it is not possible to collect knowledge in this field relying solely on experience and not on reason. I shall demonstrate this in what follows.

^{64.} برعمه] conieci (ὥ φυσιν Kühn): برعمه Mimura.

Here Galen criticises Lukas, who appears to have been writing a generation before Galen, if he was in fact a direct student of the anatomist Quintus (d. ca. 145), the latter of whom was a well-known physician who taught several of Galen's teachers such as Pelops (fl. ca. 150) and Numisanus (d. before 151). In these brief remarks, Galen manages to pack three distinct criticisms of Lukas and Quintus. The first is that he picks on the fact that Lukas does not interpret Hippocrates *consistent-ly*. In other writings, or possibly in other parts of Lukas' *Aphorisms* commentary, Lukas uses reason to offer reasons for why what Hippocrates says is true. Yet, in his commentary on *Aphorisms*, Book Three, Lukas' commentary is, in Galen's view, merely a collection of observations and medical exeperiences.

The second criticism is less about Lukas than about Quintus. Though on other occasions Galen praises Quintus as "the best physician of his generation," in this instance Galen critises Quintus for falling under the influence of the empiricist doctrine that eschews medical reasoning and stipulates that medical experience alone is sufficient for practicing as well as discoursing about medicine. Yet, here Galen's criticsm is mainly methodological. In this passage, Galen criticises Quintus for commenting on Hippocrates using an exegetical method that Hippocrates himself rejected. In Galen's eyes, the problem is not so much that Quintus commented in the style of an empiricist, but that when interpreting a Hippocratic work Quintus failed to *follow the exegetical principles to which the author himself subscribed*. In effect, Galen takes Quintus to task for using only empirical observation when discussing the *Aphorisms*, whereas in other writings Hippocrates had indicated that "it is not possible to collect knowledge in this field relying solely on experience and not on reason." Galen charges that, in this case at least, Quintus failed in his duties as a commentator because the exegetical method he adopts is not based on the principles of textual interpretation that Hippocrates himself endorsed.

^{65.} Vivian Nutton, "Galen of Pergamum", in *Brill's New Pauly: Antiquity volumes*, eds. Hubert Cancik and Helmuth Schneider (Leiden: Brill, 2006), doi: 10.1163/1574-9347_bnp_e417950.

^{66.} Galen, *Galeni De praecognitione* [Galen's *On Prognosis*] (*CMG* V 8,1), ed. Vivian Nutton (Berlin: Academy of Science, 1979), 71. Galen, *Opera Omnia*, 14:602.

Galen faults Lukas for inconsistency. In most cases he uses reason to supply the unstated principles for why what Hippocrates says is true. Galen, however, characterises Lukas' commentary on *Aphorisms*, Book Three as a laundry-list of observations and subjective impressions drawn from medical experiences without any underlying principles that rationalise Hippocrates' dicta. Yet, it seems to me that Lukas would not escape Galen's ire if he had consistently provided demonstrative arguments either, for it is clear that above all, *Galen does not see demonstration as suitable element in medical exegesis*. Indeed, Galen contrasts the type of interpretation he supplies with the kind that Lukas and Quintus provide. Whereas they (consistently or inconsistently) engage in arguments that use demonstration, Galen feels that the commentator's "proper business" is "explaining what is obscure" in Hippocrates' words.

These three themes are present, too, in Galen's introductions to his commentary on the Hippocratic *Epidemics*, Book One and Book Six. Before launching into his interpretation of *Epidemics*, Book One, Galen refers again to Quintus' failures as a Hippocratic exegete. Once again, he remarks about the fact that in speaking about the medical statements that Hippocrates makes about the seasons and the ages of people's lives, Quintus relied entirely on medical experience and failed to use reason in his commentary. Acording to Galen, then, Quintus' first error was that "he claimed that these things [medical rules about seasons and ages] are known only through experience without there being any reasoning about the cause that inevitably give rise to them." Galen continues in the following words:⁶⁷

κακῶς οὖν ὁ Κόιντος ἐξηγεῖται καὶ ταῦτα τὰ βιβλία καὶ τὰ τῶν Ἀφορισμῶν, <ἐν> οἷο ὧδέ πως ἔγραψε· "περὶ δὲ τῶν ὡρέων, ἢν μὲν ὁ χειμὼν αὐχμηρὸς καὶ βόρειος γένηται, τὸ δὲ ἔαρ ἔπομβρον καὶ νότιον, ἀνάγκη τοῦ θέρους πυρετοὺς ὀξεῖς καὶ ὀφθαλμίας καὶ δυσεντερίας γίνεσθαι." τῆ πείρα γὰρ μόνη τοῦτο ἐγνῶσθαί φησιν ὁ Κόιντος ἄνευ τοῦ κατὰ τὴν αἰτίαν λογισμοῦ, πρῶτον μὲν αὐτὸ τοῦθ' ἀμαρτάνων, ** ὅτι τὰς αἰτίας, ὧν εἶπε κατὰ τοὺς Ἀφορισμοὺς τούτους ὁ Ἱπποκράτης, αὐτὸς

^{67.} Greek: Galen, *In Hippocratis Epidemiarum librum I commentaria III*, eds. Wenkebach and Pfaff, CMG V 10,1 (Leipzig et Berlin 1934), 6–7. Arabic: Galen, *Galeni In Hippocratis Epidemiarum librum I commentariorum I-III*, Suppl. Or. V 1, ed. Uwe Vagelpohl (Berlin: De Gruyter, 2014), 74–6.

αὖθις ἐν τῷ Περὶ ὑδάτων καὶ ἀέρων καὶ τόπων ἔγραψεν, εἶθ' ὅτι τὸ χρήσιμον μέρος τῆς διδασκαλίας ὑπερέβαινεν. ἀρεταὶ μὲν γάρ εἰσιν ἐξηγητῶν δύο αὖται, τό τε τὴν γνώμην φυλάσσειν τοῦ συγγράμματος καὶ τὸ τὰ χρήσιμα διδάσκειν τοὺς ἀναγνωσομένους αὐτοῦ τὰ ὑπομνήματα, διέφθειρε δὲ ἀμφοτέρας ὁ Κόιντος ἐν τῷ μὴ συνάπτειν τῇ καταστάσει τοῦ περιέχοντος ἡμᾶς ἀέρος τὰ πλεονάσαντα νοσήματα, συνάπτεσθαι μὲν αὐτὰ βουλομένου τοῦ Ἱπποκράτους αὐτοῦ, προγνῶναι δ' ἐσόμενα καὶ κωλῦσαι συνιστάμενα καὶ ἰᾶσθαι γενόμενα μὴ δυνησομένων ἡμῶν ἄνευ τοῦ γνῶναι τὴν γενομένην ἐν τῷ σώματι διάθεσιν ἐκ τῆς δυσκρασίας τοῦ περιέχοντος. οὕτως γὰρ καὶ τῶν ἄλλων ἀπασῶν καταστάσεων τὰς δυνάμεις αὖθις ἐξευρίσκειν δυνησόμεθα.

وأول خطائه أنه لم يعلم أن أبقراط قد وصف أسباب تلك الأشياء التي ذكرها في كتاب الفصول < و > في كتابه في الماء والهواء والمواضع، والثاني أنه تجاوز وترك أنفع ما يتعلم في هذا الباب. وذلك أن للتفسير فضيلتين: إحداهما أن يحفظ معنى الرجل الذي يفسر كلامه ولا يزول عنه، فالأخرى أن يعلم من يقرأ تفسيره ما ينتفع به. وقد أفسد قوينطس هاتين الفضيلتين جميعا بتركه إيجاب حدوث الأمراض التي ذكر أبقراط أنها تكثر في كل وقت واحد من أوقات السنة على حال الهواء المحيط بالأبدان فيه. وأبقراط يريد أن حدوث تلك الأمراض واجب عن مزاج الوقت الذي تحدث فيه. ونحن لا نقدر أن نتقدم فنعلم أن تلك الأمراض ستحدث ولا أن نمنع من حدوثها ولا أن يبرئها إذا حدثت دون أن نعلم الحال الحادثة في البدن من فساد مزاج الهواء. فبهذا الطريق قد نصل نحن أن نستخرج ونعرف قوى جميع حالات الهواء التي لم يذكرها أبقراط مع ما ذكر.

[L2] His first error was that he was not aware that Hippocrates described the causes of the things he mentioend in the *Aphorisms* and in his book on waters, airs and places. The second was that he passed by and left out the most useful [part] of this chapter's teaching. For a commentary has two virtues (faḍīlatāni). The first is that it preserves the thought of the man whose words it comments on and does not deviate from it. The second is that it teaches those who read the commentary what is useful for them. But Quintus spoiled both virtues by ignoring that the diseases which Hippocrates said frequently appear during each individual season inevitably occur as a consequence of the air surrounding the bodies during it. Hippocrates, however, means that the occurrence of the diseases is inevitably due to the mixture of the season in which they occur. We cannot predict that these diseases will occur, prevent their occurrence or cure them when they occur without knowing the condition that prevails in the body based on the corruption of the air. With this

method, however, we are in a position to deduce and learn the powers of all the climactic conditions Hippocrates did not mention in addition to those he did mention.⁶⁸

As in L1, Galen refers in L2 to the fact that Quintus failed to interpret Hippocrates according to Hippocrates' stipulation that medical discourse arises from a combination of medical experience and reason. Yet, Galen censures Quintus in L2 for two other reasons, which are not mentioned in Li. In Li, Quintus was censured for not adopting Hippocrates' medical methodology whilst interpreting Hippocrates' text. In L2, Quintus is censured for "deviating from" and not "preserving" Hippocrates' thought. In this passage, Galen suggests that preserving the author's intention is accomplished by referring to other parts of the author's corpus of medical writings. Thus, Galen says that in order to interpret what Hippocrates says in the *Epidemics*, Quintus should have referred to what Hippocrates says about the seasons and ages in the *Aphorisms*, Book Three and in *Airs, Waters and* Places. The second virtuous characteristic of exegesis is that the comments be "useful." Rebecca Flemming has shown that this is a common theme in Galen's meta-exegetical digressions. ⁶⁹ In L2, however, "useful" does not mean that the details provided by the commentator should be directly relevant to medical practice. In this passage, it is evident that Galen links the requirement that commentaries be useful to their ability to expand our medical knowledge by deduction from medical principles that supply the causes for the observed phenomena. In L2, therefore, Galen avers that Quintus' commentary is not useful to the reader because it does not assist him in recognising that the medical principle that what relates the climactic conditions and the diseases in the body is the mixture (al- $miz\bar{a}\check{g}$, ή κράσις) that is particular to every season. Had Quintus' commentary explicitly mentioned the principle that the mixtures of each season causes disease by altering the mixtures in the body, the reader would have been been able to infer "the powers of all the climactic conditions Hippocrates did not mention" and also to understand why Hippocrates assigns powers to those climactic conditions he does mention in his writings.

^{68.} Translation is Vagelpohl's.

^{69.} Flemming, "Commentary," 337–9.

Near the end of the Hippocratic *Epidemics*, Book Six, Hippocrates cryptically remarks: "In cases of thinning, there is a spasm prior to death, the navel bulges out and becomes distended, and sores appear on the gums and around the teeth." Before offering his own interpretation, Galen takes the opportunity to make some remarks about the best way to interpret Hippocrates' works when one encounters an obscurity in the text. Galen contrasts his commentaries as well as as his exegetical method with those adopted by his predecessors. ⁷¹

[L₃a] When I encounter in some of these statements an evident and clear meaning that is likewise correct and genuine, I omit what the commentators on Hippocratic works have mentioned so that it [the commentary] does not become too long.⁷² When I am not able to grasp the meaning of a certain statement because it is unclear, and I myself am not sure that I truly know the speaker's meaning, in this situation, of those who have commented on this book, I mention only those commentators who have commentaries that are famous.

Galen then lists several commentaries that he read on the *Epidemics* and other commentaries on Hippocrates' books. He insists again, however, that he is afraid of burdening the reader with a commentary that is too long and, in spite of its length, fails to achieve the end of all good exegesis,

^{70.} Hippocrates, *Oeuvres complètes d'Hippocrate*, ed. Émile Littré, vol. 5 (Paris: Baillière, 1846), 338.

^{71.} Galen, *Tafsīr Ğālīnūs li-kitāb Afīdīmiyā*, trans. Ḥunayn ibn Isḥāq (Madrid, Escorial Library, MS arabe 805), fol. 155a, ll.21–5. Compare with Galen, *Galeni In Hippocratis Epidemiarum librum VI commentaria I-VI (CMG* V 10,2,2), ed. Ernst Wenkebach, transl. Franz Pfaff (Berlin: Academy of Sciences, 1956), 412, ll. 15–21.

^{72.} Reading "...dikru l-mufassirīna..." as an objective genitive annexation.

namely clarifying what is obscure. Galen lists several other important exegetical norms, however, many of which he does not mention in LL_{1-2} .

ولا رأيت أيضا أن أذكر جميع أولئك المفسرين في هذه التفاسير التي كتبتها الآن، لكني اقتصرت على ذكر المشهورين منهم ومن قال في شرح من الأقاويل الغامضة شيئا مقنعا فإني قائل في هذا الموضع أيضا شيئا قد سمعتموني أقوله دائما وهو أن الأقالويل الغامضة التي تجرى مجرى الرمز ليس يستحق أحد أن يصدق في تفاسيرها سوى قائلها وحده وأما غيره من سائر الناس فمنهم من لا يبلغ تأويله إلا المقدار الذي يكون به مما يقبل ويقنع به، ومنهم من يكتب ما لا يفهم ويعقل، ومنهم من يكتب في شرح الأقاويل القديمة التي سرهم شرحها ما هو أغمض منها. وذلك أن جميع الناس إلا القليل منهمن يحرصون على قراءة الكتب الغامضة التي هي في غاية الغموضة الجارية مجرى الرمز على المعلمين وما كان منها أيضا إنما يرعى فهمه أولئك المعلمون فقط. ولست أدري ما الذي يدعوهم الى ذلك.

[L₃b] Yet, I do not think that it is appropriate to cite all these commentators in these commentaries that I have been writing at present. Rather, I limit myself to mentioning those that are well-known, and who says something that instills conviction whilst commenting on obscure statements. Yet, I too shall say something here that you always hear me say, namely in the case of an obscure statements that are like a riddle, only the person who originally spoke it is entitled to affirm the interpretation of as correct. As far as all other people are concerned, there are among them whose interpretation reaches only to the extent of what is acceptable and convincing [to others], there are others who write things that are not coherent nor intelligible, and yet others, when explaining an old word whose interpretation they find amusing, they write something that is even more obscure than it [the original author's statement]. For all but a few people are eager to read with teachers books that are so obscure that they are like riddles, as well as books that only those teachers have made it their concern to understand. Yet, I do not know what cause they have to do that.

Thus, in LL₃a-b, Galen mentions several other characteristics that good commentaries must have. In these comments, Galen is concerned with how the commentator should use and interact with

^{73.} Galen, *Tafsīr Ğālīnūs li-kitāb Afīdīmiyā*, fol. 155b, ll.8–17. Compare with Galen, *Galeni In Hippocratis Epidemiarum librum VI*, 413, ll.5–16.

earlier commentaries written on Hippocratic texts. In L3a, Galen makes the general recommendation that there is *no need to mention any other interpretations of the text when the author's intent is clear*. Galen says that the only time he he feels the *need to mention interpretations offered by other commentators is when he cannot make sense of Hippocrates' words and he is not sure that he has understood Hippocrates correctly*. Even in such cases, Galen discourages the reader from consulting every commentary they know of. He recommends, rather, limiting oneself to w*ell-known commentaries and to those that "provide a satisfactory interpretation of the text."* Galen insists that in cases where Hippocrates' intended meaning cannot be inferred from the text in a satisfactory way, *no interpreter has the right to believe that his own interpretation is the correct one*.

Lastly, at the beginning of his commentary on the Hippocratic *On Fractures*, Galen touches on a variety of metaexegetical themes, some of which we have already encountered in LL1–3. What is especially noteworthy about his remarks in L4 is that he distinguishes the way he understands how best to comment on Hippocratic texts from the way Hippocrates was commonly interpreted in his day.⁷⁴

Πρὸ τῆς τῶν κατὰ μέρος ἐξηγήσεως ἄμεινον ἀκηκοέναι καθόλου περὶ πάσης ἐξηγήσεως, ὡς ἔστιν ἡ δύναμις αὐτῆς, ὅσα τῶν ἐν τοῖς συγγράμμασίν ἐστιν ἀσαφῆ, ταῦτ' ἐργάσασθαι σαφῆ. τὸ δ' ἀποδεῖξαί τι τῶν γεγραμμένων ὡς ἀληθὲς ἢ ὡς ψεῦδος ἐλέγξαι, καὶ εἰ κατηγόρησέ τις σοφιστικῶς ἀπολογήσασθαι, κεχώρισται μὲν ἐξηγήσεως, εἴθισται δὲ γίγνεσθαι πρὸς ἀπάντων ὡς εἰπεῖν τῶν γραφόντων ὑπομνήματα. καὶ νὴ Δία οὐδὲν κωλύει καὶ τούτου μετρίως ἄπτεσθαι τὸν ἐξηγητήν. τὸ δ' ἀγωνίζεσθαι τελέως ὑπὲρ τῶν τοῦ γράφοντος δογμάτων ἐκπέπτωκε τὸν ὅρον τῆς ἐξηγήσεως. οὐ πρὸς τοῦτον οὖν τὸν σκοπὸν, ἀλλὰ πρὸς τὸν εἰρημένον ἀποβλέπων ἐγὼ προσθήσω ταῖς ὄντως ἐξηγήσεσιν ἑκάστοτε βραχέα τῆς πίστεως ἕνεκα τῶν εἰρημένων.

Before I begin the interpretation of these [chapters] in turn, it is worth making a statement in a general way about all interpretation, namely, that it is the capacity to make clear what is unclear in the text itself. Demonstrating that something written in the text is true,

^{74.} Galen, *Galeni opera omnia*, ed. Karl G. Kühn, vol. 18b (Leipzig: Car. Cnoblicii, 1829), 318–9. Barnes, "Metacommentary," 199. Mansfeld, Prolegomena, 135–6. Flemming, "Commentary," 336–7.

or exposing it as false, or defending it if it is subjected to sophistical criticism—these have nothing to do with interpretation, though it is the custom of practically everyone who writes commentaries to do this. Certainly, nothing prevents one from undertaking this [kind] of interpretation in a moderate way. Yet, to exert oneself completely on behalf of the author's doctrines falls outside the boundaries of interpretation. I certainly do not turn towards this purpose [in my commentaries], but to saying things that in every instance focus intently on interpretation that is to the point and that instills conviction [in the reader] because of what is said.

Unsurprisingly, Galen reiterates the now familiar claim that the purpose of commentary is to make the author's intended meaning clear. Further, Galen states more forcefully than before his belief that dialectics, polemics and demonstration have no place in exegesis. In other words, arguments about whether a certain doctrine is true or false have no place in Galen's view of the types of activities proper to commentary. This requirement strikes me as remarkable, and, indeed, Galen himself adds as an aside that virtually everyone who comments on Hippocrates engages in a variety of discursive activities that do not reflect Galen's model of what commentary should be.

Finally, Galen concludes L4 by drawing attention to the relation between interpretation and certainty or conviction (π i σ τις). Generally, for Galen an important objective of commentary is that upon reading the commentary, the reader is convinced that the commentator's interpretation of the passage is a true reflection of what Hippocrates intended to say. The objective is not, in other words, to argue about whether what Hippocrates said is true, but that there is conviction that he has understood Hippocrates' thought correctly. While Galen admits in L3a that in some cases, Hippocrates' text may be so unclear that there he is unsure about what meaning Hippocrates intended to convey, for the adept commentator these cases must be the exception rather than the rule. Galen seems to believe that two factors go into instilling conviction about the commentator's interpretation: one, that *it is to the point*; and two, that it is stated *clearly*. Thus, in L3a Galen states that he avoids offering interpretations that "ramble on," and in L3b he criticises commentators

^{75. &}quot;...um nicht weitläufig zu werden, in Wenkenbach's edition, 412, l.18: taǧannuban minnī li-l-

who offer interpretations of the Hippocratic text that are more incoherent, obscure and difficult to understand than the original. Interpretations that do not have either quality are unlikely to instill conviction in the reader that what they have read is a true representation of Hippocrates' intended meaning.

We may summarise the characteristics that exegesis should have according to the meta-exegetical discussions scattered throughout Galen's Hippocratic commentaries.

- 1) Follow the exegetical principles to which the author himself subscribed;
- 2) Demonstration is not a suitable element in medical exegesis
- 3) Arguments about whether a certain doctrine is true or false have no place in Galen's view of the types of activities proper to commentary;
 - 4) No interpreter has the right to believe that his own interpretation is the correct one;
- 5) There is no need to mention any other interpretations of the text when the author's intent is clear. Galen says that the only time he he feels the need to mention interpretations offered by other commentators is when he cannot make sense of Hippocrates' words and he is not sure that he has understood Hippocrates correctly;
- 6) He recommends, rather, to limit oneself to well-known commentaries and to those that "provide a satisfactory interpretation of the text";
- 7) Commentaries have to be useful to their ability to expand our medical knowledge by deduction from medical principles that supply the causes for the observed phenomena;
- 8) Preserving the author's intended meaning is accomplished by referring to other parts of the author's corpus of medical writings;
- 9) Commentary should instill *conviction* that the interpretation of Hippocrates is correct. This is achieved by making the commentary *to the point*, and ensuring that it is stated *clearly*.
- 3.2 Abū Bakr Muḥammad ibn Zakarīyā al-Rāzī's Doubts on Galen: A "Commentary?"

taţwīl.

Abū Bakr Muḥammad ibn Zakarīyā al-Rāzī was deeply influenced by Galen. In the introduction to *Doubts on Galen*, Muḥammad ibn Zakarīyā records the fact that he owes Galen a debt of gratitude greater than he owes to any other person. Yet, it is clear that Muḥammad ibn Zakarīyā is not thinking only of his debt to Galen's philosophical learning and medical lore. From his words, it is clear that he sought to imitate Galen's philosophical praxis as well as Galen's views about the relationship between truth and argumentation. Indeed, he considered a firm, even tenacious commitment to arguing about truth as a central tenant in Galen's philosophical praxis. This element of Galen's philosophical and medical legacy left a lasting impact on Muḥammad ibn Zakarīyā's writing. Indeed, it is evident from the introduction to *Doubts on Galen* that imitating this very aspect of Galen's philosophical praxis inspired him more than any motive. To

وبودي يشهد الله أن هذه الشكوك التي ذكرتها في هذا الكتاب لم تكن في كتب هذا الرجل الحبر الفاضل ... لكن صناعة الطب والفلاسفة لا تحتمل التسليم للرؤساء والقبول منهم ولا مساهلتهم وترك الاستقصاء عليهم ولا الفيلسوف يحب ذلك من تلاميذه والمتعلمين منه كما قد ذكر ذلك أيضا جالينوس في كتابه في منافع الأعضاء حيث وبخ الذين يكلفون أتباعهم وأشيعهم القبول منهم بلا برهان. وكان أكثر ما جرأني وسهل علي أن هذا الرجل لو كان حيا حاضرا لم يلمني على تأليف هذا الكتاب ولم يثقل ذلك عليه إيثارا منه للحق وحبا لتقصى المباحث بلبوغ أواخر لها بل كان بجد ونشاط إلى تصفحه والنظر فيه وإما حل جميع الشكوك التي فيه وحمدني على أن صرت سببا لأن يكون كلامه في هذه المواضع السكوك فيها صار له فضل بيان وحراسة عن المطاعن على ما كان عليه قبل وإما رجع عنه كلها فكان يحمدني حمدا أكثر إذ صرت منبها له على السهو والغفلة الموكلة بالبشر وإما حل بعضها ورجع عن بعض وكان يجتمع فيه الأمران.

With God as my witness, I wish these doubts that I have mentioned in this book were not in the books of this eminent, learned man Yet, the arts of philosophy and medicine do not tolerate submitting to authorities, [uncritically] accepting [what they say], indulging them and refraining from taking their words at face-value. Nor did Aristotle (literally, "the philosopher (al- $faylas\bar{u}f$)") like to see this in his disciples and the people who learn form him, as Galen himself has mentioned in his book On the Uses of the Parts of the Body,

^{76.} Muḥammad ibn Zakarīyā al-Rāzī, *Kitāb al-šukūk li-l-Rāzī*, ed. Muṣṭafā L. 'Abd al-Ġanī (Cairo: Maṭba'at dār al-kutub wa-l-waṭā'iq al-qawmīya, 2005), 39.

^{77.} Ibid., 40–1.

where he censured those who demand that their followers and adherents accept them without proof. Yet, what encouraged me above all else and what facilitated me was the fact that were this man alive and present [in front of us], he would not have rebuked me for composing this book, nor would that have vexed him, for he used to esteem truth, liked to undertake exhaustive investigations and to reach the limits of them. Rather, he would have turned to scrutinise and examine them with due earnestness and diligence, in which case he would have resolved all the doubts that are in it and praised me because I would have become a reason for the fact that his words in this or that doubtful passage benefit from greater clarity and are fortified against reprobation based on what he had affirmed previously; or, he would renounce all of them, in which case he would praise me even more since I would have drawn his attention to the forgetfulness and inattentiveness that mankind has been burdened with; or he would have resolved some and renounced some, in which case both [reasons for Galen's praise] would have accrued to me.

Muḥammad ibn Zakarīyā looked to Galen's own example for reassurance that he was being faithful to Galen's legacy whilst writing *Doubts on Galen* in a way that was both (1) exhaustive and (2) directed not towards clarifying Galen's words when they were unclear, but showing that Galen's views are false, contradictory or lack corroborating evidence. Following Galen's example, then, Muḥammad ibn Zakarīyā sought to settle whether a huge number of philosphical and medical doctrines collected from Galen's entire corpus were, in fact, true or false by supplying evidence, constructing proofs, bringing forward counterexamples, and highlighting contradictory statements in different texts in the Galenic corpus. He justifies the fact that *Doubts on Galen* was written to be (1) exhaustive by alluding to the fact that Galen himself "liked to undertake exhaustive investigations and to reach the limits of them." He justifies the fact that *Doubts on Galen* is written to be (2) critical and directed by dialectical ends because he saw that Galen esteemed truth highly, to the extent that he believed that Galen would never fail to defer to the true doctrine once it was demonstrated to him.

Of course, other Greek philosophers stood as philosophical exemplars for Muḥammad ibn Zakarīyā, particuarly philosophers who are famous for criticising the authors and teacher to whom

they owed the greatest debt, such as Aristotle and Plato, Theophrastus and Aristotle, and Themistius and Aristotle. He respects the fact that in each case the student deferred ultimately to the doctrine he felt was true rather than to the doctrine his teacher had held. Muḥammad ibn Zakarīyā includes Galen among these august personalities. He admired, too, Galen's attitude toward truth mixed with a "tireless" polemic against false doctrines. It was Galen's deference to truth combined with an exhaustive and relentless (if not frequently long-winded) pursuit of it that impressed Muḥammad ibn Zakarīyā about Galen's philosophical example and what he sought to imitate in *Doubts on Galen*.

فأما جالينوس فلست أحتاج أن أقول في كثرة رده على القدماء والأجلة من أهل زمانه وصبره على ذلك وقوته والإطالة فيه إذ كان ذلك أكثر من أن أحصيه وإذ ذلك بين لقارئ كتبه أن ذلك أعظم همته ولا أحسب نجا منه أحد من الفلاسفة ولا من الأطباء إلا مشدوخا وجل كلامه عليهم حق بل لو شئت لقلت كله حق. وذلك مما يدل على سعة علمه وذكاء طبعه وكثرة تحصيله.

[L6] I do not need to speak about how frequently Galen used to refute the ancients and the eminent thinkers of his age, how tirelessly he [pursued them], how forceful it [his refutation] was, nor how extensive. For it [refutation] was more than can be enumerated, and it is evident to anyone who reads his books that this was what occupied him the most. I reckon that not a single one of the philosophers and physicians escaped his criticism without being devastated by it. Most of what he said criticising them was true; indeed, one could say all of it was true. This indicates how vast his knowledge was, how quick-witten his nature, and how many sources he used to draw from (wa-katrati tahsīlihī).

This is how Muḥammad ibn Zakarīyā characterises Galen's refutations and polemics against his predecessors and contemporaries. Yet, it equally characterises his own objectives and the structure of *Doubts on Galen*. These, then, are the motives that precipitated Muḥammad ibn Zakarīyā's critical activity in *Doubts on Galen*, and that structured the argument and content of the book. Given the nine elements of good commentary and interpretation that Galen prescribed in his Hippocrat-

^{78.} al-Rāzī, Kitāb al-šukūk, 41.

^{79.} Ibid., 42.

ic commentaries, it strikes me as unlikely that Muḥammad ibn Zakarīyā would have classed the critical activity he engages in *Doubts on Galen* as *commentary* or *interpretive* activity. In the Greek philosophical and medical commentary tradition, Galen observes that, as a matter of course, commentators engaged in polemical debates about the objective truth of this or that doctrine. They constructed proofs, cited empirical evidence, highlight contradictory statements in different texts, defended Hippocrates or Aristotle from criticism, or even, as Galen sometimes does, criticises Hippocrates for various reasons. All these activities are directed at resolving whether a certain Hippocratic doctrine is true. And all these activities Galen excludes from falling with the scope of proper commentary activity. For me, this suggests that Muḥammad ibn Zakarīyā composed *Doubts on Galen* in imitation of Galen's philosophical and medical praxis, which aimed at thoroughly and critically discovering, corroborating and defending true doctrines, refuting and uncovering false doctrines, all the while avoiding partisanship and unthinking deference to medical and philosophical authority. He did not, in other words, compose *Doubts on Galen* in imitation of Galen's exegetical method in his Hippocratic commentaries. So

Based on his work on the commentary tradition on Avicenna's *Pointers and Reminders*, Robert Wisnovsky has identified several exegetical functions that verification ($tahq\bar{q}q$) in Avicenna's *Pointers* had. Some of these techniques fall within the scope of the Galen's prescriptions about exegetical practice. Verification plays an expository role when commentators provide alternate readings of words and phrases based on their knowledge of *Pointers'* transmission history. Often this expository function is accomplished by using "synonyms to gloss key pieces of conceptual vocabulary" whilst at others they supply complete definitions. Wisnovsky also observes that verification sometimes involved harmonising "apparently incongruent theories put forth by the

^{80.} On the different styles and conditions under which the Hippocratic commentaries were written, see von Staden, "Staging the Past, Staging Oneself," 135–44.

^{81.} Robert Wisnovsky, "Avicennism," 354–7.

^{82.} Wisnovsky observes that these techniques were well-established among Greek Aristotelian commentators. See Wisnovsky, "Avicennism," 355.

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matn's author in other works with those found in the *matn*." Naturally, this agrees with Galen's stipulation that, whenever possible, the text under discussion should be interpreted using other texts in the Hippocratic corpus.

Galen would have excluded most of the other functions played by verification, however, as being unsuited to *commentary*. For example, Wisnovsky says that several functions of verification implied some transformation in the author's text: "Commentators supplied new proofs of propositions that were left unproven in the matn"; 83 "[c] ommentators changed the order of proofs contained in the matn, or changed the order of the premises in those proofs; commentators made corrections to weak portions of proofs contained in the matn; commentators supplied replacement proofs for weaker proofs contained in the matn; and commentators criticized and revised the new proofs of previous commentators."84 These activities not only violate the stipulation that proof and demonstration be avoided in commentary. They go directly against the ultimate purpose of the commentary, which is to make what clear what is obscure, whereas supplementing, fixing or replacing proofs in the text with alternative proofs seems to go well beyond the scope of commentary activity allowed by Galen. Wisnovsky says that verification frequently involved har*monising* "the author's theories with the apparently incongruent theories of other authorities and schools. The commentator did this by excavating, and exposing, what he then argued was the true common basis underlying the apparently incongruent positions."85 Once again, Galen did not believe that commentary on a Hippocratic text should involve non-Hippocratic *methods* or deriving insight from non-Hippocratic authorities, especially other Hippocratic commentators. Whereas Galen permits referring to the "famous" Hippocratic commentaries in exceptional circumstances, verification makes harmonising seeming incongruities between authorities a matter of course. Wisnovsky says: "When commentators found the theories set forth in the *matn* to be irreparable or if they had no interest in repairing the author's *matn*, or systematizing the author's philosophy, or harmonizing the author's philosophical positions within the positions of apparent rivals—they

^{83.} Ibid., 355.

^{84.} Ibid., 356.

^{85.} Ibid.

attacked and undermined the position expressed in the *matn*, and presented proofs in support of their own opposing positions." This last and what might be called most "radical" function of verification in the post-classical Islamic philosophical tradition is unambiguously excluded by Galen's vision of how commentary should function. For Galen does not countenance outright rejection of the author's doctrines. Verification is a commentary function in which the commentator constructs arguments about whether a certain doctrine is true or false. Not only does Galen frown on such activities in commentaries, Galen holds that in case the proper interpretation of the author's words is in doubt, the commentator does not have the license to hold that his interpretation is the correct one.

It is clear, then, that the most fundamental functions that Galen assigns to medical commentary are incompatible with the functions that post-classical commentators assigned to verification. Likewise, while it is true that several of the vaguely "exegetical" tasks that Muḥammad ibn Zakarīyā performs in *Doubts on Galen* are tasks that a "verifying" commentator would undertake as well, to my mind it is hardly likely that Muḥammad ibn Zakarīyā compose this book in his capacity as a Galenic commentator, as a *šāriḥ* or *mufassir*, but in his capacity as a philosopher who has taken Galen as his exemplar. As a consequence, when Faḥr al-Dīn al-Rāzī wrote his commentary on the *Canon* using the verifying mode of commentary on Avicenna's philosophical works, this appears to have been a watershed moment in the history of Islamic medical discourse. I shall argue that this was in fact a watershed moment in the next section by looking at how the late thirteenth-century Melkite physician Abū al-Faraǧ Ibn al-Quff referred to Faḥr al-Dīn's commentary, and imitated Faḥr al-Dīn's method in his great commentary on the Hippocratic *Aphorisms*.

4 The Legacy of the Commentary on the *Canon* in Medical Writing at the end of the Thirteenth Century

4.1 Ibn al-Quff and Faḥr al-Dīn al-Rāzī on Swelling: An Exchange

The "exchange" between Ibn al-Quff and Faḥr al-Dīn is precipitated by *Aphorisms* iv.72, in which Hippocrates speaks about the prognostic value of urine:⁸⁷

^{86.} Ibid., 356–7.

^{87.} Greek: Magdelaine, "Histoire," 2:426. Arabic: Galen, *Tafsīr Šālīnūs li-Fuṣūl Abuqrāt*, trans.

'Οκόσοισιν οὖρα διαφανέα λευκὰ, πονηρά· μάλιστα δὲ ἐν τοῖσι φρενιτικοῖσιν ἐπιφαίνεται.

Hippocrates said: when urine is transparent and white, it is a bad sign, especially in fevers that are accompanied by swelling in the brain.

Ibn al-Quff divides his commentary on this aphorism into seven investigations, in the third of which he takes the opportunity to speak at length about what Hippocrates means when he says that clear urine is "accompanied by swelling in the brain (yakūnu ma'ahā waramu l-dimāġ=en toisi phrenetikoisin epiphainetai)." Ibn al-Quff discusses different kinds of fevers each of which is accompanied by swelling in the brain. He mentions several different types, such as phrenitis (farānīṭis, al-sirsām^{\$8}), erysipelas (al-ḥumra) and lethargic fever (līṭarġūs^{\$9}) and a form of swelling with very severe symptoms called "ṣubārā(?)⁹⁰." This classification of fevers is derived directly from the Canon, Book Three, in which fevers in the head are discussed.⁹¹ Common to all these diseases as they are described in the Canon is the fact that the brain is affected by swelling. The claim that the brain swells is what provokes Ibn al-Quff to cite Muḥammad ibn Zakarīyā and Faḥr al-Dīn's defense of Avicenna's doctrine in the Canon that bones and the brain swell against Muḥammad ibn Zakarīyā's view that they do not.⁹²

Ḥunayn ibn Isḥāq, ed. Taro Mimura (The University of Manchester, 2012–2017), doi: 10.3927/51931732.

^{88.} Manfred Ullmann, Wörtebuch zu den griechisch-arabischen Überzetzungen des 9.

Jahrhunderts (Wiesbaden: Harrassowitz, 2002), 742 [Entry ἡ φρενῖτις]. Avicenna, Canon, 2:44.

^{89.} Ullmann, Wörterbuch, 391 [Entry ὁ (ἡ) λήθαργος]. Avicenna, Canon, 2:50.

^{90.} Avicenna, Canon, 2:50.

^{91.} Ibid., 44–52.

^{92.} Ibn al-Quff (d. 1286), *Commentary on the Hippocratic Aphorisms*, ed. ARABCOMMAPH (The University of Manchester, 2012–2017), doi: 10.3927/52132103. MS, London, British Library, Or. 1348 suppl., fols. 122b, l.42–3a, l.13.

إذا عرفت هذا فنقول: ذهب الرازي في كتابه المعروف بالفاخر إلى أن الدماغ لا يرم وكذلك العظم. قال: "وذلك لأن حدوث الورم موقوف على التمديد فما لا يقبل التمديد لا يرم. والعظم لا يقبل التمديد لصلابته فلا يرم. وأما الدماغ فإنه للينه لا يقبل التمديد فلا يرم." وذهب الرئيس إلى أنهما يرمان. قال في الفصل الخامس والعشرين من كليات القانون حيث تكلم في الأمراض المركبة: "والورم يعرض للأعضاء اللينة وقد يعرض للعظام شيء شبيه بالورم ويغلظ له حجمها ويزداد طولها ولا يغرب أن يكون القابل للزيادة بالنمو يقبلها بالفضل إذا نفذ فيه." قال الإمام فخر الدين محتجا للشيخ: قول الرازي إن العظم لا يرم وكذلك الدماغ قول فاسد من وجوه خمسة...

Having understood this, we say: "In his book that is known as *The Outstanding [Book]* (al- $F\bar{a}hir$) [Muḥammad ibn Zakarīyā] al-Rāzī holds that the brain does not swell, nor does bone. He said: 'That is because the ocurrence of swelling depends on expanding, for what does not expand does not swell. Yet, bone is not prone to expand because it is hard, so it does not swell. Owing to the fact that the brain is soft the brain does not expand, and so it does not swell.' Avicenna holds, however, that they both expand, for in the twenty-fifth (sic) chapter of the *Generalities* of the *Canon* where he speaks about compounds diseases, he says: 'Swelling affects the soft body parts, and sometimes the bones are affected by something that resembles swelling, making their bulk viscous and they increase in length. Nor is it unlikely that what is prone to increase in size by growing is also prone to increase in size by superfluity when it penetrates it.' Adducing evidence in support of Avicenna, Faḥr al-Dīn says that Rāzī's statement that neither the bones nor the brain swells is false ($f\bar{a}sid$) on the basis five considerations..."

Ibn al-Quff then carefully paraphrases Faḥr al-Dīn's five arguments against what the latter called Muḥammad ibn Zakarīyā's "minor premise (ṣuġrāhu)" that the bones and brain do not expand. After this synopsis Ibn al-Quff weighs in on the debate. First, he presents what he believes the counterarguments Muḥammad ibn Zakarīyā would have constructed against Faḥr al-Dīn's criticisms based on the medical theory that both thinkers shared. Ibn al-Quff defends Muḥammad ibn Zakarīyā, pointing out that Faḥr al-Dīn focused on the wrong sense of expansion in his *Canon* commentary, and that it is "not possible to compare" these senses with each other. After reviewing the arguments, Ibn al-Quff says that "if we judge impartially (iḍā anṣafnā)," Muḥammad ibn Zakarīyā is correct in thinking that the bones do not swell. Ibn al-Quff agrees with Faḥr al-Dīn in principle

that the brain swells, but he does not make use of Faḥr al-Dīn's arguments, relying, rather, on medical experience (or reports based on medical experience) to argue that the brain swells. Lastly, Ibn al-Quff exculpates Avicenna from error by drawing attention to the fact that, when read with proper care, Avicenna does not say explicitly that the bones swell.

والمرادة ونفس التمديد. أما الفاعل فإن الفاعل للمنو الطبيعة البدنية الموكلة بتدبير البدن والفاعل للورم دفع الطبيعة للمادة المورمة أو والممادة ونفس التمديد. أما الفاعل فإن الفاعل للمنو الطبيعة البدنية الموكلة بتدبير البدن والفاعل للورم دفع الطبيعة للمادة المورمة أو حركتها أو هي بنفسها. وأما المادة فإن الناع مادة النمو مادة صالحة مألوفة ومادة الورم فاسدة مؤذية. وأما نفس التمديد فإن الزيادة في النمو في الأقطار الثلاثة على التناسب الطبيعي. والزيادة في الورم في بعض الأقطار دون بعض. وإذا كان النمو مغايرا للتمديد بهذه الأمور فلا يجوز أن يقاس أحدها على الآخر. والجواب عن الثاني أن نفوذ الغذاء في جوهر الأعضاء أمر طبيعي مألوف. وإذا كان كذلك فلا يلزم من قبول الطبيعي قبول ما ليس بطبيعي. والجواب عن الثالث قوله إن الدماغ لزج إما أن يعني باللزوجة الدمومة أو غلظ القوام مع قبول التمديد كالمخاط. فإن عني بها الأول فتلك لم تقبل التمديد حتى تتورم. وإن عني بها الثاني فهو باطل فإن التشريح قد دلنا على أن جوهر الدماغ ليس هو كذلك. والجواب عن الرابع أن سواد الأسنان واخضرارها لا تقارنه زيادة البتة. وإذا كان كذلك فليس والجواب عن الخامس ما ذكرناه في الأول أو نقول لو ورمت الأسنان وحصل لها ما ذكره فلا ينبغي أن يقاس عليها العظام فإن جوهرها العظام ويدل على هذا العقل والنفل. أما الأول فمن وجهين أحدهما أنها أقوى حسا من العظام بل الأطباء يعتقدون أن عبر هوا العظام ويدل على هذا العقل والنفل. أما الأول فمن وجهين أحدهما أنها أقوى حسا من العظام بل الأطباء يعتقدون أن العظام عديمة الحس والأسنان الحيوانات العظيمة الجثث. وأما النقل فإن الإمام أبقراط يقول في خامسة الفصول البارد ضار للعظام والأسنان والعصب والدماغ والنخاع. وأما الحاؤ فنافع موافق لها. فأؤد الأسنان بالذكر ميزها عن الغطام.

واعلم أنا إذا أنصفنا في هذه المسألة كان الحق فيها مع الرازي في أمر العظام ودون الدماغ. ولذلك لم يجزم الشيخ الرئيس بحدوث الورم فيها. بل قال يعرض لها شيء شبيه بالورم يغلظ له حجمها ويزداد طولها ولا يغرب أن يكون القابل للزيادة بالنمو يقبل الزيادة بالفضل. ومع هذا فهذا القدر الذي ذكره إنما يمشي ويصح في سن المنو لأن الأعضاء فيه تكون قابلة للنمو. وأما الدماغ فإن جرمه يرم خلافا لما ذكره الرازي حتى أنه في بعض الأوقات تتفسخ الشؤون ويتفسخ عظم القحف.

[Muḥammad ibn Zakarīyā] Rāzī would reply to this first [objection], saying: "The expanding that happens to the bone and the brain by growing differs from the expanding that occurs to them when they swell with regard to the efficient cause, the material [substrate], and the stretching itself. The efficient cause of growing is the bodily nature that is responsible for managing the body. The efficient cause of swelling is the nature that repels the matter that causes the swelling, or that the matter moves or the matter itself. The material

[substrate] of growth is matter that is healthy and is what the body is accustomed to, whereas swelling matter is spoiled and harmful. As for the expansion itself, the increase in size by growing is in three dimensions according to the natural proportions, whereas the expanding that happens from swelling is in some dimensions and not in others. Thus, seeing that growth differs from expanding in these three ways, it is not possible to compare one of them with the other." The response to the second [objection] is that the way that nutriment penetrates the body parts' substance is something familiar and customary. That being the case, that [the body part] accepts what is not natural does not follow from the fact that the body parts accept what is natural. The response to the third [criticism]: "When he says that the brain is viscous, he is referring either to the fact that it is greasy or that its substance is viscous whilst also having the capacity to stretch, such as what is fibrous. If by this [statement] he refers to the first sense [namely, that it is greasy], this is not liable to stretching so that it swells. If, by it, he means the second [sense of viscous], [his statement] is false, for anatomy shows us that the brain's substance is not like that." The response to the fourth [criticism] is that the teeth becoming black and green is not accompanied by an increase [in size] at all. If this were so, it would not be because it receives the superfluities that give it nutriment. It is, rather, because the tooth's mixture itself is corrupted so that the food that comes to it does not dissolve in the manner that it should when it receives nutriment. The response to the fifth [criticism] is like what was mentioned in connection with the first [criticism]. Or, he should say: "Even if the teeth were to swell and what he describes were to happen, it would still not be appropriate to compare them to bones because their substance is not like the bones' substance." Both reason and authoritative text (al-'aql wa-l-naql) indicate that this is true. [Reason indicates it is true] from two considerations. The first is that they [teeth] are more sensitive than bones. The physicians even believe that he bones do not have any sensation, whilst the teeth have sensation. The second consideration is that when we expose the teeth to corruption, we see that the corruption flows to some of them but not to others. This [phenomenon] is evident in the teeth of animals with large carcasses. The proof from authoritative texts is that in the fifth book of the *Aphorisms*, Hippocrates says: "Cold harms the bones, teeth, nerves,

brain and spinal marrow. Hot brings benefit and is favourable for them." Thus he singled out the teeth for mention to differentiate them from the bones.

If we judge impartially on this question, know that Rāzī is correct with regard to the bones but not the brain. For this reason Avicenna did not make a definitive statment about swelling affects them. He said: "Something that resembles swelling, thickening its bulk thereby and increasing it in length. Nor is it unlikely that what is liable to increasing in size by growing is also liable to increasing in size by superfluity." Nevertheless, this capacity that he mentions only holds and is true in relation to the age of growth because during it the body parts are liable to growing. Contrary to what Rāzī mentions, on the other hand, the brain swells, so much so that at times the cranial sutures and the bones in the cranium burst.

The similarities between the macrostructure of Ibn al-Quff's commentary on the Hippocratic Aphorisms and Faḥr al-Dīn's commentary on the Canon are evident. What is more, in Ibn al-Quff we find the techniques of verification being used in a more refined manner than we find them in Faḥr al-Dīn's commentary on the Canon. The manner in which Ibn al-Quff defends the absent Muḥammad ibn Zakarīyā recalls the "painstaking investigation (al-istiqsa')" that Faḥr al-Dīn claimed in later works to practice, where in the case that he did not find "in the sources of the proponents of that thought-system to support their views," he would "come up with the best defense possible to affirm these views." It is noteworthy that Ibn al-Quff does not construct counterarguments in defense of Muḥammad ibn Zakarīyā's views because he fully agrees with them, but because this kind of rigorous consideration of all aspects of the argument was required by the model of exegesis he followed, in which impartiality (al-insaf), played a central role. It is his commitment to impartial consideration of Faḥr al-Dīn's, Muḥammad ibn Zakarīyā's and Avicenna's views that leads Ibn al-Quff to disagree with all of them and to offer his own views on the matter. Once again, Ibn al-Quff's impartiality recalls another pillar of Faḥr al-Dīn's exegetical method, namely the anti-

^{93.} Quoted from *Frontiers of the Intellects* (*Nihāyāt al-'uqūl*), quoted and translated in Shihadeh, "Al-Rāzī's Commentary," 300.

thetical attitude he adopts toward partisanship. For Fahr al-Dīn as well as Ibn al-Quff, it seems, in order to arrive at the truth, it was important to understand and critique earlier systems, but also "steer clear of both the traditional Avicennists' uncritical imitation and the counter-Avicennists' fixation on refutation."94 Like Fahr al-Dīn, the goal of the critical attitude that Ibn al-Quff adopts toward Avicenna, Muḥammad ibn Zakarīyā and Faḥr al-Dīn is not to engage in refutation or apologetic as an end in themselves; the criticism is, for Fahr al-Dīn as well as Ibn al-Quff, "methodical." 95 Finally, Ibn al-Quff's appeal to "reason and authoritative texts (*al-'aql wa-l-naql*)" recalls a familiar practice in Fahr al-Dīn's exegetical repertoire in the *Canon of Medicine*. Whereas in other authors in the twelfth and thirteenth centuries, the idea of authoritative text (naql) means texts such as Qur'an and *hadīt*, for Faḥr al-Dīn as well as for the Melkite Christian Ibn al-Quff *naql* here does not mean revelation, but any other authoritative medical or philosophical text, such as Hippocrates' Aphorisms, Avicenna's Canon or, as we shall see below, thy physics of The Healing. In other words, we find that how Ibn al-Quff thinks about medical authority and the task of medical commentary mirrors to a great degree how Fahr al-Dīn thought about philosophical authority and the task of philosophical commentary. For Fahr al-Dīn, methodically criticising Avicenna's philosophical works using Avicenna's writings as well as the works of earlier authors was not only the best way to comment on a text by Avicenna, but also to compose original works in philosophy. There is no question that Hippocrates and Galen remained central to Ibn al-Quff's thought. As we have seen, however, there is a sense in his commentary practices, in which Avicenna now occupied a privileged position, methodically criticising Avicenna's medical and philosophical works as modeled by Faḥr al-Dīn was the the best way to comment not only on Avicenna's texts, but on Hippocrates' Aphorisms as well.96

4.2 Ibn al-Quff (d. 1286) and Faḥr al-Dīn al-Rāzī on Pain and Pleasure: The Other

^{94.} Ibid., 299.

^{95.} Ibid.

^{96.} These conclusions are noteworthy. They are not surprising, however, given Ibn al-Quff's education at the hands of Faḥr al-Dīn's students such as al-Ḥusrawšāhī and other physicians who engaged in the *Canon*-commentary tradition, such as al-Sāmirī, Ibn al-Nafīs and Ibn al-Minfāḥ.

Exchange

Pain and pleasure were apparently a point of considerable dispute among medieval Islamic physicians. As we saw at the beginning of this article, Ibn al-Quff identifies three distinct positions in the debate. Ibn al-Quff says that Galen held that pain is caused by dissolution of continuity only, not noxious irregular mixtures; Avicenna believed that both cause pain; and Averroes and Faḥr al-Dīn held that only noxious irregular mixtures cause pain. Faḥr al-Dīn's commentary on this section of the *Canon* centres on two major problems relating to pain and pleasure: first, the definition of pain and pleasure; second, their aetioogy. In order to draw out elements of Ibn al-Quff's and Faḥr al-Dīn's exegetical practice, the following discussion will focus on questions relating to the aetiology of pain.

Faḥr al-Dīn disputes Avicenna's and Galen's views on the aetiology of pain, holding that that noxious irregular mixtures of any quality can cause pain intrinsically, not just irregular mixtures of the active qualities. For in the Canon of Medicine, Avicenna held that while both dissolution of continuity and noxious mixtures cause pain, in the case of the latter, the mixtures must be of the active qualities, cold and hot, rather than the passive qualities, dry and moist. The latter, according to Avicenna, do not cause pain, intrinsically, that is, because they are noxious mixtures. Rather, they cause pain because they lead to dissolution of continuity, which in such a scenario is the real cause of the pain. Faḥr al-Dīn feels that this distinction is not consistently upheld in Avicenna's writings, alluding to a key passage in On the Soul, in which Avicenna seems to hold the opposite view. Faḥr al-Dīn says:

البحث الرابع وهو أن الشيخ زعم أنه ليس كل سوء مزاج مختلف مؤلما بل الحار والبارد مؤلمان بالذات واليابس مؤلم بالعرض لأنه يتبعه تفرق الاتصال من شدة التقبيض. وأما الرطب لا يؤلم البتة لأن الحار والبارد كيفيتان فعالتان واليابس والرطب كيفيتان انفعالتان قوامهما ليس بأن يؤثر بهما جسم في جسم بل بأن يتأثر من جسم، واعلم أنك قد عرفت أن عند الشيخ سوء المزاج سبب ذاتي للألم وعند جالينوس سوء المزاج إنما يؤلم لأنه يتبعه تفرق الاتصال، فإذا أخذنا بمذهب جالينوس لزم أن يقال الحار والبارد مؤلمان لأن من شأنهما تفرق الاتصال وليس من شأن الرطب والبابس ذلك، وأما إذا أخذنا بمذهب الشيخ بطل هذا الفرق، بل يجب أن يحكم بأن سوء المزاج الرطب أو اليابس مؤلمان بالذات لأن حد الألم عنده إدراك المنافي والرطب واليابس الخارجان عن الاعتدال منافيان فيكون إدراكهما إدراكا للمنافي وهذا هو نفس الوجع، فإن قيل: الشيء إنما يحس إذا انفعل عنه غيره والرطوبة واليبوسة كيفيتان انفعالتان لا فاعلتان فلا ينفعل الحاس عنهما فلا يدركهما، وإذا لم يمكن إدراكهما لم يكونا موجعين بالذات. فنقول: إن الشيخ في كتاب النفس فاعلتان فلا ينفعل الحاس عنهما فلا يدركهما، وإذا لم يمكن إدراكهما لم يكونا موجعين بالذات. فنقول: إن الشيخ في كتاب النفس

بين فساد قول من يقول الرطوبة واليبوسة غير محسوسين بحاسة اللمس. وبين في فصول الاسطقسات أن الرطوبة بمعنى سرعة القبول للأشكال غير محسوسة. والظاهر أنه أراد بالرطوبة التي زعم أنها محسوسة البلة. وعلى الجملة فلا شك أن الرطوبة بمعنى البلة محسوسة. وإن شئت الاستقصاء في ذلك فارجع إلى ما قاله في الفصل الثالث من المقالة الثانية من علم النفس من الشفاء لتطمئن نفسك.

The fourth investigation, which is that the $\check{S}ayh$ thought (za'ama) that not every irregular noxious mixture is painful, but that the hot and the cold are painful intrinsically, and the dry is painful accidentially because dissolution of continuity accompanies it because the contracting it causes is intense. On the other hand, the moist is not painful at all. This is because the hot and the cold are active qualities, and the dry and the moist are passive qualities. Their substance is not such that through them a body makes an impression on another body, but a body is impressed by a body.

Know that you have learned that according to the \S{ayh} , the noxious mixture is an intrinsic cause of pain, whereas according to Galen, the noxious mixture is painful because dissolution of continuity follows from it. If we were to adopt Galen's view, it would follow that one would say that hot and cold are painful because their nature is such that they dissolve continuity, but it is not in the nature of the moist and the dry to do that. If we were to adopt the \S{ayh} 's view, this distinction would disappear. Rather, it is necessary to judge that the moist and dry noxious mixtures are painful intrinsically because the definition of pain according to him [Avicenna] is perceiving what is contrary, and the most and the dry that diverge from the balance are what is contrary, and thus perceiving them is perceiving what is contrary; but this is precisely what pain is $(h\bar{a}d\bar{a}\ huwa\ nafsu\ l-waga'i)$.

If one were to say: "Something is sensed when something else is impressed by it; yet the moist and the dry are passive rather than active qualities. The sense faculty is not, therefore, impressed by them and so it does not perceive them; and if it is not possible that they are perceived, they are not intrinsically painful." We say: "In the *Book of the Soul*, the *Šayḥ* demonstrates that the statement of the one who says that the moist and the dry are not sensed by the faculty of touch is false. In the chapters on the elementary qualities, he demonstrates that the moist is not sensed, when it has the sense of *being quick to accept*

forms. It is apparent, however, that by the moist that he thinks is sensed he refers to wetness. In sum, there is not doubt that the moist is sensed. If you desire to investigate the question exhaustively, refer to what he says in Chapter Three, Discourse Two of *On the Soul* of *The Healing* to reassure yourself."

There are several premises that Faḥr al-Dīn brings to bear in this argument. It seems he has something like the following syllogism—string of Barbaras in fact—in mind.

(P1) Every kind of irregular mixture is sensed by the sense faculties (disputed); (P2) every irregular mixture sensed by the sense faculties is perceived (granted because every sensation (hiss) is a kind of perception ($idr\bar{a}k$); (P3) every perception of the irregular mixture is perception of what is contrary (granted, $idr\bar{a}kun\ l$ -l- $mun\bar{a}f\bar{i}$); (P4) every perception of what is contrary is painful (definition of pain); (Conclusion) therefore every kind of irregular mixture is painful.

In order to arrive at the sought after Conclusion, Faḥr al-Dīn takes Premises 2–4 for granted in this investigation. P2 is assumed because sensation (*al-ḥiss*) is a species of perception (*al-idrāk*). P3, namely that an irregular mixture is something that is contrary to the natural balance, is premise that is put forward as early as Galen, who held that an irregular mixture of the (active) qualities may cause pain by generating dissolution of continuity in a body part. It is also a topic that Faḥr al-Dīn discusses at some length in investigation three in the commentary on this section of the *Canon*. Finally, P4 is simply the definition of pain stated by Avicenna at the beginning of this section of the *Canon*, which Faḥr al-Dīn discusses in investigation one. P1 is disputed, however, and receives all Faḥr al-Dīn's attention in investigation four above. For in the *Canon* Avicenna argues that not every kind of irregular mixture is sensed by the sense faculties directly; only the ones that leave an impression on the sense faculties directly (hot and cold). On the contrary, the passive qualities are by definition not able leave an impression, so they are not sensed directly. So they are not perceived. To argue for P1 and undermine Avicenna in the *Canon*, he cites Avicenna in *The Healing:*⁹⁷

^{97.} Avicenna, Avicenna's De Anima, ed. Fazlur Rahman (London: Oxford University Press,

والأمور التي تلمس فإن المشهور من أمرها أنها الحرارة والبرودة والرطوبة واليبوسة والخشونة والملاسة والثقل والخقة ، وأما الصلابة واللين والليوجة والهشاشة وغير ذلك فإنها تحس تبعا لهذه المذكورة. فالحرارة والبرودة كل منهما يحس بذاته لا لما يعرض في الآلة من الانفعال بها ، وأما الصلابة واللين واليبوسة والرطوبة فيظن أنها لا تحس لذاتها بل يعرض للرطوبة أن تطيع لنفوذ ما ينفذ في جسمها ويعرض لليبوسة أن تعصى فتجمع العضو الحاس وتعصره، والخشونة أيضا يعرض لها مثل ذلك بأن تحدث الأجزاء الناتية منه عصرا ولا تحدث الغائرة شيئا، والأملس يحدث ملاسة واستواء ، وأما الثقل فيحدث تمددا إلى أسفل والخفة خلاف ذلك. فنقول لمن يقول هذا القول إنه ليس من شرط المحسوس بالذات أن يكون الإحساس به من غير انفعال يكون منه ، فإن الحار أيضا ما لم يسخن لم يحس وبالحقيقة ليس إنما يحس ما في المحسوس بل ما يحدث منه في الحاس حتى أنه إن لم يحدث ذلك لم يحس به، لكن المحسوس بالذات هو الذي يحدث منه كيفية في الآلة الحاسة مشابهة لما فيه فيحس، وكذلك الانعصار عن اليابس والخشن، والتملس من الأملس، والتمدد إلى جهة معلومة من الثقل والخفيف ، فإن الثقل والخفة ميلان والتمدد أيضا ميل إلى نحو جهة ما، فهذه الأحوال إذا حدثت في الآلة أحس بها لا بتوسط حر أو برد أو لون أو طعم أو غير ذلك من المحسوسات حتى كان يصير لأجل ذلك المتوسط غير محسوس أولى أو غير محسوس الذات بل محسوسا ثانيا أو بالعرض

The conventional view is that the conditions that are sensed by touch are that they are hot and cold, moist and dry, rough and smooth and heavy and light. Hard and soft, viscous and crumbly and others are sensed as a result of these aforementioned [qualities]. Hot and cold, therefore, are sensed in themselves, not as a consequence of the impression that is left on the faculty of sense by them. It is thought (yuzannu) that hard and soft, and dry and moist are not sensed intrinsically. Moisture, rather, [according to this doctrine] has the characteristic that it yields to what enters into its body; and the dry has the characteristic that it resists and so it contracts the sensitive body part and compresses it. The rough also has a similar character by which the parts that protrude from it [the rough object] and produce compression [on the sense faculty], whereas the parts that descend down do not produce anything [in the sense faculty]. The smooth produces smoothness and levelness. The heavy produces extending downward and the light is the opposite of that.

We say to the person who says this: "It is not a condition of the object that is sensed in itself that the perception is made without an impression. For as long as what is hot is not heated, it is not sensed. In reality, it is not what is in the sense object that is sensed, but

^{1959), 69,} ll.1-21.

what it [the sense object] brings about in the sense faculty, such that if it were not to bring it about, it would not be sensed. The object that is sensed in itself, rather, is what produces a quality on the sensory faculty that resembles what is in it so that it [the sense object, sc. al-maḥsūs] is sensed. The case is similar in the case of the compressing that is caused by the dry and the rough, and the slipperiness caused by the smooth, and the expanding in the suitable direction in the case of the heavy and the light. For heaviness and lightness are a kind of inclination, likewise expanding is inclining in a certain direction. When these conditions, therefore, come about in the faculty of sense, it senses them [in themselves], not by means of hot, cold, colour, taste or some other type of object of sense such that it [the object of sense, sc. al-maḥsūs] should not be an object that is not sensed in a primary way, or object that is not sense in itself, but it is an object sensed in a secondary manner or accidentally."

In this passage, Avicenna says that the moist and the dry are sensed by the sense faculties "in themselves (*li-datiha*)," meaning *directly*, without the need for a mediating, active quality to leave an impression on the sense faculty. Avicenna says that what is sensed by the sense of touch is the quality that the sense object generates in the sense faculty; it does not perceive the sense object itself. The faculty that is responsible for the sense of touch does not sense the heavy object or the light object or the moist or dry object itself; it sense the qualities (for example, the inclination, the sliperiness, the comperssion, the expanding, the wetness) that these object imbue the sense faculty with. Faḥr al-Dīn seems to think, then, that when we understand the perception of qualities this way, there is some incompatibility between Avicenna's statement in the Canon and The Healing. In the Canon, Avicenna holds that pain is caused by an noxious irregular mixture of only the active qualities, cold and hot, whereas the moist and dry are passive, so they do not cause pain. Yet, it is clear that in On the Soul, Avicenna says that not only cold and hot but also sense objects that have moist and dry qualities have the capacity to leave an impression on the sense faculties in such a way that they are perceived. Fahr al-Dīn argues, in effect, that based on Avicenna's words in *On the* Soul, dry and moist are active qualities, in the sense that they too can leave an impression on the sense faculties. Yet, if we admit that they are active qualities, then irregular mixtures of dry and moist should be able to cause pain. Thus, in this investigation in the commentary on the *Canon*, Faḥr al-Dīn seeks, in effect, to bring the views Avicenna expresses in the *Canon* into line with the views he expresses in *The Healing*.

We have seen that the aetiology of pain consumes a large portion of Faḥr al-Dīn's attention in the commentary on the *Canon*. The same is true of Ibn al-Quff. We pick up the the story of the exchange between Ibn al-Quff and Faḥr al-Dīn in the sixth investigation in Ibn al-Quff's commentary on *Aphorisms* ii.72, in which Ibn al-Quff offers an overview of the what Galen and Avicenna had said about aetiology of pain in their works. The discussion here is broader than the one Faḥr al-Dīn discusses in investigation four above. Here, Ibn al-Quff is interested in resolving the question of whether dissolution of continuity *alone* causes pain, a point that, as we shall see, Faḥr al-Dīn argues for at length in the third investigation of his commentary on this portion of the *Canon*. Where Ibn al-Quff says that Galen thought that pain was caused by dissolution of continuity *exclusively*, Avicenna held that an irregular noxious mixture also caused main. Investigation six surveys a number of arguments for the view that dissolution of continuity causes pain. Table 2 presents the argumentative macrostructure of Ibn al-Quff's sixth investigation.

- A. Summary of the contents of the investigation
- B. Proof for the position that dissolution of continuity causes pain
 - 1. Ibn al-Quff supplies one proof in Galen's name
- C. Proofs for the position that a noxious irregular mixture causes pain
 - 1. There are five proofs
 - a. Avicenna's three proofs
 - i. Proof One
 - ii. Proof Two
 - iii. Proof Three
 - b. Faḥr al-Dīn's proof
 - i. Proof Four
 - c. Ibn al-Quff's proof
 - i. Proof Five
- D. Objections to five proofs
 - a. Objection to Proof One (copied from Faḥr al-Dīn's commentary)
 - i. First doubt on Fahr al-Dīn's Objection to Proof One
 - ii. Second doubt on Fahr al-Dīn's Objection to Proof One
 - b. Objections to Proof Two
 - i. Objection One
 - ii. Objection Two
 - c. Objection to Proof Three
 - d. Objection to Proof Four
 - e. Objection to Proof Five
- E. Survey of Fa $\hat{\mu}$ r al- $D\bar{n}$ position that the noxious irregular mixture is the intrinsic cause of pain and the dissolution of continuity does not cause pain
 - a. Five proofs
 - i. Proof One
 - ii. Proof Two
 - iii. Proof Three
 - iv. Proof Four
 - v. Proof Five
- F. Rebuttal of Faḥr al-Dīn's proofs for his position (stated in E)
 - 1. Rebuttal ($\check{q}aw\bar{a}b$) of Proof One
 - i. First Rebuttal of Proof One
 - ii. Second Rebuttal of Proof One
 - 2. Rebuttal of Proof Two
 - 3. Rebuttal of Proof Three
 - 4. Rebuttal of Proof Four
 - 5. Rebuttal of Proof Five
- G. Survey of Averroes' view that the noxious irregular mixture causes pain and intrinsically that dissolution of continuity causes pain "by means of it (*bi-wāsiṭatihi*)"
 - a. Two Proofs
 - i. Proof One
 - ii. Proof Two
 - b. 2. Summary of Avoerroes' postion
 - i. Quote from the Generalities
- H. Conclusion: Averroes position is the correct one.

Table 2: Argumentative Structure of Investigation Six in Ibn al-Quff's commentary on *Aphorisms*ii.72

As usual, Ibn al-Quff begins with "Galen and his ilk (al-fadilu Gal-fadilu Gal-fad-fadilu Gal-fad-

واحتج القاضي أبو الوليد بن رشد على صحة مذهبه بوجهين أحدهما أنّ تفرّق الاتصال عبارة عن حركة الأجزاء بعضها على بعض والحركة المذكورة من شأنها أن يتبعها سوء المزاج كما أنّ مقابل هذه الحركة يتبعه مقابل ذلك. فالموجب للوجع بالذات هو سوء المزاج فقط. وثانيهما أنّه قد يتبيّن في كتاب النفس أنّ هذه الحاسّة إنّما تحسّ حسًّا أوّليًا بالكيفيات الأربع التي هي الحرارة والبرودة والبرودة والبيوسة. وإذا كان كذلك فالألم إنّما يعتريها من إفراط محسوساتها الخاصّة بها كما تعتري سائر الحواسّ. ولو كانت هذه الحاسّة أعني حاسّة اللمس إنّما يحدث لها الوجع بتفرّق الاتصال لكان محسوسها الخاصّ بها إنّما هو تفرّق الاتصال فقط على ما يقوله الفاضل جالبنوس أو يكون لها محسوسان بذاتيهما على ما يقوله ابن سينا. وإذا كان كذلك فالألم إنّما يعتريها من إفراط محسوساتها الحاصّة بها على نحو ما يعتري سائر الحواسّ. فإنّ العين إنّما تفرّق الاتصال شيء يعرض عن الكيفيات المفرطة ونفس اللسان مع الطعوم والسمع مع الأصوات والشامّ مع المشمومات وإنّما تفرّق الاتصال شيء يعرض عن الكيفيات المفرطة ونفس الإحساس إنّما هو للكيفيات. فحاصل ما ذكره هذا الرجل أنّ السوء المزاج هو المؤلم بذاته وأنّ تفرّق الاتصال كما يقوله جالينوس ولا هو كتاب المعنون بالكلّيات حيث تكلّم في أمراض حاسّة اللمس: وليس سبب الوجع تفرّق الاتصال كما يقوله المنوب سوى ما ذهب إليه والسوء المزاج بالذات على ما يقوله ابن سينا. واعلم أنّني لمّا نظرت فيما قيل في هذه المسألة لم يصحّ عندي سوى ما ذهب إليه هذا الإمام قدّس اللّه روحه.

The Judge Abū al-Walīd ibn Rušd adduced proof for his viewpoint from two perspectives. One of them is that dissolution of continuity is an expression about parts that move each other. It is the nature of the motion mentioned that the noxious mixture results from it, just as the opposite of this result from the opposite of this motion. What necessitates pain intrinsically is, therefore, the noxious mixture alone.

^{98.} Ibn al-Quff, Ibn al-Quff, *al-Uṣūl fī šarḥ al-Fuṣūl*, ed. Arabcommaph (The University of Manchester, 2012–2017), doi: 10.3927/52131995 [Commentary on Aphorisms, Book Two]; (MS, London, British Library, ms. or. 1348), fol. 26a, ll.3–16; (MS, Istanbul, Yeni Camii, ms. 919), fols. 58a, l.24–b, l.12.

The second [perspective] is that he [Aristotle] explained in the Book on the Soul [that is, referring to Aristotle's On the Soul that this sense faculty [namely the sense of touch, sc. alhāssa al-lamsīya] only senses the four qualities, namely hot, cold, dry and most, directly. This being the case, pain, then, can only affect them when the sense objects that are particular to it are in excess, just as they [the sense objects in excess] affect all the sense faculties. If this sense faculty, that is the sense of touch, were only affected by pain by means of dissolution of continuity, [either] the object of sense that is particular to it would be the dissolution of continuity itself only, according to what Galen says, or there would be two objects of sense [namely, the dissolution of continuity, and the sense object that is particular to the sense of touch], as Ibn Sīnā holds. That being the case, pain affects it [the sense of touch] when the object of sense that is particular to it is in excess, just as it affects the other faculties of sense. The eye, therefore, feels pain when colours are in excess, and they deviate from the balance. Likewise, the tongue in relation to tastes, hearing in relation to sounds and smell in relation to odours. Continuity is dissolved by something that is caused by qualities that are in excess, but the qualities themselves are what is perceived by [the faculties].

The upshot of what this man has mentioned is that the noxious mixture causes pain intrinsically, whereas dissolution of continuity causes pain by means of it. In the book entitled *Generalities* where he speaks about diseases that affect the sense of touch he says: "The cause of pain is not dissolution of continuity, as Galen says, nor is it the noxious mixture in itself as Ibn Sīnā says."

Know that when I examined what has been said on this issue, the only [viewpoint] I believe to be true is the one propounded by this $im\bar{a}m$ [that is, Ibn Rušd], God sanctify his spirit.

Be that as it may, given the length of Sections E and F in Table 2 and in spite of what Ibn al-Quff says in praise of Averroes, it is clear that his main concern in this investigation lay in presenting a synopsis of Faḥr al-Dīn's position based on what Ibn al-Quff purports is a complete survey of Faḥr

al-Dīn's writings (hāda maǧmū'u mā dakarahu l-imāmu Faḥr al-Dīn fī ǧamī'i taṣānīfi), and then presenting as many objections to it as he can muster.

واحتج الإمام فخر الدين بن الخطيب على صحة ما ذهب إليه بوجوه حمسة أحدها أنّ التقرّق والانفصال لفظان مترادفان. وقد اتققوا على أنّ الانفصال أمر عدمي وهو عدم الاتصال عن ما من شأنه أن يكون مقصلا والوجع. والألم لا شكّ أنّهما أمران وجوديان والأمر العدمي لا يجوز أن يكون علّة للأمر. وثانيها أن الآلة إذا كانت في غاية الحدّة وقطع بها عضو قطعًا سريعًا لا يحسّ بذلك القطع في أول الأمر بل إنّما يظهر الألم بعد ذلك بلحظة. فلو كان التفرّق لذاته مؤلمًا لاستحال تخلّف الألم عنه. فلمّا تخلّف عنه علم من ذلك أنّ التخلّف إنّما كان لأنّ في أوّل القطع لم يحصل سوء المزاج فلا جرم لم يحصل الألم عنه. ثمّ لمّا حصل سوء المزاج بعد ذلك حصل الألم. وثالثها أنّ الاغتذاء والنماء إنّما يحصلان بتفرّق اتّصال العضو لينفذ في الفرج المستحذية الأجزاء الغذائية مع أنّه ليس هناك ألم. ومعلوم أنّه إنّما لم يؤلم لأنّ ذلك التفرّق أمر طبيعي ولم يحدث عنه سوء مزاج. وذلك بدلّ على أنّ التفرّق ليس هو سبب للألم لأنّه تفرّق بل لما يتبعه من سوء المزاج. ورابعها أنّ لسعة العقرب أشدّ إيلامًا من الجراحة العظيمة أقوى من الإيلام منها. ولمّا لم يكن كذلك علمنا أنّ زيادة الألم في اللسعة إنّما يحصل من سوء المزاج لا من تفرّق الاتصال. وخامسها أنّ البدن إنّما الحتصّ وقبل صورته المعين فما دام المزاج المعين باقيا استحال زوال تلك الصورة فيكون السبب القوي في حدوث اللذة والألم ثبوتًا وانتفاء المعينة بالمزاج لا التفرّق.

هذا مجموع ما ذكره الإمام فخر الدين في جميع تصانيفه. والجواب عمّا تمسّك به أوّلاً من وجهين. أحدهما أنّ التفرّق يلزمه لا محالة ممّا يمكن أدراكه كحال سوء المزاج. فإنّ إيجابه للوجع لأجل فقدان العضو اعتداله المزاجي الذي هو كماله. وإذا كان كذلك فيكون موجعًا من هذه الجهة. وثانيهما نقول: ما المانع من أن يقال وقدان العضو اعتداله المزاجي الذي هو كماله. وإذا كان كذلك فيكون موجعًا من هذه الجهة. وثانيهما نقول: ما المانع من أن يقال إنّ التفرّق متى حصل كان معّدًا لفيضان الألم كما يقوله الإمام فخر الدين من فيضان السوء المزاج عليها عند كونها كذلك. وذلك لأنّ كمال الأعضاء واستعدادها لما يفاض عليها من الصورة الصحيحة بمزاج مخصوص وتركيب مخصوص فما دام المزاج والهيئة أمور معدّة لا فاعلا الصورة. وأمّا إذا زالا أو أحدها استعد لمقابل ما استعد به عند كونه على حالته الطبيعية. فالحاصل أنّ هذه أمور معدّة لا فاعلة. ويكون معنى قول الشيخ هاهنا أسباب الوجع منحصرة في جنسين ليس المراد به السبب الفاعلي بل القابلي. والفاعلي هو مبدأ الفيض. ومع ذلك فنقول: والإمام وقع فيما هرب منه فإنّه يدّعي أنّ التفرّق موجب للألم أي لسوء المزاج وهذا أمر وجودي. والجواب عمّا تمسّك به ثانيًا: الآلة المفروضة عند قطعها للعضو لا يخلوا إمّا أن نكون شاعرين بذلك عند حصوله أو لا نكون شاعرين. فإن كان الأوّل استحال تخلّف الأم والوجع. وذلك لأنّ الانفعال والإحساس يتمّ بشيئين أحدهما انفعال الحاسّة من نكن شاعرين. فإن كان الأوّل استحال تخلّف ليس لأنّ التفرّق مع البديهة حاكمة ذلك. وأمّا إن لم نكن شاعرين بذلك بل غافلين عنه تخلّف الوجع حينتذ غير أنّ تخلّفه ليس لأنّ التفرّق غير موجب للوجع بل لعدم شعورنا به وذلك لانصراف القوة المفكرة في هذا الوقت إلى ما هو أهمّ من ذلك. وقد بسطنا القول في غير موجب للوجع بل لعدم شعورنا به وذلك لانصراف القوة المفكرة في هذا الوقت إلى ما هو أهمّ من ذلك. وقد بسطنا القول في

والاغتداء لأنّ الغذاء ينفذ في أجزاء خالية في البدن وكيف نقول هذا وقد ثبت في غير هذا الفنّ عدم الخلاء لذاته. ولو قلنا به لزم أن لا تزيد الأعضاء البتّة بالغذاء في حال النماء غير أنّ هذا التفرّق لما كان طبيعيًا مألوفًا أي صادر عن الطبيعة المدبّرة للبدن وبه كمال الأعضاء وهو في أجزاء صغيرة صار طبيعيًا مألوفًا غير مؤلم، والإمام قدّس أللّه نفسه يوافقنا على مثل هذا. فإنّ حرارة المدقوق عنده حرارة غريبة مباينة للطبيعة مع أنّها غير مؤلمة، وما سبب هذا إلا أنّها لمّا تمكّنت في الأعضاء ألفتها وصارت غير مؤلمة، فإذا كانت هذه الحرارة مع منافاتها للطبيعة إذا طال زمانها وألفتها الأعضاء صارت غير مؤلمة، فما عسى أمر صادر عن الطبيعة المدبّرة للبدن وبه كمال الأعضاء وهو حاصل دائمًا وفي أجزاء صغيرة؟ وقد أطنبنا في هذا الجواب وفي تقريره من جهة الإمام فيما تمسّك به من الوجوه النقلية والعقلية في شحرنا لكليات القانون. والجواب عمّا تمسّك به رابعًا قد ذكرناه. والجواب عما تمسك به خامسًا نقول: ليس قبول البدن لصورته المعينة بمزاجه الخاصّ به فقط بل وبتركيبه فإنّه لا بدّ من اعتبار التركيب مع اعتبار المزاج على ما تقدّم.

The *imām* Faḥr al-Dīn ibn al-Ḥaṭīb adduces five proofs that the viewpoint he maintains is correct.

The first of them is that "dissolution" and "being disconnected" are synonyms, and they all agree that being disconnected is a privative state of affairs, namely the absence of continuity in what is naturally inclined to be continuous. Yet, there is no doubt that aches and pain are hypartic states of affairs, and it is not possible that a privative state of affairs causes a hypartic state of affairs. Therefore, dissolution of continuity cannot be the cause of pain. 99

The second is if the instrument is extremely sharp and the limb is cut very quickly, initially there is no sensation of the cut, but the pain becomes apparent a few moments after that. Yet, if dissolution of continuity in itself caused pain, it would be impossible for the pain to be delayed. Since it is, in fact, delayed, one knows that there is a delay because at the beginning of the cut, the noxious mixture has not come about, and necessarily, the pain that it causes does not come about. Then, once the noxious mixture comes about, there is pain.

The third is that nutrition and growth come about when the continuity of the body part is dissolved so that the nutriment is able to enter the nutritive elements in the gaps that are

^{99.} For the terms "privative" and "hypartic," see Fritz W. Zimmermann, *Al-Farabi's Commentary* and Short Treatise on Aristotle's De Interpretatione (Oxford: Oxford University Press, 1981), 29, n.2 (privative, 'adamī) and lx, n.1 (hypartic, wuǧūdī).

adjacent to each other. Yet, there is no pain. It is known that it is not painful because that dissolution of continuity is a natural state of affairs that does not generate a noxious mixture. This indicates that dissolution of continuity does not cause pain because it dissolves, but because a noxious mixture results from it.

The fourth is that the scorpion's sting is is more painful than a serious wound, but if what causes pain were the dissolution of continuity only, the serious wound would be stronger than it in causing pain. Since this is not the case, we know that the fact that the greater in scorpion's sting is from the noxious mixture not the dissolution of continuity.

The fifth is that before its form is determined the mixture that is particular to the body is determined for it, so as long as the mixture that is determined for it persists, it is impossible for its form to cease. Thus, the potent cause in bringing about pleasure and pain is that there is a stable [state of affairs] followed by their withdrawal. But the mixture is like this, not dissolution. This is the sum of what the $im\bar{a}m$ Faḥr al-Dīn has mentioned on this issue in all his writings.

The rebuttal to what he claimed first is from two perspectives. One is that dissolution of continuity necessarily entails that the body parts lose the perfection in the composition that befits them, and this is something that is necessarily perceived, just as in the case of the noxious mixture. Thus, [dissolution of continuity] necessitates pain because the body loses the balance in its mixtures, which is the perfection proper to it. That being the case, it [dissolution of continuity] causes pain in this way.

The second, we say: "What stops one from saying that when dissolution of continuity comes about, creates the disposition for the pain to rush in just as Faḥr al-Dīn says about the noxious mixture that rushes into them [the body parts, sc. al- $a'd\bar{a}'$] when they are like that? That is because the body parts' perfection is owing to the fact that they are disposed to have the healthy through a particular mixture and a particular composition. Thus, as long as the mixture and the composition endure, it is impossible that the [healthy] form ceases. In the case that both or one of them ceases, it [the body part, sc. al-udw] becomes disposed to the opposite of what it was disposed to when it was in its natural condition.

The upshot is that these states of affairs dispose the body part, they do not act as the agent. The meaning of the *Šayḫ*'s statement here "the causes of pain are two kinds" refers not to the active cause, but to the cause that disposes, whereas the active one is the principle of the rushing in [of pain]. In light of this, we say: "The *imām* here has fallen victim to what he sought to avoid. For he claims that dissolution is what necessitates pain, that is, the noxious mixture, yet this is a hypartic state of affairs."

The rebuttal to what he claimed second is that at the moment that the hypothesised instrument cuts the body part, either we feel it or we do not. If we feel it, it is impossible that the aching and pain is delayed. That is because the impression and the perception is fulfilled by two things. The first is that the sense faculty is impressed by the object of sense that is particular to it; the second is the feeling that is from the impression. Thus, when the aforementioned cut happens accompanied by the feeling of that impression as well as the knowledge of it [the cut], it is impossible that the pain caused by it should be delayed, and primitive reasoning (*al-badīha*) forms this judgment. If we do not feel it, being oblivious to it, the painful sensation is delayed at that time. The delay, however, is not because dissolution does not necessitate pain, but because the feeling we have of it is non-existent. This is owing to the fact that at that moment, the faculty of thinking has been diverted to what is more urgent than that. In our commentary on the *Generalities* of the *Canon*, we have provided an extensive rebuttal.

The rebuttal to what he claimed third, we say: "We do not say that it is impossible that dissolution affects the body parts while they grow and while they receive nutrition because the nutriment enters into the parts of the body that are empty; whereas in another discipline [namely, physics] it is established that the void is intrinsically non-existent." For if we were to say this, it would follow that the body parts do not increase in size at all by receiving nutrition when the body grows. Yet, when the dissolution is natural and familiar, that is, it proceeds from the nature that manages the body and through it [the body parts] attain their perfection, and further, that it happens in certain small parts, it [the dissolution] becomes natural and familiar, and so is not painful. The *imām*—God sanctify his

soul—concurs with us in a case that is analogous, for according to him, the heat of the person with hectic fever is an extrinsic heat that is at odds with the nature, and yet it is not painful. What can the reason for this be save that when it [the heat] settles in the body parts, they become accustomed to it, and so it is not painful. So if the heat stands at odds with the nature, when its duration is long and becomes familiar to the body parts, and nevertheless, it is not painful, how should it [dissolution] be with something that proceeds from the nature that manages the body and through which the body parts attain their perfection, and it always comes about in parts that are small? In our commentary on the *Generalities* of the *Canon*, we have treated this rebuttal and confirmed it in great detail from the *imām*'s point of view and on the basis of doctrines he adheres to, by way of authoritative texts and reason.

The rebuttal to what he claimed fourth we have already mentioned. The response to what he claimed fifth is that we say: "It is not the case that the body only receives its proper form from the mixture that is particular to it; it also receives it [proper form] from the body's composition. For it is necessary to consider its composition as well as its mixture as discussed earlier."

This text richly illustrates the different ways in which Faḥr al-Dīn's thought and practice influenced how Ibn al-Quff composed the commentary on the Hippocratic *Aphorisms*. Above all, this influence is not evident owing to the fact that Ibn al-Quff agreed with Faḥr al-Dīn's views. For, as is plain, Ibn al-Quff agrees ultimately with Averroes on the question of the aetiology of pain. What is more, the above passage represents a series of objections all of which are directed at undercutting Faḥr al-Dīn's doctrine. As we have also seen, Ibn al-Quff also rejects Faḥr al-Dīn's view that noxious mixtures of any quality cause pain instrinsically, not accidentally. Yet, how Ibn al-Quff structures his argument and the techniques he employs in this investigation imitate Faḥr al-Dīn's verification techniques. In imitation of Faḥr al-Dīn's prescriptions about gleaning and painstaking investigation, Ibn al-Quff collects and critiques a large number of medical authorities. He dispassionately surveys each viewpoint, and arrives at the what he believes to be true (Averroes' doctrine) by testing each viewpoint by constructing counterarguments against them to see if they are able to bear

thorough criticism. Through a series of rebuttals to Faḥr al-Dīn's arguments that noxious irregular mixtures are the only intrinsic cause of pain, Ibn al-Quff shows that none of Faḥr al-Dīn's arguments are demonstrative. Whereas it is normal for Ibn al-Quff to defend Galen against criticism in his commentary on the *Aphorisms*, in this particular point, Ibn al-Quff faults Galen explicitly, siding instead with Averroes, who was much less influential as a medical authority.

Finally, in the rebuttal of Fahr al-Dīn's third argument in investigation six, Ibn al-Quff says that he deals with this question at greater length in his commentary on the Canon. What is noteworthy, however, is the words Ibn al-Quff uses to speak about how he addresses Fahr al-Dīn's thought on the aetiology of pain, for his words recall some of the themes and prescriptions that Fahr al-Dīn refers to in his introductions to his philosophical commentaries and philosophical summas. Alluding to Avicenna's distinction in On the Soul between an irregular noxious mixture (sū' al-mizāğ al-muḥtalif), which causes pain, and a regular noxious mixture (sū' al-mizāğ almuttafiq), which does not cause pain, Ibn al-Quff says that he treats this question "in great detail $(atnabn\bar{a})$ " and "confirms it $(taqr\bar{i}rihi)$ " exhaustively "from the $im\bar{a}m$'s point of view and on the basis of doctrines he adheres to, by way of authoritative texts and reason (min ğihati l-imāmi fīmā tamassaka bihi mina l-wuğūhi l-naqlīyati wa-l-'aqlīya)." First, Ibn al-Quff's reference to the fact that his analysis proceeds from the "authoritative texts and reason" recalls similar phrases in Fahr al-Dīn's commentary on the Canon. For example, in the second investigation in his commentary on the section on pain in the Canon, Fahr al-Dīn says that the proposition that the continuity of the body parts is dissolved when they receive nutriment "requires explanation, first on the basis of authoritative texts, and then on the basis of demonstration second." Likewise, after apparently concluding a survey of Avicenna's doctrines on the nature of pleasure, Fahr al-Dīn says, having recognised that Avicenna wavers on the nature of pleasure, "let us now consult our intellects" so that "we perceive the truth." This reference to a methodological deployment of *naql*, meaning surveing mainly Avicenna's medical and philosphical words for relevant material on the question under discussion, and 'aql, using syllogistic reasoning to problematise the principles underlying Avicenna's statements in the Canon, is clearly analogous to the methods of gleaning and verification as described by Shihadeh with reference to the commentary on the Pointers and Reminders. Second, it

is important to recognise that Ibn al-Quff is careful to say that his rebuttal to Faḥr al-Dīn's arguments are confirmed ($taqr\bar{t}r$) on the basis of doctrines that Faḥr al-Dīn himself upheld, rather that introducing propositions into the discussion, for which there is no textual evidence that Faḥr al-Dīn would have agreed with them. Ibn al-Quff is careful, in other words, to distinguish his rebuttals to Faḥr al-Dīn from the kind of criticism that Faḥr al-Dīn condemns his contemporaries, such as al-Masʿūdī in early works such as the Rebuttals ($\check{G}aw\bar{a}b\bar{a}t$).

The evidence in the section shows that Ibn al-Quff's commentary on the Hippocratic *Aphorisms* is modelled on Faḥr al-Dīn's exegetical practices both in how it structures the text under examination and the different exegetical tasks the commentator performs. All the macrostructural features as well as many of the the exegetical elements that make up the method of verification in Faḥr al-Dīn's commentaries on Avicenna's works are present in Ibn al-Quff. Above all however, we see in Ibn al-Quff's commentary on the Hippocratic *Aphorisms* a greater shift taking place in the Islamic medical tradition, one that Faḥr al-Dīn can by no means be said to be the main protagonist. It is not only that the medical and philosophical works of Avicenna are used with increasing frequency to understand and criticse the ideas of Hippocrates and Galen, but that the methods and textual norms for interpreting a text that were developing in eleventh- and twelfth-century Islamic scholarly circles, especially those in Transoxiana, were being introduced into a medical tradition, in which they had until that time occupied a peripheral position.

5. Conclusion

I began this paper by drawing attention to the fact that the great thirteenth-century physician Ibn al-Quff treats Faḥr al-Dīn al-Rāzī as a major medical authority, in the same rank as Galen and Avicenna. This fact is puzzling in light of how little attention in previous scholarship has been given to Faḥr al-Dīn's contributions to medicine. I showed, however, that by the end of the thirteenth century, Faḥr al-Dīn was esteemed highly by physicians and philosophers. For his part, the authority that Ibn al-Quff allots to Faḥr al-Dīn's medical thought is in large part owing to the fact that he was educated in the Levant at a time when Faḥr al-Dīn's students and their successors had made their impact on Islamic medicine through their commentaries on the *Generalities* of the *Canon* as well as on Avicenna's philosophical works. Yet, despite Ibn al-Quff's regard for Faḥr al-Dīn as an authority, it is puzzling that Ibn al-Quff rarely cites Faḥr al-Dīn's medical writings, and when he does,

herarely agrees with him. If Faḥr al-Dīn was important to Islamic physicians in the thirteenth century, it cannot be because Faḥr al-Dīn's medical doctrines or writings themselves were extremely popular. I have argued that the answer to this puzzle should be sought not in what doctrines Ibn al-Quff puts forward but in how he constructs the arguments for the doctrines he holds. ¹⁰⁰ I have argued that the collection of techniques of verification, which came to be used for interpreting mainly Avicennian philosophical texts, come to be used with increasing frequency in the medieval Islamic East after the twelfth century. What is more, I have argued that Faḥr al-Dīn al-Rāzī's commentary on the Canon of Medicine played an important role in introducing these exegetical methods into the Islamic medical discourse. I have collected evidence that leaves no doubt that Faḥr al-Dīn uses these techniques in his commentary on the Canon. I argue that the Canon commentary was likely written before, probably well before, 580/1184. This conclusion leads me to conclude that the references to Saraḥs as the town in which Faḥr al-Dīn composed the commentary on the Canon before setting out to Transoxiana, as well as the references to Faḥr al-Dīn's patron 'Abd al-Karīm al-Saraḥsī, should be treated with a caution. I show that an early date for the Canon com-

^{100.} In assessing Faḥr al-Dīn's contributions to Arabic logic, Khaled El-Rouayheb comes to conclusions that are similar to mine in relation to medicine (El-Rouayheb, *Relational Syllogisms*, 40). He observes that Faḥr al-Dīn's contributions to Arabic logic are "uneven," frequently affecting the formal structure of the discipline, and involving shifts in argument style, writing style and genre rather than offering dramatically new insights into individual logical doctrines. In other words, Faḥr al-Dīn's contributions affected mostly *how* these discourses unfolded rather than *what* they stated. Summarising Ibn Ḥaldūn's comments about Faḥr al-Dīn's contributions to the logic curriculum, El-Rouayheb says that "starting with Rāzī, logicians ceased to be interested in covering all the books of Aristotle's *Organon*, and instead reoriented the field toward a more focussed study of the five predicables, definition, propositions and their immediate implications, and the formal syllogistic. Ibn Khaldūn did not, however, indicate whether Rāzī should be credited with any substantial contributions besides this shift in focus."

mentary is corroborated by the fact that at the time of composing the commentary on the *Canon* Faḥr al-Dīn was not yet able to articulate the important elements in his analytical method.

In attempting to gauge the legacy of Faḥr al-Dīn's commentary on the *Canon* in Islamic medical discourse after the twelfth century, I have contrasted the divergences between Galen's prescriptions about how to write commentary and the methods of verification that Faḥr al-Dīn uses in the *Canon* commentary. While I accept to some extent Shihadeh's distinction between exegetical and aporetic genres, I do not think that Muḥammad ibn Zakarīyā al-Rāzī's exegetical activity in *Doubts on Galen* would have been viewed as *proper to a commentary* by the physicians of the twelfth or thirteenth century. Ibn Abī Ṣādiq, who probably died near the end of the eleventh century, uses a host of exegetical strategies in his commentary on the Hippocratic *Aphorisms*. Many of the strategies he adopts in interpreting Hippocrate's words conform to the prescriptions Galen made abou what good commentary should be. On the other hand, he frequently violates Galen's recommendations, especially when it comes to defending Galen against Muḥammad ibn Zakarīyā al-Rāzī in *Doubts on Galen*. In these instances, we find Ibn Abī Ṣādiq departing from the business of commenting on the Hippocratic text to rebut Muḥammad ibn Zakarīyā's criticisms. While engaging is such dialectic is proscribed by Galen in commentary, in practice Galen frequently engaged in such dialectic in his Hippocratic commentaries.

The exegetical techniques used by Ibn Abī Ṣādiq in his commentary on the Hippocratic *Aphorismsm*, for example, do not, in other words, represent a new vision of commentary as a unified method for carrying out medical research, nor do they precipitate changes in the way medical writing and research were carried out by scholastic physicians after the twelfth century. My contention has been that Faḥr al-Dīn's commentary on Avicenna's *Canon of Medicine* is response in large part for introducing the method of verification into Islamic medical writing, and to changing the exegetical forms and strategies, argument types and medical and philosophical authorities that were relevant in medical discourse. I have shown how by the end of the thirteenth century, Ibn al-Quff wrote his commentary on the *Aphorisms* in the same aporetic spirit as Faḥr al-Dīn wrote his *Canon* commentary. Of course, Galen remained important for Ibn al-Quff, and so did Avicenna, Muḥammad ibn Zakarīyā, Hippocrates and a huge number of medical and philosophical

authorities whom Ibn al-Quff refers to in his Aphorisms commentary. Yet, the structure of Ibn al-Quff's commentary as well as his attitude toward research, argument style, and the way he synthesises Avicenna with other Arabic and Greek medical authorities is typical of Faḥr al-Dīn's style of inquiry. Gerhard Endress says that where al-Gazālī gradually adopted and synthesed parts of Avicenna's philosophical thought over a lifetime, Fahr al-Dīn received Avicenna's thought and methodology at a time in which it had already become widespread in various disciplines, was being introduced into madrasa curricula by prominent legal and kalām scholars from Cairo, Damascus and into Transoxiana, and was being synthesised into an increasingly unified picture of the Islamic sciences and their interrelationship.101 Analogously, during his medical education Ibn al-Quff (like his contemporary Ibn al-Nafis) would have been introduced to Avicenna's philosophical and medical writings by his teachers Ibn Abī Uṣaybi'a, Ibn al-Minfāḥ, Ibn al-Nafīs, Ya'qūb al-Sāmirī and Šams al-Dīn 'Abd al-Ḥamīd al-Ḥusrawšāhī, all of whom were active participants in adapting and refining the exegetical practice of verification in Islamic medical and philosophical discourse. This is not to say that Ibn al-Quff formally identified with a school of philosophical medicine that traced its pedigree to Fahr al-Dīn. I for one am certain that Ibn al-Quff was a practicing physician, and his book on surgery is too detailed to be merely a stale theoretical exercise. Unlike several members of Fahr al-Dīn's school, Ibn al-Quff is reported to have written a commentary on all five books of the Canon of Medicine rather than just on Book One (Generalities). It is plain too from his Aphorisms commentary that Ibn al-Quff's interets in medicine ranged far beyond the discipline's theoretical principles. Nevertheless, I have discussed elements in Ibn al-Quff's medical writing and medical thought that make evident Fahr al-Dīn's influence on medical discourse at the end of the thirteenth century, in a thinker who was clearly steeped in Avicennian and Galenic medical and philosphical lore.

^{101.} Endress, "Reading Avicenna in the Madrasa," 402.

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Appendix

The following three texts are referred to extensively in this paper. The stemma for Faḥr al-Dīn's commentary on the *Canon of Medicine* requires a separate study. It would be rash to speculate at this point about the stemma given the fact that I have only a partial collation based on three manuscripts. Collation suggests, however, that the Judeo-Arabic manuscript stands on another branch of the stemma in relation to the Oxford and Gotha manuscripts. The errors that all three manuscripts transmit when Faḥr al-Dīn quotes the *Canon* and *The Healing* should not necessarily be taken as implying that all three are drawn from the same branch in the stemma, since it likely that what appears to be a scribal error is, in fact, a faithful representation of Faḥr al-Dīn's copies of these texts. There is ample evidence that the text of the *Canon* remained unstable until the thirteenth century. For example, see Chapter Two of Daniel S. Nicolae, "A Medieval Court Physician at Work: Ibn Jumay's commentary on the *Canon of Medicine*." Since there is no critical edition of the *Canon*, nor, incidentally, does it look like there ever will be in the near future given the vagaries of long-term funding for academic research in Europe, it is impossible to do more than speculate about stemmatic issues at this point.

A. Introduction to the Commentary on the Canon¹⁰²

Oxford, Bodleian Library, ms. Arch. Seldon A 64 [Ox], fols. 4b, l.1–6a, l.2.

Paris, Bibliotheque nationale de France, MS hebr. 1208 [P], fols. 1a, l.1-2a, l.5.

Gotha, Forschungs- und Landesbibliothek, MS or. 1916 [G], fols. 1b, l.1–3a, l.6.

102. There is a partial transcription of Faḥr al-Dīn's introduction in based on the mansucript Konya, Yusuf Ağa ms. 4980; see Albert Dietrich, *Medicinalia Arabica: Studien über arabische medizinische Handschriften in türkischen und syrischen Bibliotheken* (Göttignen: Vandenhoeck und Ruprecht, 1966), 78–9.

[P 1a] أما بعد حمد 104 الله 105 مقدر الأمزجة والأجزاء ومدبر القوى والأعضاء ومبعد 106 أصناف الداء ومبدع أنواع 107 الدواء، والصلاة على محمد 108 سيد الأنبياء وعلى آله وأصحابه صفوة الأولياء 109.

فإن الله تعالى لما وفقني للوصول إلى مدارج ¹¹⁰ المناهج ¹¹¹ الحكمية والترقي ¹¹² إلى معارج ¹¹³ المباحث الحكمية ¹¹⁴ والاطلاع على نهايات أقدام العقلاء ¹¹⁵ والاضطلاع بتلخيص مباغي ¹¹⁶ الفضلاء وكان من جملة العلوم الشريفة علم الأبدان الذي جعله الصادق الصدوق قرينًا ¹¹⁷ لعلم الأديان واختص من الفضائل أما ¹¹⁸ أولاً فبمعموم ¹¹⁹ الحاجة إليه في كل حين وأوان وحيز ¹²⁰ وزمان ¹²¹، وأما ثانيًا

- 104. באג] Ox, G: אלחמד P.
- 105. אנה add. אנה P.
- 106. מעד : Ox מעד P השב G.
- 107. أنواع] Ox, P (אנואע): اصناف G.
- 108. סיידנא מוסי נבי אללה: Ox, G: סיידנא מוסי נבי
- 109. אלאוליה (ועפעيه): Ox אלאוליה (ועפעيه): add. פֿיָשב G.
- 110. מדארג) P (מדארג), G: مداریج Ox.
- 111. אלמנהאג :] Ox, G אלמנהאג P.
- 112. פוلترقى Ox : אלתראקי P.
- 113. المناهج الحكمية والترقى إلى معارج] Ox, P: om. G.
- 114. וلحكمية] Ox, G: אלעלמיה P.
- 115. والاطلاع على نهايات أقدام العقلاء] Ox, G: om. P.
- 116. معانی : (מנאגי) Ox, P (مباغی G, in marg. Ox.
- 117. פֿע װַט Ox, G: קריבי P.
- 118. באמא P. פאמא P.
- 119. פלעמום :Ox פלעמום (האשתע G, in marg. Ox فبمשתע Ox פלעמום P.
- 120. ווקת: י Ox: פבענ, in marg. Ox : ווקת P: om. G.
- 121. وزمان] Ox, P: om. G.

فلأن موضوع 122 نظره 123 بدن الإنسان الذي هو أشرف الأجسام في هذا المكان. وأما ثالثًا فلاعتضاد مقاعد 124 قواعده بواضح الحجة 125 ولائح البرهان. ولما وقفت على كمال هذا العلم ومنفعته وعلو درجته ومرتبته أردت الخوض في عبابه 126 والترقي في غاية 127 الوصول 128 إلى لبابه والتعمق 129 في أغواره 130 والترقي إلى أنواره. ولما كان كتاب القانون للشيخ الرئيس أحسن كتاب صنف في هذا الباب باتفاق أولي الألباب ثم أن الكتاب الأول منه تميز 131 عن 132 سائر كتبه باللطائف الحكمية والدقائق العلمية والنكت الغريبة والأسرار العجيبة التي 133 حارت أذهان أبناء الزمان عن إدراكها وخارت قواهم 134 عن الوصول إلى دري أفلاكها صرفت نهاية وكدي 135 وكدي 136 وثنيت 137 غاية وهمي وهمي وهمي 138 إلى تفسير عيونه وشرح متونه 139 واستخراج معضلاته [G 2a]

- 125. אלחגג] Ox, G: אלחגג P.
- 126. (עבאבה] P, G : غبابه Ox.
- 127. في غاية] Ox : om. P, G.
- 128. ווף פוף P: אלוצול P פוף פוף G.
- 129. פוلتعمق] Ox, G: ואלתגמק P.
- 130. אחואזה : Ox, G أغواره P.
- 131. יגאנ] Ox, P (ממייז): הגנ G.
- 132. עלי: Ox, G : עלי P.
- 133. (אלתי) Ox, P (וודט : G.
- 134. עקולהם (פרונד عقولهم) Ox, G: (פרונד פומה P.
- 135. פכרי] Ox, G פכרי P.
- 136. وکدي P (۱۵۶۰), G, in marg. Ox : om. Ox.
- 137. ותבת: G פ מיים P.
- 138. وهمي] Ox: om. P.
- 139. מתונה] Ox, P (מתונה): فنونه G.

^{122.} موضوع] Ox, G : الاالا P.

^{123.} نظره] Ox, G: نظره P.

^{124.} מקאצד] Ox, G: מקאצד P.

f.5a ولما والاعتذار عن مساهلاته أن وقعت في أثناء كلماته وامتحانات لعقول المتعلمين ضمنتها أن في سياق أن عباراته. ولما ساعدني التوفيق على هذا المطلب العظيم والمقصد الكريم وظفرت فيه بالمقصد الأقصى أن وفزت بالقدح المعلي لم أجد أن أن أعداً ينشط لظهور هذا المرام أن ويهتز لسماع هذا الكلام وكيف والعلم صارت معالمه مدروسة أن وأعلامه منكوسة وآثاره مطموسة أن وطوالعه منحوسة، وأصبح أن الجهل باهر الرايات ظاهر أن الآيات وصار أهله فائزين بغايات المقاصد والمآرب أن واصلين أي نهايات الأماني والمطالب واجدين للمناصب أن الرفيعة الشريفة نائلين للمراتب العلية المنيفة. ثم هم أن في ذلك درجات متفاوتة أوصل ومقامات متباينة. فكل من كان في عمق أن بحر الحمق أوحج أن وعن ضياء المعقول والمنقول أخرج كان إلى أوج الإقبال والقبول أوصل وعند أبناء الزمان أعلم وأفضل ولله رد أن القائل:

^{140.} שואליב ו in marg. Ox: מסהלאת Ox.

^{141.} צמנתא : Ox שמנתא P.

^{142.} שעום] Ox : סיאקאת P : תעופה G.

^{143.} אלאעלי: in marg. Ox : ועל וווישנט in marg. Ox אלאעלי P.

^{144.} ארי (ועט) :Ox, G | أجد P.

^{145.} אלמדאם] Ox, G: אלמדאם P.

^{146.} מדרוסה] Ox, P (מדרוסה) : مدوسة G.

^{147.} מטמונה : Ox, G מטמונה P.

^{148.} אצבג : Ox, G وأصبح P.

^{. (}עאהר) P (שוג, G: ظاهر Ox.

^{150.} אלמתארב] Ox, G: אלמתארב P.

^{151.} אלמנאצב] Ox, G: אלמנאצב P.

^{152.} אן Ox: add. post et del. וע in textu Ox: G, P (אן להם).

^{153.} במק: Ox, G : אמק P.

^{154.} פֿבא] Ox : G, P (אובג).

^{155.} רד) P (רד): om. Ox.

إن الزمان لتابع 157 للأندل تبع النتيجة للأخس 157 الأرذل

وللمتنبي 158 في قوله 159:

أذم إلى هذا الزمان أهيله فأعلمهم فدم وأحزمهم 160 وغد

وأكرمهم كلب وأبصرهم عمى 161 وأشهدهم فهد162 وأشجعهم قرد

بل العلم صار كلاً في هذا الزمان على كل أصحابه ووبالا¹⁶³ على محبيه وطلابه. فترى¹⁶⁴ الرجل بعد أن أفنى في تحصيله زمانه وفاق فيه أترابه وأقرانه [G 2b] وتعين ¹⁶⁵ بحل ¹⁶⁶ الغوامض في ¹⁶⁷ العلوم ¹⁶⁸ وإظاهر ما فيها من السر المكتوم ممنوعًا بسبب ذلك عن جميع المرادات مدفوعًا عن كل المباغي والطلبات ¹⁶⁹. هذا ولكن الله تعالى بفضله العميم وطوله الجسيم ¹⁷⁰ وإنعامه العام وإكرامه التام عوض [Ox 5b] أهل العلم من السعادات ¹⁷¹ الخسيسة الحسية بالسعادة الكريمة العقلية، ومن اللذة الدنية الدنيوية ¹⁷² باللذة الشريفة

157. למלאכס : Ox, G | ללאכס P.

ואלמתנבי: Ox ואלמתנבי: P פול פול G.

159. قوله] add. حيث قال G.

160. פוֹבימאת] Ox, G: ואחד מנהם P.

161. באב Ox, G: מג P.

162. פרד : Ox : פרד P.

163. וובאל (פפיולה) : Ox (פיוע P: פיוע G.

164. פתרבי] Ox פתרבי P.

165. עין] Ox, G: תעין P.

. 166. ابحل] Ox, P (בחל): في حل (בחל) G.

167. في Ox, P (פי) : من G.

168. ואבעם] Ox, G: אלעלם P.

169. פושלוים] Ox, G: ואלמטאלבאת P.

170. אלחסים : Ox | ולجسيم P.

171. ווששובום] Ox : G, P (אלסעאדה).

172. אלדנויה :Ox ווدينونية] אלדנויה P.

^{156.} שואה] Ox, G: למאבע P.

الأخروية. وهيهات أن 173 تقايس 174 الملائكة 175 بالحدادين، وأي مناسبة لظلمة الكفر إلى أنوار الدين وأي مشابهة للذة الحمار في قبقبه وذبذبه بلذة 178 الروحانيين 177 وابتهاجهم بدوام قربهم من جوار رب العالمين. وله سبحانه وتعالى 178 تحت كل محنة لطيفة خفية ووراء كل حادثة حكمة شريفة مرضية.

ثم لما ساعد¹⁷⁹ التوفيق على تلخيص هذا الكتاب وتهذيبه وتحريره وترتيبه جعلته باسم الشيخ الإمام الفاضل ¹⁸⁰ الحكيم المحقق ¹⁸¹ ثقة الدين شرف الإسلام سيد الحكماء والأطباء ¹⁸² عبد الرحمن بن عبد الكريم السرخسي ¹⁸³ حرس الله أيامه ¹⁸⁴ فإنه ¹⁸⁵ بعد أن تحلى بالعلم الكثير والفضل الغزير والطريقة الفاضلة الرضية والسنة الحسنة السنية كثر إحسانه إلي وإنعامه علي وطال انجذاب خاطره إلى ما يتعلق بصلاح حالي وإفراغ ¹⁸⁶ بالي حالتي إقامتي وارتحالي ¹⁸⁷ فأردت أن أكتب هذا الكتاب باسمه لأغراض ثلاثة. الأول ¹⁸⁸ أن كثيرا¹⁸⁹

^{173.} انی] G, P (۱۲۲), in marg. Ox انی Ox, in marg. Ox.

^{174.} יקאס : Ox : יקאס P.

^{175.} ואלמליכה] Ox, G: אלמליכה P.

^{176.} بلذة] Ox, G: ללדה P.

^{177.} וועפרויגעי] Ox, G: אלרוחאניון P.

^{178.} سبحانه وتعالى Ox : om. P : سبحانه وتعالى G.

ساعد .supr. lin اشاهد

^{180.} الشيخ الإمام الفاضل] Ox, G: om. P.

^{181.} المحقق] Ox, G: om. P.

^{182.} شرف الإسلام سيد الحكماء والأطباء] Ox, G: om. P.

^{183.} אלסרכסי : Ox, G | ועת לשתם P.

^{184.} أيامه (איאמה) Ox, P أيامه G.

^{185.} פֿאנה) Ox, P (פֿאנה): om. G.

^{186.} فراغ :Ox فراغ G, P (اودهد).

^{. (}וארתחאלי)] G, P (וארתחאלי) : פוע בולם Ox.

^{188.} ועי, ל Ox, G: אלאולי P.

^{189.} בתירה] Ox, G : כתירה P.

من هذه ¹⁹⁰ المباحث تُلُخِصَتْ بمجاورته ومحاورته وتُهُذِّبَتْ ¹⁹¹ بمنافسته ¹⁹² ومناقشته. الثاني ليكون قضاءً لبعض حقوقه. الثالث لوثوقي ¹⁹³ بقوته في هذا العلم ¹⁹⁴ وتحقيقه، فإني وجدته واقفًا على [G 3a] فروع هذا العلم وأصوله لا سيما على أبواب هذا الكتاب وفصوله فعرفت أنه ¹⁹⁵ الذي يعرف قدر ما استخرجته [P 2a] من النكت العلمية والغرائب الحكمية التي لا توجد في شيء من المصنفات التي للقدماء والمتأخرين ولم يشتمل عليها كتاب أحد من ¹⁹⁶ السالفين السابقين ¹⁹⁷. ولما عزمت [Ox 6a] على ذلك استعنت بالله عز وجل ¹⁹⁸ في ذلك ¹⁹⁹ محصل الصور والمعاني مفصل السور والمثاني ²⁰⁰ وهذا حين أشرع ²⁰¹ في شرح مشكلات ²⁰² كتاب ²⁰³ القانون على ترتيبه ²⁰⁴.

B. On Compound Diseases

Commentary refers to Avicenna, *al-Qānūn fī al-ṭibb*, ed. Qāsim M. Raǧab (Baghdad: Dār al-mutan-nā, 1970), 1:76, l.14–77, l.33.

Oxford, Bodleian Library, ms. Arch. Seldon A 64, fols. 106a, l.2–109b, l.17.

^{190.} هذه] in marg. Ox, G : הדא P : om. Ox.

^{191.} ותהדת: Ox (, יَهُذَّبَتْ P.

^{192.} במנאפסתה] Ox, P (במנאפסתה : G.

^{193. |} לתוקי Ox : לתוקי P.

^{194. |} אלעלם Ox, P (וושלם): וושני G.

^{195.} הו add. הו P, G.

^{196.} מן) Ox, P (מן): om. G.

^{197.} אלסאבקין) P (אלסאבקין), G, in marg. Ox: om. Ox.

^{202.} مشكلات add. كليات in marg. Ox.

^{203.} كتاب Ox, G: om. P.

^{204.} עינייף] Ox, G: אלתרתיב P.

Paris, Bibliotheque nationale de France, MS hebr. 1208, fols. 69a, l.16-72a, l.16.

Gotha, Forschungs- und Landesbibliothek, MS or. 1916, fols. 101a, l.5–105a, l.1.

الفصل الخامس²⁰⁵ في الأمراض المركبة إلى قوله والورم²⁰⁶ يعرض للأعضاء المركبة.

التفسير هذا الكلام يستدعي أربع²⁰⁷ مباحث. الأول ذكر أقسام الأمراض المجتمعة. الثاني أنها كيف²⁰⁸ ينبغي أن يكون حتى يحصل من اجتمعاها ²⁰⁹ مرض واحد. الثالث²¹⁰ حقيقة الورم وحده. الرابع²¹¹ بيان كونه مرضا مركبا.

البحث الأول فاعلم أن اجتماع الأمراض على ستة أوجه، الأول أن يوجد مع المرض المزاجي مرض آخر مزاجي. الثاني أن يوجد معه مرض تركيبي كما إذا كان مع الحمى دمل²¹². الثاث أن يوجد معه تفرق اتصال²¹³ كما إذا كان مع الحمى قرحة. الرابع أن يوجد مع المرض التركيبي مرض تركيبي كما إذا حدث في المجاري ورم يضيقها أنه وإنادة في المقدار وسد²¹⁵ للمجاري²¹⁶ وهو²¹⁷ مرضان. الخامس التحكيبي مرض التركيبي تفرق اتصال كما إذا أ²¹⁹ قطع سلامية من سلاميات الأصابع فإنه من حيث هو قطع فهو من جنس أمراض التركيب. السادس أن تجتمع الأجناس الثلاثة

^{205.} אלה] Ox, G: אלה P.

^{206.} المرض : Ox الورم G.

^{207.} عو : Ox] واربع

^{208.} בעב] G, in marg. Ox, P (כיף): om. Ox.

^{209. |} אגתמאעה Ox, G: אגתמאעה P.

^{210.} ולווב Ox, G: אלג P.

^{211.} אלד] Ox, G: אלד P.

^{212.} באל] Ox, P (דמל): om. G.

^{213.} שלאתצאל P.] Ox, G: אלאתצאל P.

^{214.} ביי או א א א א א פייעפֿאן (יציקהא) (יציקהא G.

^{215.} שב] Ox, G: סדת P.

^{216. |} ווה וללמגארי Ox, P (ללמגארי): G:

^{217.} פאפ] Ox, G: והמא P.

^{218.} אלה] Ox, G: אלה P.

^{219.} אָלו] G, P (אדא): om. Ox.

^{220.} והו add. ווים P.

بمنزلة العين إذا كان بها رمد وقرحة قد انفجرت ²²¹ وخرجت الطبقة القرنية [G 101b] وزال ثقب الحدقة عن موضعها ²²² ونزل ²²³ فيها الماء ونبت فيها ظفرة. فإذا كان كذلك فقد حدث بها ستة أمراض أحدها الرمد وهو ورم حار والثاني انفجار القرحة ²²⁴ وهو تفرق الاتصال والثالث نتوء الطبقة العنبية وهو مرض آلي من باب المقدار. الرابع زوال الثقب [Ox 106b] عن موضعه وهو مرض آلي من باب الوضع. الخامس ²²⁵ الماء وهو مرض آلي من باب زيادة العدد. فهذه ستة أمراض حادثة في عضو واحد.

البحث الثاني²²⁷ في أنها كيف ينبغي أن يكون حتى يحصل من اجتماعها مرض واحد. فنقول: لما حصلت الأنواع الستة من المرض فيها فلم يحصل من اجتماعها مرض واحد بل²²⁸ كل واحد منها متميز بنفسه عن الآخر، ولكل واحد منها²²⁹ سبب على حدة وعلاج على حدة حتى أنه لو زال الواحد²³⁰ منها بقي الباقي. فأما إذا حصل من اجتماعها حقيقة واحدة ذات سبب معين وعلاج معين وبحيث أنه متى زال البعض زال الباقي كان ذلك مرضا متحداً²³¹ مركبا²³² عن أجناس الأمراض.

^{221.} انفرحت :Ox انفجرت G.

^{222.} מע אפים] Ox, G: וצעהא P.

^{223.} ونزل Ox: فنزل G.

^{224.} القرحة] Ox, P (אלקרחת): القرحة G.

^{225.} الخامس] Ox, G: 7 P.

^{226.} الماء وهو مرض آلي من باب] Ox: om. G.

^{227.} ווֹנוֹנּם Ox, G: אלב P.

^{228.} كان add. كان G.

^{229.} מנהלא] Ox, G: מנהלא P.

^{230.} וועשש (אלואחד) Ox, P (אלואחד): G.

^{231.} מתכדא Ox, G: מתכדא P.

^{232.} מתרכבא] Ox, G: מתרכבא P.

البحث الثالث 233 في حقيقة الورم. اعلم أن بين الأعضاء البسيطة فرجا 234 كثيرة ولكنها و235 غائبة عن الحس في الأعضاء اللينة لانطباق بعضها على البعض 236 ولكنها ظاهرة في الأعضاء الصلبة كمشاش العظم 237 ثم أنه 238 متى انصب خلظ إلى شيء من العروق ملأت 239 أولا العروق العظام التي في العضو ثم يسري إلى العروق 240 الصغار ولا يزال كذلك حتى تملأ 241 جميع العروق الصغار والكبار ثم أن الفضل إن كان أكثر من ذلك وكانت زحمة الانصباب باقية انفجرت 242 أفواه [G 102a] القروق الليفية 243 وسال منها الفضل على 244 التجاويف التي في جرم الأعضاء اللينة التي يمكن توسعها. ولا شك أن ذلك الخلط يؤثر بكيفيته ويحس منه في العضو بسوء مزاج مختلف فيحصل في العضو تمدد وانصباب فضل وإحساس بالمنافي. فالثاني في ذلك 245 هو الورم [Ox 107a] وحده أنه تمدد يحدث 246 للعضو من قبل انصباب مادة رديئة 247 إليه. وإنما قلنا تمدد ولم نقل غلظ حتى تدخل فيه الأورام الربحية 248.

- 238. ابو :G أنه Ox.
- 239. מלא] Ox: מלא P.
- 240. أولا العروق العظام التي في العضو ثم تسري إلى العروق Ox : om. G.
- 241. ימלא :Ox, G ימלא P.
- 242. שנפתחת | Ox: (אנפתחת אנפתחת ו פובבי P, G.
- 243. אללינת :Ox, G וועופי P.
- 244. طی Ox: الی G, P (אלי).
- 245. في ذلك Ox: وذلك Ox وذلك Ox
- 246. ברים] Ox, G: (فيحدث P.
- 247. בענה (רדית) Ox, P (ענגה (רדית) G.
- 248. وإنما قلنا تمدد ولم نقل غلظ حتى تدخل فيه الأورام الريحية] Ox, P: om. G.

^{233.} الثالث Ox, P: لم P.

^{234.} פרגה] Ox, G: פרגה P.

^{235.} كن :Ox, P لكن G.

^{236.} בעצ) Ox: بعض G, P (בעצ).

^{237.} אלעטאם אם G, P (וושלם).

البحث الرابع 259 في أن الورم مرض مركب من الأجناس الثلاثة إما أن فيه سوء مزاج مادي فلأن فيه خلط منصب ثم أن سوء المزاج [P 70a] يوجب تفرق 250 الاتصال وهو توسيع تلك المنافذ ثم أن تلك 251 المادة بعد تفريقها للاتصال تغير الشكل وتزيد في مقدار [P 70a] العضو وربما يزيد 252 العضو بحيث يمتنع أن يقرب مما من شأنه أن يقرب منه 253 أو يبعد مما من شأنه أن يبعد عنه وذلك هو مرض العضو.

قال الشيخ: والورم يعرض للأعضاء اللينة إلى قوله وكل ورم ليس له سبب باد²⁵⁴.

التفسير: لما فرغ ²⁵⁵ بيان حقيقة الورم شرع في بيان العضو الذي يعرض له الورم. ومن الناس من زعم أن العضو الصلب كالعظم أو اللين ²⁵⁶ كالدماغ فإنه لا يتورم لأنه لا يتمدد وما لا يتمدد لا يتورم. وصغرى قياسهم كاذبة. أما أولا²⁵⁷ لأن الدماغ والعظم يعرض لهما النمو والنمو لا يكون إلا بالتمدد ²⁵⁸. وأما ثانيا لأن ²⁵⁹ كل واحد منهما يغتذي. وذلك إنما يكون بنفوذ جوهر الغذاء فيه ²⁶⁰. فثبت من هذين الوجهين نفوذ الأجزاء الغذائية فبه. فتلك ²⁶¹ الأجزاء كما أنها قد تصلح فتكون غذاء أمكن أيضا أن تفسد. وإذا فسدت ²⁶² أرجبت التمديد ²⁶³ وذلك هو الورم [G 102b]. وأما ثالثا فلأن جوهر الدماغ وإن كان رطبا إلا أن فيه لزوجة والعظم أيضا كذلك

^{249.} ועווש] Ox, G: אלד P.

^{250.} تفریق : (תפרק) Ox, P (تفرق G.

^{251.} تلك] add. المنافذ G.

^{252.} يصير : (יזיד) P (יזיד) : يديد Ox, G.

^{253.} מנה) G, P (מנה): om. Ox.

^{254.} باد] G, P: om. Ox.

^{255.} פרג ען :G מט G פרג ען P.

^{256.} פוועני:] Ox, G: ואללין P.

^{257.} אמא אולא) P (אמא אולא): om. Ox, G.

^{258.} בתמדיד] Ox, G: בתמדיד P.

^{259.} עלי :Ox פלאן G: פלאן P.

^{260.} פיה) Ox, P (פיה): om. G.

^{261.} ביול] Ox, G: ותלך P.

^{262.} فسدت] Ox, P: انفسدت G.

^{263.} אלתמדד | Ox: וודאר | G, P (אלתמדד).

فيكون تمددهما ²⁶⁴ من هذا ²⁶⁵ الوجه ممكنا. وأما رابعا فالعظام ²⁶⁶ لو لم تقبل ²⁶⁷ نفوذ الفضلات لما [Ox 107a] كانت ²⁶⁸ الأسنان تخضر ²⁶⁹ وتسود. فإن ذلك لنفوذ ²⁷⁰ الفضول ²⁷¹ فيها. وأما خامسا ²⁷² فقد خلقت الأسنان ²⁷³ مائلة ²⁷⁴ للنمو أبدا حتى أن السن المحاذية ²⁷⁵ لموضع السن الساقطة تزداد طولا إذ ²⁷⁶ كانت الزيادة ترد عليها ولا يقابلها الانسحاق ²⁷⁷.

قال الشيخ: وكل ورم ليس له سبب باد ثم سببه البدني 278 يتضمن انتقال مادة من عضو إلى ما تحته فيسمى 279 نزلة.

التفسير: هذا 280 شروع منه في تقسيم 281 الأورام. واعلم أنه يمكن تقسيمها على وجوه كثيرة بعضها بالفصول الذاتية وبعضها بالخواص العرضية 282. فإنا 283 نقول: الورم إما أن يكون حدوثه بسبب مادة رديثة نزلت إلى العضو العرضية 282.

276. אָרא P. Ox, G: אדא P.

277. ועוייבו (אלאנסחאק): אלאנסחאק) G.

278. אלדי :G ועונي (Ox, באדי P.

279. فيسمى] Ox, G: יסמי P.

280. בנו Ox, G: הדה P.

.381 كأقسام .add تقسيم G.

282. באלכואצ אלדי דכרה אלאן תקסים באלכואצ אלערצית) Ox, P (פאנו ווגע באלכואצ אלערצית) באלכואצ אלדי דכרה אלאן פאלדי דכרה אלאן פאלכואצ אלערצית) : om. G.

283. ואנא] Ox, G: ואנא P.

^{264.} ימרדהא] Ox, G: תמדדהא P.

^{265.} אבו Ox, G: הדה P.

^{266.} פאלעטם G: פאלעטם P.

^{267.} יקבל] Ox, G: יקבל P.

^{268.} בוני] G, P (כאנת): טוי Ox.

^{269.} تخضر] Ox, G: חכדר P.

^{270.} בנפוד] Ox, G: בנפוד P.

^{271. |} וווים אלפצול Ox, P (אלפצול): G.

^{272.} באמסת Ox, G: כאמסת P.

^{273.} ועלייטוט] Ox, P (אלאסנאן): om. G.

^{274.} מועה] Ox: פועה G, P (קאבלת).

^{275.} אלמגאדבת] Ox, G: אלמגאדבת P.

من عضو آخر فوقه. وأما أن لا يكون والقسم 284 الأول هو النزلة. واعلم أن هذا لانصباب يكون لأمور ستة: قوة العضو الدافع وضعف القابل وكثرة المادة وسعة 285 المجاري وضعف غاذية العضو القابل 286 وكون القابل أسفل من الدافع. ومتى حدث في عضو من الأعضاء ورم دفعة فذلك من فضل مدة 287 انصبت إليه من غيره ومتى حدث قليلا قليلا احتمل كلي 288 الأمرين.

قال الشيخ: وربما كان السبب المادي إلى قوله والأورام قد تنفضل بفضول مختلفة.

التفسير: ليس الغرض من هذا الكلام البحث عن أحوال الورم بل ²⁸⁹ عن حكم من أحكام سبب الورم وهو أن سبب [P 70b] الورم قد يكون حاصلا ومع ذلك لا يورم [G 103a] وذلك عندما يكون الخلط الرديء الفاعل للورم مغمورا²⁹⁰ في الأخلاط الجيدة. فإذا استفرغت الأخلاط الجيدة إما [Ox 108a] استفراغا طبيعيا كما يعرض للنساء ²⁹¹ في ²⁹² الأرضاع أو غير طبيعي كما يعرض لجراحة تسيل دما محمودا بقيت الأخلاط الرديئة خالصة مفردة فيتأذى ²⁹³ بها الطبع ودفعها. وربما ²⁹⁴ كان وجه دفعها إلى الجلد فحدثت أورام وبثور.

قال الشيخ: والأورام قد تتفضل بفضول مختلفة إلى قوله وأما الأورام الغير الحادة 295.

التفسير: الآن عاد إلى بيان 296 تقسيم الأورام وذلك التقسيم يمكن بيانه من وجوه كثيرة إلا أن أولى الفضول بالاعتبار الفضول الكائنة عن الأسباب المادية للأورام وهي ستة: الأخلاط الأربعة 297 والمائية والربح. ثم أنه جعل هذا التقسيم علة لنوع آخر من التقسيم وهو

^{284.} פולפועה (ואלקסם) Ox, P (פולפועה : G.

^{285.} امار : Ox وسعة P.

^{286.} all this omitted by G.

^{287.} בולה] P (מדת): סונה Ox, G.

^{288.} در : Ox کون : P. کلی P.

^{289.} אל add. אל P.

^{290.} מעמירא] Ox, G: מעמירא P.

[.] Ox الناسي : Ox إلنساء G.

[.] Ox ض ا Ox في 392.

^{293.} يتأذى Ox, G:

^{294.} פרבמא] Ox, G: פרבמא P.

^{295.} ולחאדת] Ox, G: אלחאדת P.

^{296.} יעוט] G, in marg. Ox, P (ביאן): om. Ox.

^{297.} ול ישב | Ox, G: אלד P.

تقسيم الأورام بحسب كيفيتها في حرارتها وبرودتها. وإنما جعل التقسيم الأول علة للتقسيم الثاني لأن 29% الأخلاط الأربعة 29% والمائية والربح مشتركة في أنها إما حارة وإما باردة ويلزم من انحصار مادة الورم في تلك الستة انحصار كيفية الورم في هاتين الكيفيتين ويظهر مما 30% قلنا أن تقسيم الأورام بالأمور الستة المادية تقسيم الفصول 30% وتقسيمها بالحرارة والبرودة تقسيم بالعوارض. ثم هاهنا شك وهو أنه في هذا الموضع جعل الأورام المائية نوعا 30% في مقابلة الأورام البلغمية. وأما في المقالة الذي يذكر فيها 30% معالجات 30% الباردة من هذا الكتاب جعل الأورام المائية نوعا 30% من الأورام البلغمية. فإنه قال: الأورام الباردة 37% إما أن تكون بلغمية أو سوداوية أو ربحية، والأورام البلغمية إما ساذجة بلغمية [G 103b] وتسمى أوراما رخوة وإما مائية كما يعرض [Ox 108b] لعضو ما أن يجتمع فيه ماء كاستسقاء 30%؛ هذا 90% كلامه. ولا شك أن الأورام المائية إما أن تكون داخلة تحت البلغمية أو لا تكون فيكون كلامه لا محالة في أحد الموضعين مستدركا. وقوله: وإذا جمع سمي خراجا. فاعلم أن هذا نوع آخر من التقسيم وهو أن الورم كيف ما كان إما أن يكون قد جمع أو لم يجمع؛ والأول يسمى خارجا. ثم عبر 310 أن الخراج الذي يكون من جنس رديء فإما أن يكون أنه الكورة الضعيفة وهي المغابن 31 وخلف الأذن والأربية وإما أن لا يكون واقعا 318 فيها. فالأول يسمى طاعونا. وقوله: وللأورام الحادة 314 اللحوم الضعيفة وهي المغابن 31 وخلف الأذن والأربية وإما أن لا يكون واقعا 318 فيها. فالأول يسمى طاعونا. وقوله: وللأورام الحادة 314 ولم

^{298.} كَان Ox: om. G.

^{299.} ועל, שב] Ox, G: אלד P.

^{300.} אלסנת] Ox, G: אלסנת P.

^{301.} מא Ox, G: מאט P.

^{302.} באלפציל] Ox, P (באלפציל: באלפציל G.

^{303.} نوعين : Ox نوعين G نوعا P.

^{304.} אלדי ידכר פיהא) איז Ox, P (ווגע אלדי ידכר פיהא): שנא נאכע או שנא האלדי ידכר פיהא G.

^{305.} מעאלגאת] Ox, P (מעאלגאת): معالجه G.

^{306.} نوعين :Ox نوعا G.

^{307.} من هذا الكتاب ... قال الأورام الباردة] Ox, G: om. P.

^{308.} באלאסתסקא] Ox, G: כאלאסתסקא P.

^{309.} בנו Ox, G: هذו P.

^{310.} عبر] G: om. P.

^{311.} قد جمع أو...فإما أن يكون] G: om. Ox.

^{312.} אלמעאפן Ox, G: אלמעאפן P.

^{313.} פוقعا Ox, G: ואקעת P.

^{314.} الحادة add. لها G.

ابتداء فيه يندفع الخلط ويظهر الحجم ثم يتزيد فيزيد معه الحجم ويتمدد ثم وقوف ثم يأخذ في الانحطاط فينضج [P 71a] بتحلل أو قيح. فاعلم أن هذا أنه بيان حكم من أحكام الورم الحار³¹⁷ وهو أنه بالحقيقة حكم من أحكام مطلق المرض لأن لكل مرض أنه هذه الأوقات الأربعة على ما سيأتي. وقوله: ومآل أنه أمره إما أنه تحلل وإما أنه جمع مدة وإما استحالة إلى الصلابة. فاعلم أنه لما ذكر أن الورم له انتهاء أراد أن يشرح حاله عند الانتهاء. وبيان ذلك أن الورم إذا أنه حدث في العضو فإما أن يغلب الفضل العضو أو العضو الفضل. فإن غلب العضو الفضل دفعه فرقه أنه أن كان مما يمكن نضجه وإحالته أنه الدم المحمود كالبلغم أنه العذب فعل أنه وإن كان دما فيه حدة وحرافة عدله ورده إلى حالته الطبيعية. وكل ذلك يسمى تحلل الأورام وهو 328 أحمد أقم وجوه شفاءها، وبعد ذلك

^{315.} وقوف Ox, G: וקף P.

^{316.} אבו Ox, G: הדה P.

^{317.} ולחר] Ox, G: אלחר P.

^{318.} وهو Ox: هو G.

^{319.} من add. مرض G.

^{320.} ونهاية : Ox ومآل G : om. P.

^{321.} אלי] Ox, G: אלי P.

^{322.} או ,] Ox, G: או P.

^{323.} אך] Ox, G: אל P.

^{324.} פֿעפֿא] Ox : פֿוקה P : om. G.

^{325.} وإن كان لا يمكن دفعته قوية : (المد دم ממא מכן נכגה ואחאלתה) Ox, P (وإن كان مما يمكن نضجه وإحالته G.

^{326.} واللعم: Ox واللعم G.

^{327.} فصل : (פעל) Ox, P (فعل G.

^{328.} פ (פ פ Ox, G: והדה P.

^{329.} אחד] Ox, G: אחד P.

في الصلاح أن ينضج، والنضج يلحقه 330 [G 104a] بالضرورة أدّة أمران أحدهما تولد المدة والآخر جمعها 332. ثم 333 ذاك 334 الجمع إما أن يكون إلى قرحة موصوفة بوصفين أحدهما أن يكون أعظم القرح 335 القريبة [Ox 109a] منه 336 والآخر 337 أن يكون أقلها خطرا، وإما أن تكون إلى قرحة موصوفة بأحد هذين الوصفين وهو 339 أن يكون أعظم القرح القريبة إلا أنها ليست قليلة الخطر أو تكون أعظم القرح القريبة إلى السلامة. واعلم أن أورام المفاصل لا تجمع لأن رطوباتها مخاطية فإذا كثرت حتى تبل 342 اللحم الذي حول المفاصل أحدثت أوراما شبيهة بأورام الاستسقاء. هكذا قاله صاحب 343 الكامل في باب النقرس، وأما القسم الثالث 64 وصيرورة الورم صلبا فهو ظاهر.

قال الشيخ: وأما الأورام الغير 345 الحارة إلى قوله وأما جنس الأورام البلغمية.

^{330.} עבעה] Ox, G: תבעה P.

^{331.} بالضرورة] Ox, G: om. P.

^{332.} באשאו (גמעהא): א האשן Ox.

^{333.} יכון :Ox, G מֹב P.

^{334.} خال] Ox: خالك G, P (تاك).

^{335.} القرح : (אלקרה) Ox, P (אלקרה): لقرح G.

^{336.} منه] add. et del. والى G.

^{337.} פוּעֹבֹע] Ox, P (אלאכר) : om. G.

^{338.} الى قرحه هو .add. et del أن يكون G.

^{339.} אלי קרחת מוצופת באחד הדין אלוצפין והו) Ox, P إلى قرحة من...هذين الوصفين وهو : om. G.

^{340.} פוי يكون : (או תכין) Ox, P (פוי يكون : G.

^{341.} والقسم :Ox والقسم

^{342.} יאָל] Ox, G: תכל P.

^{343.} مالكتاب add. الكتاب G.

^{344.} מלג] Ox, G: אלג P.

^{345.} בער : (אלגיר) Ox, P (אלגיר) : غير G.

التفسير: ثم أنه عاد 346 مرة أخرى إلى التقسيم وشرع 477 في تقسيم الأورم 348 الباردة وهي أربعة: السوداوية السيداوية والمبلغمية والمائية والريحية. ثم قسم السوداوية إلى أقسام ثلاثة: الصلابة والسرطان وأجناس الغدد التي منها الخنازير والسلع ليست سوداوية بل بلغمية لأن الشيخ قال في المقالة التي يذكر فيها الأورام الباردة من هذا أقد الكتاب الأورام البلغمية إما ساذجة بلغمية كما يعرض لعضو إن يجتمع فيه ماء، وإما مائية وإما دبيلات لينة كالسلع اللينة، وإما مستحصفة كالخنازير والسلع الصلبة. وأما المسيحي فإنه قال في آخر 352 كتاب الأورام: والخنازير أورام تحدث عن بلغم غليظ فتصلب عندما [P 71b] يبقى في اللحم. وأما صاحب [G 104b] الكامل فإنه أورد السلع والخنازير في باب الأورام البلغمية، وحصر 353 الورم السوداوي في الجنسين 354 الباب الغدد التي الباقيين. ويمكن أن يقال: الشيخ [Ox 109b] لم يجعل الخنازير والسلع من الأورام السوداوية وهي التي تسمى مسامير فإنه أفرد 356 منها الخيارير والسلع داخلة في الأورام السوداوية وهي التي تسمى مسامير فإنه أفرد 356 في المقالة التي يتكلم 357 فيها على الأورام السوداوية لهذه المسامير فصلا؛ أو يقال: إنه قال في باب السلع إنها دبيلات بلغمية تحوي أخلاطا غليظة بلغمية المفدة عن البلغم كلحم أو كعصيدة 350 أو كعسل أو شيئا صلبا لا 360 يبعد أن يجب إلحاقها بالسوداوية إلا أخلاطا غليظة بلغمية 358 أو متولدة عن البلغم كلحم أو كعصيدة 350 أو كعسل أو شيئا صلبا لا 3600 يبعد أن يجب إلحاقها بالسوداوية إلا

^{346.} בור] Ox, P (שאר G.

^{347.} פ شرح : (ושרע)] P (פ מעכ : Ox : om. G.

^{348.} פי תקסים אלאוראם) Ox, P (פי תקסים אלאוראם) : om. G.

^{349.} אלמדאוית] Ox, G: אלמדאוית P.

^{350.} السلع] G : om. Ox.

^{351.} אבו Ox, G: בבו P.

[.] كلامه في .add [آخر 352. G.

^{353.} פخص: (וחצר) P (פבשע Ox, G.

^{354.} אלגכסיין] Ox, G: אלגכסיין P.

^{355.} والسلع Ox: والسلع Ox:

^{356.} אגוד] Ox, G: אגוד P.

^{357.} מכלם :Ox, G ביצאה P.

^{358.} בלגמית גליטת און אובל] Ox, G: בלגמית בלגמית בלגמית P.

^{359.} בסענה : (כעצידמ) Ox, P (כעצידמ) : G.

^{360.} און Ox, G:ולא: P.

أنا جعلناها أفق بلغمية لأن أصل ذلك العصيد 362 بلغم عرض له أن يبس فازداد غلظا؛ هذا كلامه في هذا الموضع. وبالجملة 363 فكلامه في هذا الموضع. وبالجملة قد يكون مضطرب. وقوله الأورام الصلبة السوداوية تبتدئ في أول كونها صلبة وقد تنتقل إلى الصلابة وخصوصا الدموية وقد يعرض ذلك أيضا في البلغمية أحيانا. فالمراد منه أن أحد نوعي الورم 365 السوداوي وهو 366 الصلابة قد يكون تكونه عن خلط محدث 367 له ابتداء وقد يكون حدوثه من قبل أن 368 يحصل 369 نوع آخر من الورم ثم أن مادته تغلظ فيصير الورم صلابة وأكثر 370 ذلك إنما يقع في الورم الدموي وقد يكون أيضا في الورم البلغمي. فأما 371 ما ذكره 372 في باب 373 الفرق بين الغدد والسلع وبين تعقد العصب فكله ظاهر والذي 374 يلحقه 375 يلم أن تعقد العصب لا يتحرك إلى قدام وخلف بل يمنة 376 ويسرة 377. وأما السلع فإنها يتحرك 378 إلى الجوانب كلها وباقي الفصل [G 105a] ظاهر 379.

369. ليحصل add. أ P.

371. فأما] Ox, P (פאמא) : واما G.

372. בער א Ox: גענ G, P (זכר).

373. באב) און P (באב) : om. Ox, G.

374. פולגי] Ox, G: ואלתי P.

375. עבפ] Ox, G: תלחקה P.

376. באיג] Ox, G: אמנא P.

377. יסרא] Ox, G: יסרא P.

378. בישע] Ox, G: תתחרך P.

379. طاهر] add. والله الموفق G.

^{361.} אנהא געלהא : Ox, G ווו جعلناها P.

^{362.} אלעציד)] P (אלעציד) : שבשע Ox : om. G.

^{363. (}ובאלגמלת) G, P (ובאלגמלת): om. Ox.

^{364.} אבו Ox, G: בבו P.

^{365.} الورم] Ox, G: om. P.

^{366.} وهو] Ox, G: והי P.

^{367.} מברב] Ox, P (מחדת): فيحدث G.

^{368.} אנה :Ox, G أن P.

^{370.} פֿוֹאַת] Ox, P (ואכתר) : שֿוֹאַת G.

C. On Pain and Pleasure

Commentary refers to Avicenna, *al-Qānūn fī al-ṭibb*, ed. Qāsim M. Raǧab (Baghdad: Dār al-mutan-nā, 1970), 1:108, l.4–109, l.16.

Oxford, Bodleian Library, ms. Arch. Seldon A 64 [Ox], fols. 131b, l.10-138, l.9.

Paris, Bibliotheque nationale de France, MS hebr. 1208 [P], fols. 87b, l.25-92, l.17.

Gotha, Forschungs- und Landesbibliothek, MS or. 1916 [G], fols. 127b, l.9–133b, l.13.

الفصل التاسع عشر 380 في أسباب الوجع على الإطلاق إلى آخره 381 .

التفسير 382: اعلم أن في هذا 383 الفصل مباحث لا بد من استقصاء النظر 384 فيها.

البحث الأول في حد اللذة والألم 386. فنقول 386: الحد المشهور للذة أنها إدراك الملائم. وذكر 387 في الأدوية القلبية أنها إدراك مخصوص 388 لحصول 388 الكمال الخاص بالقوة المدركة. [P 88a] وبالحقيقة لا تفاوت بين الحدين. فإن الكمال الخاص بالقوة المدركة هو تفسير 390 الملائم. وأما الألم فهو إدراك المنافي. ثم لقائل أن يقول: إن 391 الوقت الذي يكون فيه لا ملتذين ولا متألمين 392

^{380.} التاسع عشر Ox, G: ن P.

^{381.} אלתפסיר] add. (אלתפסיר) P.

^{382.} אלתפסיר): om. Ox, G.

^{383.} אבו Ox, G: הדה P.

^{384.} البحث : Ox, P النظر G.

^{385.} الالم واللذة :Ox, P اللذة والألم واللذة

^{386.} פנקול) P (פנקול): om. Ox, G.

^{387.} نكك :Ox نكل G.

^{388.} مخصوص Ox: om. G, P.

^{389. |} עבשע | Ox, P (לחצול): אבשעל G.

^{391.} ان Ox, G: om. P.

^{392.} ע אלמלתדין ו מתאלמין :Ox, G ע אולגיי פע הולגיי פע P.

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يمكننا أن نعقل فيه ⁹⁹³ ما ينافي ⁹⁹⁴ بدننا وما يكون منافيا له. ففي تلك الحالة إدركاك الملائم والمنافي يكون حاصلة وإن لم يكن الألم واللذة حاصلة بل وقت كوننا ملتذين هكذا يعقل ما ينافي كوننا ³⁹⁵ وبالعكس. فإذا كان إدراك المنافي ممكن ³⁹⁶ الحصول عند وجود اللذة والألم يمتنع ³⁹⁷ اللخصول عند وجود اللذة والألم يمتنع الحصول عند وجود اللذة الإدراك ³⁹⁸ فالألم مغاير للإدراك ³⁹⁹. فإن قيل اللذة إدراك الملائم الحاصل وفي الصورة التي [Ox 132a] ذكرتموها الملائم صيرها ⁴⁰⁰ غير حاصل فاندفع الإشكال ⁴⁰¹. فنقول أما أولاً فهذا ⁴⁰² زيادة في الحد وهي مع ذلك غير دافعة للإشكال [G 128a] لأن المدقوق إذا علم أنه حصل ⁴⁰³ في أعضائه الأصلية حرارة غير طبيعية فهناك إدراك المنافي الحاصل موجود مع أن الألم غير موجود. فإن قيل الحاصل في هذه الصورة هو التعلم ⁴⁰⁴ بوجود المنافي لا إدراك المنافي والعلم غير والإدراك غير ⁴⁰⁵. فنقول الإدراك على قسمين منه ما يتوقف على حصول مدركه ⁴⁰⁶ في الخارج ومنه ما لا

- 396. ימכו] Ox, G: ימכו P.
- 397. במדגש] G, P (מתנע): סמדיש Ox.
- 398. ואלאלם ימתנע אלחצול ענד וגוד אללדת) G, P (פולות במינא שלחצול שנד וגוד אללדת): om. Ox.
- 399. מעאיר לאדראך G: מעאיר לאדראך P. מעאיר לאדראך P.
- 400. צירהא) P (צירהא): om. Ox, G.
- 401. السؤال : (אלאשכאל) P (אלאשכאל) : الشكال Ox, G.
- 402. منه] Ox1: هذه G, P (הדה).
- 403. בבעל Ox. P (מצלת).
- 404. ווישלה (אלתעלם) P (אלתעלם) : Ox, G.
- 405. غير Ox, P (גיר) : om. G.
- 406. مدرك] G, P (מדרכה): مدرك Ox.

^{393.} פיה) P (פיה): om. Ox, G.

^{394.} ينافى Ox, G: ילאים P.

يتوقف. والأول 407 هو الحواس الخمسة 408 فقولكم 408 اللذة إدراك الملائم إن عنيتم به 410 القسم الأول لزمكم حصر الألم واللذة في الإدراكات الحسية ونفا 411 اللذات 412 والآلام 413 العقلية. وهذا مخالف الحق ولما هو كالمتفق عليه بين 414 الفلاسفة وإن 415 عنيتم به ما يتناول 416 القسمين لزمكم الشك المذكور. فإذن لا بد هاهنا من الاعتراف بأن 417 اللذة العقلية أمر مغاير 418 لنفس 419 العلم حاصل معه. وأما اللذة الحسية فهل هي أمر حاصل مع الإحساس بالملائمات أو هو نفس الإحساس بهذا 420 ، وذلك 422 المشكل 422 . ومما نقوله فقى اللذة العقلية أنهم حدوه بأنه إدراك الملائم واتفقوا 423 على 425 أن العلم بالباري والعلم بالمقدمات 426 قد يكون حاصله عندما لا

- 414. יעני] G, P (איני: בין): סט Ox.
- 415. פוני (ואך) Ox, P (פוני G.
- 416. יותנאול)] G, P (יתנאול): ناول Ox.
- 417. بأن Ox: ان G.
- 418. القسمين لزمكم الشك المذكور فإذن لا بد هاهنا من الاعتراف بأن اللذة العقلية أمر مغاير) Ox, G: om. P.
- 419. נפס] Ox, G: נפס P.
- 420. בהדא] G, P (בהדא): לאַנו Ox.
- 421. وذلك : (١٣٢٦) G, P (وذلك Ox.
- 422. משכל] Ox, G: משכל P.
- 423. טקולה :Ox, G نقوله P.
- 424. פוזשה] G, P (ואתפקוא): פוזשה Ox.
- 425. على Ox.
- 426. באלמתפאות) G: יואספות Ox: (באלמתפאות) P.

^{407.} פאלאול) G: פֿאלאול) Ox, P (פֿאלאול).

^{408.} מאלכמסת) Ox, P (אלכמסת): om. G.

^{409.} פנקול להם] Ox, G: פנקול להם P.

^{410.} יף א] Ox, G: חסתל בהא P.

^{411. (}دنها Ox, P (نفا : وتقي) G.

^{412.} מולום] Ox: P (אללדת): וולום G.

^{413.} פועצע] Ox : פועל פועלעם G, P (ואלאלאם).

تحصل اللذة فدل 427 على أن اللذة مغايرة لهذا العلم. وأيضا فالعلم بالباري لذيذ 428 مع أنه ليس علما بشيء ملائم لأن الملائم قد يفسر بما يكون كمالا خاصا بالشيء والباري ليس هو كمالا خاصا بشيء 439 . فإن قالوا 430 إن العلم به كمال خاصا بالنفس فلا جرم أذه يكون لذيذا فنقول 432 : فرق بين نفس الكمال وبين العلم بالكمال فهاهنا العلم هو نفس الكمال لا أن معلومه هو [P 88b] الكمال. فالعلم [Ox 132b] هو الملائم لا أنه علم شيء آخر هو الملائم فكان من الواجب عليكم أن يقولوا اللذة هو 433 حصول 435 الملائم لا أنه إدراك الملائم لأن العلم هو نفسه ملائم لا أنه إدراك لشيء ذلك الشيء ملائم 434 . وبالجملة فنقول [...]

البحث الثاني 436 في أن تفرق الاتصال مؤلم. هذا 437 متفق عليه بين 438 الجمهور من الفلاسفة والأطباء ولي فيه شكوك. الأول أن التغرق 439 والانفصال لفظان مترادفان وقد اتفقوا على أن الانفصال أمر 440 عدمي وهو عدم الاتصال عما من شأنه أن يكون متصلا 441 والوجع لا شك أنه أمر وجودي 442 والأمر العدمي لا يجوز أن يكون علة للأمر 443 الوجودي. فتفرق الاتصال لا يجوز أن يكون علة 444 الوجودي.

^{427.} בעל] Ox, P (פדל): فيدل G.

^{428.} נעב (לדיד) G, P (לדיד) Ox.

^{429.} באלשי) Ox, P (באלשי: באלשי) G.

^{430.} בולפו Ox, G: קיל P.

^{431.} אנם :Ox, G جرم P.

^{432.} לדיד פנקול : Ox : לדיד פנקול : om. G.

^{433.} هي : (۱۲۱) Ox, P هو G.

^{434.} אלמלאים : Ox, G מעל P.

^{435.} om. Ox, G.

^{436.} בחת אלב] Ox, G: בחת אלב P.

^{437. [}هذا Ox, G: הדה P.

^{438.} ענין) Ox, P (איני: בין G.

^{439.} וודשׁתַם (אלתפרק) Ox, P (אלתפרק) G.

^{440.} אמור Ox, G: אמור P.

del. in textu G. والموضع add. متصلا

^{442.} פجودى] Ox, G: מוגודי P.

^{443.} ועת (ללאמר) Ox, P (וולת (ללאמר) G.

^{444.} שב] add. post. et del. ללאמר אלוגודי P.

للألم 445. الثاني وهو أن التغذى والنمو إنما يحصلان بأن يتفرق 446 اتصال العضو وينفذ في الفرج المستجذبة 447 للأجزاء 448 الغذائية مع أنه ليس هناك ألم. ومعلوم أنه 440 إنما لم يؤلم لأن ذلك التآلم والتفرق 450 أمر طبيعي ولم يحدث عنه سوء مزاج 451. وذلك يدل على أن التفال ألم لأنه تفرق لم يكن 452 معه من سوء المزاج 553. فيحتاج هاهنا إلى بيان أن اتصال العضو يتفرق عند التغذى والنمو 454. وذلك بالنقل أولا ثم بالبرهان ثانيا. أما النقل فقد صرح الشيخ بذلك في مواضع 455 من كتاب الشفاء فمنها أنه حكى في الفصل السادس 456 من المقالة الثانية من الفن الأول من الطبيعيات عن أصحاب الخلاء أنهم احتجوا 457 على وجود الخلاء بأن 458 قالوا 459 النامي إنما نما 460 لنفوذ شيء فيه. ولا شك أن ذلك الشيء ينفذ لا في الملاء بل في الخلاء، ثم أنه أجاب عن ذلك في

^{445.} אלום] Ox, P (ללאלם): ועל G.

^{446.} تفرق : (יתפרק) G, P (تقرق : Ox.

^{447.} ולמסתגדבת | P (אלמסתגדבת Ox : ולאשיבני Ox ולאשיבני G.

^{448.} ועל אנום: (ללאגזא) P (ללאגזא): ועל אנום Ox, G.

^{449.} מנה) Ox, P (אנה): om. G.

^{450.} التآلم والتفرق: (אלתפרק) Ox, P (אלתפרק) G.

^{451.} מואג) P (מואג): om. Ox, G.

^{452.} ابل لما يكن (בל למא יכון) Ox, P بل لما يكون (בל למא יכון) G.

^{453.} מזאג] Ox, G: מזאג P.

^{454.} פוויمو] Ox, G: וענד אלנמו P.

^{455.} מוצע Ox, G: מוצע P.

^{456.} אלז] Ox, G: אלז P.

^{457. |} אהתאגוא Ox, G: אהתאגוא P.

^{458.} פֿאן :Ox, G: אַלט P.

^{459.} פועפו] Ox, G: קאלו P.

^{460.} ינמו Ox, G: ינמו P.

الفصل التاسع 461 فقال: وأما حديث النامي فإن الغذاء ينفذ بين متماسين من أجزاء الأعضاء يجزلها 462 بالتنفيذ 463 بقوة فيتسكر 464 الفصل بينهما [Ox 133a] ويتفسح 465 الحجم. هذا لفظ الشيخ وهو صريح [G 129a] فيما ادعيناه 666. ومنها أنه قال 467 في الفصل الثامن 468 من الفن الثالث 469 من الطبيعيات في بيان كيفية النمو: يجب أن يكون الازدياد مستمرا على تناسب مؤذ 470 إلى كمال النشوء 470 ويكون الوارد قد فسد واستحال إلى شاكلة 472 المورود عليه والمورود عليه 473 قد نما ممتدا في الأقطار متجها 474 إلى 475 كمال النشوء فيجب أن يكون هذا الوارد 476 يداخل 477 المورود عليه نافذا في خلل تحذيه 478 في جسمه يندفع له المورود عليه إلى أقطاره على نسبة واحدة في نوعه 479. ومنها أنه قال في الفصل الأول من المقالة [P 89a] الثانية 480 من علم النفس: "وأما المربية فإنها تزيد في

^{461.} וושם אלפצל אלט] Ox, G: הדא אלפצל אלט P.

^{462.} באנשן] Ox, G: יחרכהא P.

^{463.} יבאלתנפיד) Ox, G, P (באלתנפיד) : Rahman.

^{464.} פיסכן :G ביסכן P.

^{465.} وینفسخ) P (وینفسخ) Ox, G:اروینفسخ).

^{466.} רעינאה : Ox, G ונعيناه P.

^{467.} قال Ox, G: om. P.

^{468.} אלח] Ox, G: אלח P.

^{469.} וומו אלג] Ox, G: אלג P.

^{470.} אלמוגוד] Ox, G: אלמוגוד P.

^{471.} אלנמו] Ox, G: אלנמו P.

^{472.} משאכלת :G משאכלת P.

^{473.} שב] Ox, P (עליה): om. G.

^{474.} מתגהא) Ox, P (מתגהא): om. G.

^{475.} post إلى add. et del. in textu ذلك Ox.

^{476.} ועפוער] Ox, G: אלכמאל P.

^{477.} پدخل] Ox: پدخل G.

^{478.} יחדתה : Ox, G דحدیه P.

^{479.} في نوعه] G, P (ود دالام): om. Ox.

^{480. |} ווליעה (אלתאנית) Ox, P (אלתאנית) G.

الطول أكثر كثيرا 482 مما تزيد في العرض. والزيادة في الطول أصعب من الزيادة في العرض وذلك لأن الزيادة في الطول يحتاج فيها إلى تنفيذ الغذاء 482 ين 484 مما تزيد في العرض. والزيادة في العرض والعصب تنفيذا في أجزائها طولا لتنميها ويبعد 483 بين 484 أطرافها. "واعلم أن كلامه في هذه 485 المواضع الثلاثة صريح في أن النمو لا يحصل إلا عند تفرق الاتصال هناك وإن حصل 486 تفرق الاتصال 487. وأما البرهان فلأن الأعضاء لا شك أنها في التحلل ولا معنى للتحلل إلا أن ينفصل 488 عن العضو 489 جزء 490 كان متصلا به وإلحاجة 191 إلى الغذاء للإلصاق 492 مثل ذلك الجزء بالعضو. فإذن تفرق الاتصال شيء لا يخلو 493 الأعضاء عنه في أكثير الأوقات ثم أن هذا التفرق 494 ليس شيئا يختص به 495 ظاهر العضو دون باطنه لأن المحلل هو 496 الحرارة وهي سارية في ظاهر العضو وباطنه فوجب أن يتحلل من الأجزاء من باطن (Ox 133b) العضو كما يتحلل من ظاهره 497 والتحلل لا يتم إلا بتفرق الاتصال 498 فإن قيل التغذى والنمو وإن كانا لا

^{481.} כתירת P: om. G.

^{482. |} الغذاء Ox, P (אלגדא), Rahman: الفضل G.

^{483.} ادروم) Ox, Rahman وينفذ : 6, P ويبعد).

^{484.} יעני] Ox, P (ביך) G.

^{485.} هذه] Ox, G: אהדא P.

^{486.} מצל] Ox, G: תצל P.

^{487.} الاتصال add. لعله سقص G.

^{488.} עינפעל] G, P (ינפעל): ספטל Ox.

^{489.} العضو Ox.

^{490.} جزء Ox, G: ہار P.

^{491.} פאלהאגא :Ox, G פולהאגא P.

^{492. [} ועלבאק Ox: P (אלצאק).

^{493.} בלע : Ox: אבלע G: תכלו P.

^{494.} וודשׁנט] Ox, G: אלתפריק P.

^{495.} יא] Ox, P (בה): om. G.

^{496.} שנ] Ox, G: די P.

^{497.} ظاهره] Ox, G: om. P.

^{498.} וויבשול Ox, G: לתצלא P.

يتمان إلا بتفرق اتصال العضو 499 لكن ذلك تفرق في أجزاء صغيرة جدا فلصغر 500 ذلك التفرق لا يحصل الألم. فنقول: إن كل واحد [G 129b] من تلك التفرقات 501 وإن كان صغيرا جدا. ولكن تلك التفرقات كثيرة جدا لأن التغذى والنمو شيء غير مختص بجزء من البدن دون جزء بل هما حاصلان في جملة الأعضاء وهما لا يتمان 502 إلا بهذا النوع من التفرق. فإذن 503 هذا النوع من التفرق أمر حاصلة حاصل في جملة الأعضاء وإذا كان كذلك فلو كان تفرق اتصال 504 الأعضاء 505 من حيث أنه تفرق مؤلماً كانت 507 الآلام حاصلة في جملة البدن ولما لم يكن 508 كذلك علمنا أن التفرق لذاته غير مؤلم بل إنما يؤلم إذا حصل معه سوء مزاج، فإن قيل: هذه التفرقات مؤلمة 509 إلا أن تلك الآلام لما دامت بطل 510 الشعور بها 511 . فنقول: أما أولا فنحن لا نعني بالألم 512 إلا هذا الأمر المحسوس ولا شك أنه غير 513 حاصل بسبب التغذى والنمو وليس 514 كلامنا إلا في ذلك فإن 515 أثيتم 515 أمرا آخر كان وقوع الاسم عليه وعلى ما نحن فيه باشتراك الاسم. وأما ثانيا فلأن الوجع الحاصل من تفرق الاتصال لما صار لكونه 517 مألوفا غير محسوس وجب أن يكون كل وجع

^{499.} فإن قيل التغذى ... بتفرق اتصال العضو] Ox: om. G, P.

^{500.} פוصغر (פלצגר) Ox, P (פלצגר) G.

^{501.} מן תלך אלתפרקאת] Ox, P (מן תלך אלתפרקאת): om. G.

^{502.} ינמאן] Ox, G: ינמאן P.

^{503.} פֿאָרא] Ox, G: פֿאָרא P.

^{505. |} וול שביום Ox, P (אלאעצא): لل שביום G.

^{506. |} ספלה (מולמא) Ox, P (מולמא) G.

^{507.} בונים: (לכאנת) G, P (לכאנת): Ox.

^{508.} בוט עש (לם יכן) Ox, P (לם יכן): كان ليس G.

^{509.} מולמא] Ox, G: מולמא P.

^{510.} עלוד אין Ox, P (בטל: בטל) G.

^{511.} אלשעיר בה] Ox, G: אלשעיר בה P.

^{512.} באלאלם] Ox, P (באלאלם): om. G.

^{513.} غير) Ox, P (גיר): om. G.

^{514.} עעש] Ox, G: ליסת P.

^{515.} فإن Ox, G: ואן P.

^{516.} מניתם (סx, G: אנתם עניתם P.

^{517.} كونه : (לכונה) Ox, P لكونه : 3.

يحصل عن تفرق الاتصال. وليس مطلوبنا إلا ذلك. ومنها أنه قد 510 يصيب العضو جراحة ثم أنها لا تؤلم في أول الأمر بل إنما يظهر صادر عن تفرق الاتصال. وليس مطلوبنا إلا ذلك. ومنها أنه قد 520 يصيب العضو جراحة ثم أنها لا تؤلم في أول الأمر بل إنما يظهر الألم بعد ذلك بلحظة. ولو 521 كان تفرق [P 89b] الاتصال لذاته مؤلما لاستحال يخلف الألم عنه [Ox 134a]. فلما تخلف علم أنه إنما تخلف في الأول لم يحصل سوء المزاج 522 فلا جرم 524 لم يحصل الألم، ثم لما حصل سوء المزاج 525 بعد ذلك [G] حصل الألم، فإن قيل: الحس شاهد بأن تفرق الاتصال مؤلم فما عذركم 526 عنه؟ فنقول: العذر عنه واضح وهو أن تفرق الاتصال يلزمه سوء المزاج وذلك هو المؤلم، فإن قيل: فقد جعلتم تفرق الاتصال علة 527 لسوء المزاج مع أن التفرق أمر عدمي وسوء المزاج أمر وجودي. فنقول: بدن الإنسان مركب من العناصر التي تقتضي طبيعة كل واحد منها الخروج مع أن تفرق الاتصال الخروج 522 عن الاعتدال ثم أنها ما دامت 520 متصلة 530 الكيفيات الخارجة عن الاعتدال فحينئذ تفيض 531 عنها تلك الكيفيات. فالحاصل 532 أن السبب منها خالية عما يعوقها عن إفاضة تلك الكيفيات الخارجة عن الاعتدال فحينئذ تفيض 531 عنها تلك الكيفيات. فالحاصل فقد عدم المانع فحينئذ تعود الطبيعة مقتضية لفعلها. فهذا غاية ما عندي في هذا البحث.

^{518.} אלא P. סx, G: אלא P.

^{519.} באם] Ox, G: חכםא עלי P.

^{520.} قد] supra lin. et del. وجب G.

^{521.} פלי] Ox, P (פלפ G.

^{522.} تخلف] Ox, G: תכתלף P.

^{523.} מזאג :Ox, G المزاج P.

^{524.} אנזם :Ox, G جرم P.

^{525.} מזאג] Ox, G: מזאג P.

^{526.} פאעדרכם] Ox, G: פאעדרכם P.

^{527.} שב Ox, G: סבבא P.

^{528.} مع أن ... الاتصال الخروج] G: om. Ox, P.

^{529.} בומד] Ox, G: דם דמת P.

^{530.} מתצלת) או in marg. Ox: מתצלת) Ox.

^{531.} יקבצ] Ox, G: יקבצ P.

^{532.} אל אצל] Ox, G: ואל אצל P.

^{533.} פכמא Ox, G: פכמא P.

البحث الثالث⁵³⁴ في أن سوء المزاج المختلف مؤلم⁵³⁵. مذهب جالينوس أن السبب الذاتي للألم⁵³⁶ هو التفرق ومذهب الشيخ أن السبب الذاتي للألم^{538,537} إما تفرق الاتصال وإما سوء المزاج المختلف. وأما نحن فنظن أن السبب الذاتي هو سوء المزاج فقط. واعلم أن كل ما دل على أن التفرق⁵³⁹ ليس سببا ذاتيا للألم فهو يدل على أن سوء المزاج يجب أن يكون سببا ذاتيا لأنه ليس هاهنا ثالث. وهاهنا نريد أن نذكر ما⁵⁴⁰ يدل على أن سوء المزاج المختلف مؤلم من غير [Ox 134b] أن يبني ذلك على كون ا⁵⁴¹ التفرق مؤلما أم لا. وذكر الشيخ في ⁵⁴² ذلك وجوها ثلاثة. الأول أن الوجع ⁵⁴³ [d 130b] قد يكون متشابه الأجزاء في العضو الوجع وتفرق الاتصال لا يمكن أن يكون متشابه الأجزاء لأنه أن أن أن عن عن تفرق الاتصال لا يكون عن أن يكون متشابه الأجزاء الأجزاء أن أخراء أن يكون متشابه الأجزاء أن التفرق الاتصال. ولقائل ⁵⁴⁸ أن يقول إنا لا نسلم ⁵⁴⁹ كون الوجع متشابه الأجزاء في الحقيقة لأن التفرقات الأحزاء في الحقيقة لأن التفرقات الأ

^{534.} שלג:] Ox, G:אלג P.

^{535.} מיולם] Ox, G: יולם P.

^{536.} על א] Ox, P (ללאלם): ועל G.

G. الملائم هو :OX للألم

^{538.} هو التفرق ومذهب...السبب الذاتي للألم] Ox, G: om. P.

[.] אונים (סx, G: תפרק P. סx, G: תפרק

^{540.} במא Ox, G: כמא P.

^{541.} בפי] add. אלכון P.

^{542.} في add. post et del. in textu كتاب G.

^{543.} lee | אלוגע G, P (אלוגע) Ox.

^{544.} משאבה] Ox, G: משאבה P.

^{545.} كأنه] Ox, G: om. P.

^{546. |} שלוגע G, P (אלוגע) Ox.

^{547.} عن] Ox, P (ער): من G.

^{548. (}ולקאיל) Ox, P (פומן: ולקאיל) G.

^{549.} ישלה add. לכם P.

^{550.} משאבה] Ox, G: משאבה P.

^{551. |} וודיע פור אלתפרקאת | Ox, P (אלתפרקאת): G.

متى كثرت في السطح كان البعض قريبا من البعض وصارت السطوح صغيرة جدا. فإذا حصلت 552 الآلام في 553 مواضع التفرقات 553 فلكثرة 553 تلك المواضع وقرب بعضها من البعض 555 وصغر ما بينها من السطوح يشتبه 556 على الحس فنظن كون الوجع 556 متشابها وإن لم يكن في نفس الأمر كذلك. وهذا 558 كما أنا إذا دققنا 569 المداد والاسفيداج والزنجفر 560 والزرنيخ دقا ناعما وخلطنا 561 البعض بالبعض يابسا 562 فإنه يظهر في الحس للمجموع 563 لون 564 على حدة وإن لم يكن 566 في نفس الأمر كذلك. وإذا كان هذا 567 المداد والاحتمال قائما لم يكن 568 القياس برهانيا. الحجة الثانية 569 قال 577 البرد موجع 571 حيث يقبض ويجمع وحيث يبرد وتفرق

^{552.} מעל :] Ox, G בשל P.

^{553.} ווווענפור (אלתפרקאת) Ox, P (אלתפרקאת): G.

^{554.} فللكثرة (פלכתרת) G, P (פלכתרת) Ox.

^{555.} ווبعض (אלבעצ) Ox, P (אלבעצ): עשלש G.

^{556.} משתבה] Ox, G: תשתבה P.

^{557.} lee שלוגע) G, P (אלוגע) Ox.

^{558.} פגלו Ox, G: והכדא P.

^{559.} רבים] Ox, P (רקקנא): G.

^{560.} אלזנגפור] Ox, G: ואלזנגפור P.

^{561.} בולם: Ox, P (כלטנא): בולם G.

^{562.} پابسا P: om. Ox, G.

^{563. |} שו א א א א א א א א א א א א ללמגמוע) ווא האפ G.

^{564.} אן Ox, G: אפן P.

^{565.} אוֹפרד] Ox: אוֹע הענ G, P (מפרד).

^{566.} עבי] Ox, G: יכון P.

^{567.} אבו Ox, G: הדה P.

^{568.} יכון :Ox, G עצי P.

אלב :Ox, G الثانية P. β69.

^{570.} בול Ox, P (אל): אוט G.

^{571.} מוצע P.] Ox, G: מוצע

الاتصال عن 572 البرد لا يكون حيث يبرد 573 بل 574 في أطراف الموضع المتبرد 575. ولقائل 576 أن يقول الموضع إذا تبرد 577 فإنه ينقبض ويعرض 578 من ذلك الانقباض أن تتمدد أطرافه عن أطراف الموضع الحار وأن تنضغط 579 أجزاؤه المتبردة بعضها في بعض وكلا 580 الأمرين سبب لتفرق الاتصال لها 581 [Ox 135a]. أما 582 الأول فلأنه إذا تمدد طرفه عن طرف الموضع الحار انفصل عنه فحصل التفرق. وأما [G 131a] الثاني 583 فلأن الضغط سبب لتفرق الاتصال ولذلك جعلتم الألم الضاغط قسما من أقسام الألم 584. وأيضا فلأن الموضع المتبرد 585 يمكن أن يكون بعضه أبرد من البعض وحينئذ ينفصل الأبرد عن البارد 586. وإذا كانت هذه الاحتمالات قائمة لم يكن 587 القياس برهانيا. الحجة الثالثة 588 قال الوجع لا محالة إحساس بمؤثر مناف بغتة 589 من حيث هو مناف والحد ينعكس 590

^{572.} שנ] Ox, G: מן P.

^{573.} עני: (יברד) Ox, P (אעני: יברד): א. G.

^{574.} און G, P (בל): om. Ox.

^{575.} אלמתברד] Ox, P (אלמתברד): וואיענ G.

^{576. (}ולקאיל) Ox, P (פלפולט: ולקאיל): שנולט G.

^{577.} ייענ] Ox, P (אברד): אענ G.

^{578.} ويعرض Ox, G: om. P.

^{579.} מעגט] Ox, G: תצגט P.

^{580.} בל] G, P (וכלא): Ox.

^{581.} لها] G: om. Ox, P.

^{582.} أما Ox: om. G.

^{583.} אלב] Ox, G: אלב ₽.

^{584.} ועל אם Ox, G: אלאלאם P.

^{585.} אלמשתרך G: אלמשתרך P.

^{586.} النار : G: البارد Ox.

שכון :G באט בפיט] Ox טכון G: טכון P.

^{588.} אלג] Ox, G: אלג P.

^{589.} عدر] Ox: بعتة G.

^{590.} עיבאים] Ox, G: מנעכס P.

وكل 592 محسوس مناف 592 من حيث هو مناف موجع. ولقائل أن يقول إن كنت تجعل 593 اسم الوجع اسما لإدراك المنافي 595 فذلك مما لا منازعة 595 فيه. ولكنا نجد من أنفسنا أمرا مخصوصا متميزا في نفسه فإذا جعلنا الوجع اسما لذلك الأمر الوحداني 595 لم 597 يلزم بالضرورة أن يكون ذلك 598 الأمر هو لصيق 599 إدراك المنافي بل احتمل ذلك واحتمل أيضا 600 غيره وهو أن يكون الألم حالة أخرى مغايرة لإدراك المنافي حاصلة معه. ومتى كان ذلك محتملا لم يكن 601 الجزم بأن إدراك المنافي ألم، فثبت أن هذه الحجج 602 غير برهانية. ويمكن أن نتمسك في إثبات المطلوب بأن 603 لسعة العقرب أشد إيلاما من الجراحة العظيمة. فلو 604 كان المؤلم هو تفرق الاتصال فقط لكانت الجراحة العظيمة أقوى في الإيلام منها. ولما لم يكن كذلك علمنا أن زيادة الألم من لسعة العقرب إنما حصل من سوء المزاج لا من تفرق الاتصال 602

^{591.} פכל] Ox, G: פכל P.

^{592.} مناف add. عدر G.

^{593.} تعلم :Ox تجعل G.

^{594. [} וייהו אבער אל אדראך אלמנאפי] Ox, P (אסמא לאדראך אלמנאפי): אסמא לאדראך הווש ענעום ווייהו אבער G.

^{595.} منازعة Ox: ومنازعة G.

^{596. |} ועפרוים (אלוחדאני) G, P (אלוחדאני) Ox.

^{597.} א Ox, G: לא P.

^{598.} **山**] Ox: om. G.

^{599.} أصيق Ox: نفس G: ٦٦ P.

^{600.} أيضا Ox: om. G.

^{601.} בטי] Ox, G: יכון P.

^{602.} אלחגת] Ox, G: אלחגת P.

^{603.} אָן :Ox, G: אל P.

^{604.} فلو] Ox, G: اذا P.

البحث الرابع 605 وهو أن الشيخ زعم أنه ليس كل سوء مزاج مختلف مؤلما 606 بل الحار والبارد مؤلمان 607 بالذات واليابس مؤلم بالعرض لأنه 608 يتبعه تفرق الاتصال من شدة التقبيض 609 . وأما الرطب لا 610 يؤلم البتة 611 [Ox 135b] لأن الحار والبارد كيفيتان فعالتان أوامهما ليس بأن يؤثر بهما جسم في جسم بل بأن يتأثر 613 من جسم 614 . واعلم أنك قد عرفت أن عند الشيخ سوء المزاج سبب ذاتي للألم وعند جالينوس سوء المزاج إنما يؤلم لأنه يتبعه تفرق الاتصال. فإذا أخذنا بمذهب جالينوس لزم أن يقال الحار والبارد مؤلمان لأن من شأنهما تفرق الاتصال وليس من شأن الرطب والبابس ذلك. وأما إذا أخذنا بمذهب الشيخ بطل هذا الفرق بل يجب أن يحكم بأن سوء المزاج الرطب أو اليابس 610 مؤلمان بالذات لأن حد الألم عنده إدراك المنافي والرطب واليابس 610 هو نفس الوجع. فإن

מסם .add ביו add ביו P.

614. بل بأن يتأثر من جسم] Ox: om. G.

615. אגדנא P. أخذنا Ox, G: אגדנא P.

616. (ואליאבס) G, P (פועוויש G, P (ואליאבס).

617. פועוויש] Ox: אליאבס P.

618. والرطب واليابس ... والرطب واليابس] Ox: om. G.

619. منافيا] Ox: منافيان G.

620. فكون] Ox: فيكون G.

621. ادر اك المنافي :Ox إدراكا للمنافي G.

622. وهذا Ox, G: مته P.

^{605.} אלד] Ox, G: אלד P.

^{606. |} ספלה (מולמא) Ox, P (מולמא) G.

^{607.} מולמא G: מנולמא P.

^{608.} על ווא אין אין אין אין אין אין 'Ox, P (לאנה'): א G.

^{609.} אלתקבצ] Ox: וונפبض G, P (אלתקבצ).

^{610.} און Ox, G: פלא P.

^{611.} אלבתת] Ox, P (אלבתת): ועיד G.

^{612.} فعالتان :Ox فعالتان G.

قيل: الشيء إنما يحس إذا انفعل عنه غيره والرطوبة واليبوسة 623 كيفيتان انفعالتان لا فاعلتان 624 فلا ينفعل الحاس 625 من يقول الرطوبة يدركهما. وإذا لم يمكن إدراكهما 626 لم يكونا موجعين بالذات. فنقول: إن الشيخ في كتاب النفس بين فساد قول 627 من يقول الرطوبة واليبوسة غير محسوسين بحاسة اللمس وبين في فصول الاسطقسات أن الرطوبة بمعنى 628 سرعة القبول للأشكال 629 غير محسوسة. والظاهر أنه أراد بالرطوبة التي زعم أنها محسوسة البلة. وعلى الجملة فلا شك أن الرطوبة بمعنى البلة محسوسة. وإن شئت الاستقصاء في ذلك فارجع إلى ما قاله في الفصل الثالث 630 من المقالة الثانية 631 من علم النفس من الشفاء لتطمئن نفسك. وأما الذي يقال 632 إن الرطوبة واليبوسة كيفيتان انفعالتان فكذلك 633 تأويلات ذكرناها [Ox 136a] في فصل الأركان ولا 634 يوجب 636 شيء منها أن لا يكونا محسوسين 636 . وإذا ثبت أنهما محسوستان فعند 637 كونهما خارجتين عن الاعتدال كانتا 638 متنافيتين 630 فيكون إدراكهما [G]

- 631. אלג:] Ox, G אלג:P.
- 632. בוו Ox, G:קאל P.
- 633. פדלך: Ox, G פדלך: P.
- 634. אין אין Ox, G: לא P.
- G. يودى سيا :(الرد) Ox, P يوجب G.
- 636. יכונאן מחסוסין :G בעני מבשעשו P. יכונאן מחסוסין יבעני מבשעשו
- 637. عند] Ox, P (ولادة): عبد G.
- 638. כאנא :Ox, G كانتا P.
- 639. מתנאפסין P. מתנאפסין P.

^{623.} واليبوسة] Ox, G: om. P.

^{624.} פאעלתאן) G, P (פאעלתאן): om. Ox.

^{625.} בוש אלחאס) P (אלחאס): טא, G.

^{626.} أوإذا لم يمكن إدراكهما] G, corr. in marg. Ox فلا يدركهما ادراكهما Ox.

^{627.} בין פסאד קול) $G,\,P$ (בין פסאד קול): om. Ox.

^{628.} ان add ابمعنى G.

^{629.} על ווהי add. והי P.

^{630.} אלג Ox, G: אלג P.

132a] إدراكا للمنافي فيتحرى 640 أن يكون وجعا. وللمسيحي إشارة إلى قريب مما ذكرنا 641 فإنه قال في كتاب الأسباب والأمراض والأعراض: متى كان سوء المزاج المختلف في الحرارة والبرودة كان 642 [P 91a] الألم أشد ومتى كان في الرطوبة واليبوسة كان أضعف أو لم يكن. واعلم أن هاهنا بحثا 643 آخر وهو أن بعضهم سلم أن سوء المزاج الرطب لا 644 يؤلم بالذات لكنه زعم أنه مؤلم بالعرض لأن الرطوبة مرخية 644 والإرخاء ممدد والتمديد 647 سبب لتفرق الاتصال فالرطب مؤلم 648 بالعرض كما أن اليابس لإفادته التقبيض 649 مؤلم.

البحث الخامس⁶⁵⁰ في تفصيل الكلام في اللذات الحسية. قال جالينوس: اللذة والألم يحدثان في الحواس كلها وكلما كان الحس أكثف كانت⁶⁵¹ مقاومته مع الوارد أكثر فكان⁶⁵² الألم واللذة أقوى. وألطف الحواس⁶⁵³ البصر لأنه يتم بالنور الذي⁶⁵⁴ يشبه⁶⁵⁵ النار التي

^{640.} نيجب] G: فيتحرى P. P. انالد P.

^{641.} נצעיו] Ox: געניוא G, P (זכרנאה).

^{642.} בוט (כאך) Ox, P (און): فان G.

^{643.} בב" : (בחתא) Ox, P (בחתא): יב" G.

^{644.} און Ox, G: לם P.

^{645.} أن يؤلم : (אנה מולם) Ox, P أنه مؤلم : G.

^{646.} מרכית] Ox P (מרכית): من جهه G.

^{647.} פוליה בער (ואלתמדיד) Ox, P (פוליה בער :) G.

^{648.} مؤلم] Ox, G: om. P.

^{649. |} אלתקבצ G, P (אלתקבצ).

^{650.} וلخامس Ox, G: אלה P.

^{651.} كان : (כאנת) Ox, P (كانت G.

^{652.} נבאן Ox: وكان G, P (וכאן).

^{653.} באלחואס] Ox, G: באלחואס P.

^{654.} ווגט] Ox, G: אלתי P.

^{655.} מיעבה] G, P (ישבה): מיעב Ox.

هي ألطف العناصر فلا جرم 656 لا تكون 657 اللذة والأذى في هذه الحاسة أكثر منها في البصر. ثم الشم أقل لطافة من السمع لأن محسوسه بخار المقروع 660 فلا جرم 661 صارت اللذة والأذى في هذه الحاسة أكثر منها في البصر. ثم الشم أقل لطافة من السمع لأن محسوسه بخار وهو أغلظ من الهواء فلا جرم 662 صارت اللذة والأذى في الشم أكثر منها في السمع. والذوق أغلظ من الشم لأن آلته 663 الرطوبة العذبة وهي في درجة الماء فلا جرم 664 صارت اللذة والأذى في الذوق أكثر. واللمس أغلظ من جميع الحواس لأنه في قياس الأرض فكانت مقاومته مع الوارد [Ox 136b] أقوى وأبطأ فلا جرم 665 صارت اللذة والأذى فيها أقوى. وقال الشيخ في الفصل الثالث 667 من المقالة الثانة 668 من علم النفس الحواس منها ما لا لذة لها في محسوسها 669 ولا ألم ومنها ما يلتذ ويألم بتوسط المحسوسات [G 132b].

^{656.} אנזם יתם :P, G جرץ P.

^{657.} יכון] Ox, G: יכון P.

^{658.} אלאלם ואללדת] Ox, G: אלאלם ואללדת P.

^{659.} בעל אילה] Ox, G: קלילה P.

^{660. |} אלמקרוע P (אלמקרוע): או סג, G.

^{661.} אנזם :Ox, G جرم P. €.

^{662.} גזם Ox, G: جرم P.

^{663.} محسوسه :Ox محسوسه G.

^{664.} אנום :Ox, G جرم P.

^{665.} גזם :Ox, G جرم P.

^{666.} فيها Ox, G: מנהמא P.

^{667.} ולולי] Ox, G: אלג P.

^{669.} מחסוסאתהא] Ox, G: מחסוסאתהא P.

^{670.} ادته : Ox, G وكذلك P.

تألمت 671 الأذن 672 آفة 673 من صوت شديد والعين من لون مفرط كالضوء 674 فليس 675 تألم من حيث تسمع أو تبصر بل من حيث تلمس لأنه يحدث فيها 676 ألم لمسي وكذلك 677 يحدث فيه بزوال ذلك لذة لمسية 678. وأما الشم والذوق فيألمان 679 ويلتذان إذا تكيفا تلمس لأنه يحدث فيها 676 ألم لمسي وكذلك 677 يحدث فيه بزوال ذلك لذة لمسية 688. وأما الشم والذوق فيألمان 679 ويلتذان إذا تكيفا بكيفية منافرة أو ملائمة. وأما اللمس فإنه قد يألم بالكيفية 680 الملموسة ويلتذ بها وقد يألم ويلتذ 681 بغير توسط كيفية هي المحسوس 682 الأول بل بتفرق الاتصال والتيامه 683. واعلم أن الذي 684 قاله الشيخ مشكل لأنه 685 حد اللذة بأنها إدراك الملائم ولا شك أن الملائم للقوة الباصرة هو الألوان والقوة السامعة هو الأصوات فالقوة الباصرة إذا أدركت الألوان والقوة السامعة 688 إذا أدركت

- פלם: Ox, G: פלם P.
- 676. פיהא] Ox, G: פיהא P.
- 677. وكذلك] Ox: فلذلك G: الأحرام P.
- 679. פֿינלאאן] Ox, G: פֿינלאאן P.
- 680. אול בשנה באלכיפית] Ox, P (באלכיפית): עול בשנה G.
- 681. אן ילתד ;] Ox, G: אן ילתד P.
- 682. אלמחסוסת] Ox, G: אלמחסוסת P.
- 683. ו אלקמאמה :Ox, G פוליבו אל P.
- 684. מא Ox, G: מא P.
- 685. עוי (לאנה) Ox, P (אנה): יויש G.
- 686. עלקות אלבאצרת הו אלאלואן) G, P (ללקות אלבאצרת הו אלאלואן): om. Ox.
- . (וללקות) Ox, P (וללקות) P. والقوة P.
- 688. הו אלאצואח פאלקות אלבאצרת אדא אדרכת אלאלואן) P [هو الأصوات فالقوة الباصرة إذا أدركت الألوان والقوة السامعة P (ואלקות אלסאמטת): om. Ox, P (ואלקות אלסאמטת):
- 689. [إذا أدركت] Ox, G: הו

^{671.} נאלם] Ox, G: נאלם P.

^{672.} ועלינט] Ox, G: אלאדאן P.

^{673.} אפת) P (אפת): om. Ox, G.

^{674.} באלצו) Ox, P (כאלצו): الضو G.

الأصوات كان ذلك إدراكا للملائم فإما⁶⁹⁰ أن يكون ذلك الإدراك⁶⁹¹ لذة فيكون قوله البصر لا يلتذ بالألوان والأذن لا يلتذ بالاصوات مستدركا⁶⁹² وإما أن يكون تحديده للذة بأنها إدراك الملائم مستدركا⁶⁹³ (⁶⁹⁴ أن يكون تحديده للذة بأنها إدراك الملائم مستدركا

البحث السادس ⁶⁹⁶ 695

[Ox 137a] باب الألم واللذة

فصل في الرد على من جعل اللذة أمرا عدميا. إن محمد بن زكريا جعل اللذة أمرا عدميا⁶⁹⁷ وزعم أنها عبارة عن الخروج عن الحالة الغير⁶⁹⁸ الطبيعية وسبب هذا الظن أن اللذة لا تتم إلا بإدراك والإدراك ⁶⁹⁹ الحسي وخصوصا اللمسي⁷⁰⁰ إنما يحصل بالانفعال عن الضد، فإذا استقرت الكيفية لم يحصل الانفعال فلم يحصل الشعور فلا تحصل اللذة. ولما لم تحصل اللذة اللمسية⁷⁰¹ إلا عند تبدل الحال الغير⁷⁰³ الطبيعي ظن أن اللذة نفسها هي ذلك الانفعال [G 133a] والذي يدل⁷⁰³ على أن اللذة أمر وجودي وجوه

^{690.} פֿאמאן] Ox, G: פֿאמאן P.

^{691.} الإدراك] Ox, G: אדראך P.

^{692.} מסתדרכת] Ox, G: מסתדרכת P.

^{693.} والله أعلم add. مستدركا G.

Ox, G: om. P وإما أن يكون تحديده للذة بأنها إدراك الملائم مستدركا

^{695.} البحث السادس Ox: om. G, P.

^{696.} in marg. مهمل

^{697.} עדמית] Ox, G: עדמית P.

^{698. |} אלגיר Ox, P (אלגיר): غير G.

^{699.} والإدراك] Ox, P (المלדראך): om. G.

^{700.} אללמס] Ox, G: אללמס P.

^{701.} ועה און אללמסית Ox, P (אללמסית): G.

^{702.} אלגיר] Ox, P (אלגיר): שֿעַע G.

^{703.} עבט] Ox, G: יכון P.

[.] مهمل لم يذكر هنا من الأصل بل هو بياض من عدة نسخ أظن هذه المواضع سقطت من الأصل للشارح.

فصل في حقيقة اللذة والألم. لما ثبت أنهما أمران ثبوتتان ⁷⁰⁵، فاعلم أن الغالب على كلام الشيخ أن اللذة هي إدراك الملائم والملائم والملائم هو الإحساس بالمنافي. وذكر ⁷⁰⁶ في الفصل الأخير من المقالة الثامنة ⁷⁰⁷ من المفالة النامنة أن القوى الشفاء أن اللذة ليست إلا إدراك الملائم من جهة ما هو ملائم. وذكر أيضا في فصل المعاد من المقالة التاسعة ⁷⁰⁸ أن القوى تشترك في شعورها بموافقها ⁷⁰⁸ وملائمها ⁷¹¹ هو الخير واللذة الخاصة. وذكر في الأدوية القلبية أن اللذة إدراك لحصول ⁷¹² الكمال الخاص بالقوة المدركة إلا أنه ذكر في آخر هذا ⁷¹³ الفصل من هذا ⁷¹⁴ الكتاب ما يناقض ذلك فإنه بعد أن بين ⁷¹⁵ السبب لغلط من جعل اللذة ⁷¹⁶ عبارة عن الخروج عن الحالة الغير ⁷¹⁷ الطبيعية ⁷¹⁸ فقال قد ⁷¹⁹ بين ⁷²⁰ أن السبب في عدم الالتذاذ بما يستقر من الكمالات المحسوسة هو عدم الإدراك وسبب اللذة عند [Ox 137b] ابتداء الخروج إلى ⁷¹² الحالة الطبيعية هو حصول الإدراك، ولما عرض أن

^{705. (} ثبوتتان) Ox, G: תבויתאן P.

^{706.} פדכר] Ox, G: פדכר P.

^{707.} الثامنة Ox, G: 77 P.

^{708. [} إلهيات (אלאהיאת) Ox, P (אלאהיאת): ועלשيات

^{709.} السابعة Ox, G: v P.

^{710.} במואפקתהא :Ox, G بموافقها P.

^{711.} מלאימהא] Ox, G: ומלאימהא P.

^{712.} בסעל (לחצול) Ox, P (אדול): עבסעל G.

^{713.} אבו Ox, G: הדה P.

^{714.} אבו Ox, G: הדה P.

^{715.} עני] Ox, P (איני : ביץ G.

^{716.} اللذة Ox, G: om. P.

^{717.} אלגיר אלם :G غير Ox אלגיר אלם P.

^{718.} אלטביעת Ox, G: אלטביעת P.

^{719.} فقد (קד) G, P (קד): فقد Ox.

^{720.} ייעט] Ox, P (אביין): ייעט G.

^{721.} שני (אלי) Ox, P (אלי): שני G.

كان حصول ⁷²² الإدراك مع الخروج عن الحالة الطبيعية عرض أن ⁷²³ كانت اللذة مع الخروج عنها فظن أن ذلك سببا ⁷²⁴ وليس كذلك بل السبب هو إدراك حصول ⁷²⁵ الكمال لا غير. فهذا ⁷²⁶ هو سبب ⁷²⁷ اللذة. أقول إنه لما جعل أدرك الملائم سببا للذة ⁷²⁸ وجب أن يكون مغايرا للذة [P 92a] لأن الشيء لا يكون سببا لنفسه وهو قد جعل إدراك الملائم نفس اللذة في سائر المواضع فبين القولين تناف. وأيضا ذكر في الفصل الثالث ⁷²⁹ من المقالة الثانية ⁷³⁰ من علم النفس إن الحواس ⁷³¹ [G 133b] منها ما لا لذة لها في محسوساتها ولا ألم. ومنها ما يلتذ ويألم بتوسط المحسوسات،

الفصل إلى آخره 732

وإذ قد عرفنا اضطراب قول الشيخ في حقيقة اللذة فلنرجع إلى عقولنا ولنجتهد فلعلنا ندرك الحق. فنقول الألم واللذة حالتان ⁷³³ نحدهما من النفس وهما غنيان عن الحد [...]

^{722.} אלחצול] Ox, G: אלחצול P.

^{723.} أ Ox: om. G. كان حصول الإدراك م...الطبيعية عرض أن

^{724.} שייא] Ox: איי G בבהא P.

^{725.} שפ בשפט P : אדראך מפן ועול אדראך P אפ בשפט G.

^{726.} افهذا (פהדא) Ox, P (هذا : (قات الله عنه) G.

^{727.} سبب أي (סבב) Ox, P (סבב): السبب في

^{728.} מפפ אללדת G, P (שיי ולגה) ספפ אללדת (ספפ אללדת).

^{729.} الثالث] Ox, G: كم P.

^{730.} الثانية] Ox, G: ⊃ P.

^{731.} ان الحواس add. ان الحواس G: om. P.

^{732.} in marg. مهمل.

^{733.} בולאוט (האלתאן) Ox, P (בולוט - G.

in marg. Ox.

فنقول لا يجوز أن يقال حقيقة الألم هي ⁷³⁵ الإدراك المنافي وذلك لأن إدراك المنافي ⁷³⁶ قد يكون حاصله مع عدم الألم وذلك أمر يوجب تغايرهما ⁷³⁸. والدليل [Ox 138a] على أن إدراك المنافي قد يكون ⁷³⁹ حاصلا مع عدم الألم أن سوء المزاج الرطب أمر محسوس مع أن التجارب الطبية تشهد ⁷⁴⁰ بأنه غير مؤلم إلا إذا كان ماديا فتورث ⁷⁴¹ تلك المادة تمديدا فيرجع للتفرق ⁷⁴² الحاصل من التمديد. فأما مجرد الإحساس بسوء المزاج الرطب غير ⁷⁴³ مؤلم، فلما حصل الإحساس بالمنافي ولم يحصل الوجع ⁷⁴⁴ عوفنا تغايرهما. فإن قيل ⁷⁴⁵ الرطوبة غير ⁷⁴⁶ محسوسة لأن الإحساس إنما يكون بأن ينفعل الحاس عن المحسوس والرطوبة ليست كيفية فاعلة حتى

^{735.} هو] Ox, P (۳۲): هو G.

^{736.} وذلك لأن إدراك المنافى] Ox: اترا المنافى P.

^{737.} قد يكون حاصله ... عدم الألم وذلك Ox: om. P.

^{738.} תגירהמא : Ox : תגירהמא P.

^{739.} בועני סוג בי וואים אלדליל עלי אן אדראך אלמנאפי קד יכון אל יכון ווגפ תגירהמא ואלדליל עלי אן אדראך אלמנאפי פון יכון P: om. G.

^{740.} יشهد] Ox, G: תשתהד P.

^{741.} وתותר] Ox, G فتورث P.

^{742.} שלתפרק : G פוצ G | אלתפרק P.

^{743.} غير (גיר) Ox, P (גיר): فغير G.

^{744.} שלאלם] Ox, G: אלאלם P.

^{745.} באן קבל] Ox, G: באן קבל P.

^{746.} غير] Ox, G: om. P.

ينفعل عنها الحاس بل كيفية منفعلة. قيل له إن الشيخ بين في $^{747} < ... > ^{748}$ أن 749 الرطوبة محسوسة 750 ولأنا 752 نجد 752 تفرقة 753 بين التبا وبين الماء 754 وليس ذلك إلا للإحساس 755 بالرطوبة وأما في اللذة 757 , 756

- 755. על אחסאס] Ox, G: אלאחסאס P.
- 756. אין פי אללדת א פי אללדת] Ox, P (ואמא פי אללדת): om. G.
- in marg. Ox. مهلم لم يذكر في نسخ الأصل ولا في غيره ولعله يسقط .add اللذة

^{747.} في Ox, P (قن): om. G.

^{748.} vacat Ox.

^{749.} أن Ox, G: om. P.

^{750.} ב-שפשה] Ox, G: עכהא אלחאס ינפעל חתי ינפעל P.

^{751.} פעיט Ox : צי G, P (ולא).

^{752.} نجد] Ox : بحد P.

^{753.} in marg. Ox. (תפרקת) Ox, G, P التفرقة in marg. Ox.

^{754.} פולסו (ובין אלמא) Ox, P (ובין אלמא): G.