The Emergence of Verification (taḥqīq) in Islamic Medicine: The Exegetical Legacy of Faḥr al-Dīn ar-Rāzī’s (d. 1210) Commentary on Avicenna’s (d. 1037) Canon of Medicine

Kamran I. Karimullah
The University of Manchester
karimullah.kamran@manchester.ac.uk

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 Faḥr al-Dīn’s legacy lies in the exegetical practices, the method of verification (taḥqīq) 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 Zakariyā 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’s medical legacy.

Keywords: taḥqīq; Islamic medicine; Faḥr al-Dīn al-Rāzī; Ibn al-Quff; Galen; Avicenna; Canon of Medicine

1 Introduction

Abū al-Faraḥ ibn Ya’qūb ibn Ishāq Ibn al-Quff (d. 1286) is not much known outside the field of medieval Islamic medicine.¹ He was born in 1233 and was raised in a Melkite Christian family in Karak.

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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 Uṣaybi‘a (d. 1270) and the physician Ibn al-Nafis (d. 1288).² 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-Ṣifā’).³ 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.⁴

Ἐν ὃ νοσήματι ὕπνος πόνον ποιεῖ, θανάσιμον ήν δὲ ὕπνος ώφελέῃ, οὐ θανάσιμον.

قال أبقراط: إذا كان النوم في مرض من الأمراض يحدث ووجعًا فذلك من علامات الموت، وإذا كان النوم يدفع فليس ذلك من علامات الموت.


2. Ullmann, Medizin, 176.


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 (mabāḥīṭ),” each of which covers a variety of different topics that Ibn al-Quff believes are necessary for explaining Hippocrates often cryptic words. In most cases, the first investigation is given over to explaining the connection (ṣila) 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 Aphorisms 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 (ḥaqīqat al-nawm), how it comes about (kayfīy- at ḥudūṭīḥi), the reason why there is a need for it (al-ḥāğa ilā al-nawm) and its relation to pain. Additionally, several other investigations are committed to clarifying the nature of pain (al-waḡa‘) 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 (tafarraq 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 (ṣū‘ al-mizāḡ, pain in fevers and a painful swelling). 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


phrase in his commentary on this aphorism. A number of other sources from among the “recent scholars (al-mutaʿḥirin),” however, are mentioned also.\footnote{Ibn al-Quff, al-Uṣūl fī ṣarḥ al-Fuṣūl, ed. ARABCOMMAPH (The University of Manchester, 2012–2017), doi: 10.3927/5213995.}

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, ‘Ali ibn ‘Abbās al-Mağūsī] and Abū Sahl al-Masīḥi; or it is caused by [both dissolution of continuity] and an irregular noxious mixture according to what the Šayḫ al-Raʾis 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 Ruṣd held.

Galen, ‘Ali ibn ‘Abbās al-Mağūsī, Abū Sahl al-Masīḥi, 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.\footnote{Manfred Ullmann, Medizin, 166. See Emilie Savage-Smith and Peter E. Pormann, Medieval Islamic Medicine (Edinburgh: Edinburgh University Press, 2007), 166.} 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 Qurʾān exegesis, as well as what is known about his scholarly career, patronage, writings and intellectual interests,
we would not guess that his medical thought would rank with the likes of Avicenna, Galen or al-Mağüsi in the mind of a thirteenth-century physician such as Ibn al-Quff. Why does Faḫr al-Dīn warrant such respect in Ibn al-Quff's eyes?

Second, there is a sense in which Faḫr 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, Faḫr 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 Faḫr al-Dīn's medical viewpoint. In what ways was Faḫr 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. Endress presents compelling evidence for


10. Endress, “Reading Avicenna in the Madrasa.”
Faḫr 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 Faḫr 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 Faḫr al-Dīn.” With regard to medicine, Faḥr al-Dīn’s commentary on the Canon inaugurated a tradition of philosophical interest in Book One (the Generalities, Kulliyāt) 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 Sinā’s al-Qānūn fī l-Ṭibb, mostly, it is true, confining themselves to the part on theoretical medicine, al-Kulliyāt. 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 Sinā’s own pupils, wrote commentaries, epitomes and quaeestiones on his physiological and medical theory.”

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

In the Sharḥ al-Kulliyāt, I found him give precedence to al-Masīḥī whilst Ibn al-Khaṭīb [that is, Faḫr al-Dīn al-Rāzī] favours the Shaykh Abū ‘Alī ibn Sinā. 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 Abū ‘Ali in this art. He also said: The expression of al-Masiḥī 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-Ḥāriṯ Ibrāhīm ibn 'Alī ibn Muḥammad al-Sulamī al-Miṣrī al-Maḡribī (d. 1221). It is clear that in addition to finding more to esteem in al-Masiḥī'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 Quṭb al-Dīn al-Miṣrī's words is by Ibn Abī Uṣaybiʿa (d. 1270), recorded in his Sources of Lore on the Ranks of the Physicians ('Uyūn al-anbāʾ fī ṭabaqāt al-ʿāṭibbāʾ), one of the best historical sources on the development of the commentary tradition on the Avicenna's Canon. Ibn Abī Uṣaybiʿa 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 Uṣaybiʿa was also one of Ibn al-Quff's medical teachers, and, along with Naǧm al-Dīn ibn al-Minfāḥ (d. ca. 1252), Muwaffaqq al-Dīn Yaʿqūb al-Sāmīrī (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.14 Ibn Abī Uṣaybiʿa records that Yaʿqūb al-Sāmīrī wrote a commentary on the Generalities of the Canon, “in which he included what Ibn al-Ḥaṭṭīb [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 (wa-ḥaʾarrara mā fī aqwālīhim mina l-mabāḥih).”15 Ibn Abī Uṣaybiʿa records too that al-Sāmīrī wrote a book that “solves Naǧm al-Dīn ibn al-Minfāḥ's doubts on the Generalities of the Canon.”16 He writes

16. Ibid. This recalls the earlier, lost work by Ibn Abī Ṣādiq entitled Resolving Rāzī's Doubts on Galen's Books (Haššūkūk al-Rāzī 'alá kutub Ġalinūs), in which he responds to Muḥammad ibn Zakariyā's doubts on Galen's medical and philosophical works. See Ibn Abī Uṣaybiʿa, 'Uyūn al-
that Ibn al-Minţâh wrote a commentary entitled *Book on the Omissions in the Book of the General-ites* (*Kitâb al-muhamlât fî Kitâb al-Kulliyât*), though it is unclear whether this is identical to the book of Ibn al-Minţâh’s “doubts” on the *Generalities* mentioned in al-Sâmirî’s entry later in ‘*Uyun al-anbā’*.

What is more, according to Ibn Abî Uṣaybi’a, in his early years in Karak, the city of his birth, Ibn al-Quff studied philosophy with Faţr al-Dîn’s notable student Šams al-Dîn ‘Abd al-Ḥamîd ibn ‘Isâ al-Ḥusrawšâhi (d. 1254). Ibn Abî Uṣaybi’a knew al-Ḥusrawšâhi personally, and relates the following story:

One day, I [Ibn Abî Uṣaybi’a] saw him [al-Ḥusrawšâhi] when a Persian scholar brought him a book written in a subtle hand, in Baghdâdî size and Mu’tazîli 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 Imâm Faţr al-Dîn, son of the khaṭîb, may God have mercy on him. My esteem for him grew because of his reverence for him 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, Faţr al-Dîn 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 Faţr al-Dîn should be mentioned in the same breath as, say, Abû Sahl al-Masîhî, ‘Alî ibn ‘Abbâs al-Maġûsî or even Avicenna and Galen.

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*anbā’,* 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 Abî Uṣaybi’a, ‘*Uyun al-anbā’*, 2.266.

18. Ibid., 2.273, l. 26; The entry on al-Ḥusrawšâhi is in Ibid., 2.266.

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

20. Faḫr 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 thirteenth-century Jewish philosopher Ibn Kammūna (d. 1284) and to the Christian Ibn al-Ībrī's (a.k.a. Barhebraeus, d. 1286) critiques of Faḫr al-Dīn's arguments for the veracity of Muḥammad's claim to prophethood. Ibn al-Quff's own writings clearly demonstrate how influential Faḫr al-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 Faḫr al-Dīn's commentary on the Canon of Medicine written in MashaitJudéo-Arabic. The manuscript serves as a faithful record of Faḫr 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 Faḫr 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-Rashid Abū l-Khayr Ibn al-Ṭabīb’s Risālat al-Bayān al-Azhar fī l-radd ‘alā man yuqūlu bi-l-qaddā’ wa-l-qadar,” Intellectual History of the Islamicate World 2 (2014): 143–69. Barbara Roggema, “Ibn Kammūna’s and Ibn al-Ībrī’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 Faḫr al-Dīn's medical or philosophical views. In short, how do we reconcile the mounting historical evidence that Faḫr 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 Faḫr 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 (tahqīq) into medieval Islamic medical discourse. I argue, too, that the vehicle for bringing the methods of verification to medical authors was Faḫr 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 (tahqīq)." 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-Nafīs' commentary on Avicenna's Canon of Medicine, where, for example, he made novel contributions to the anatomy of human respiration. Fancy has also drawn attention to how

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-Muğiz* or *al-Muğaz*). Yet, Fancy has suggested that Ibn al-Nafis was an active participant in the post-classical tradition of verification, 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. 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 Zakariyā al-Rāzī (d. ca. 925), Ibn al-Hayṭam (d. 1039), Abū Ḥāmid al-Ḡazālī (d. 1111) and Abū al-Barakāt al-Ḡādārī (d. before


1164–1165), as well as his less famous contemporaries, such as Šaraf al-Dîn al-Maʿûdî (d. before 1208) and Ibn Ġaylân al-Balḫî (d. ca. 1194). Nevertheless, Wisnovsky and Shihadeh single out Faḥr al-Dîn 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-Dîn'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. In his autobiographical remarks in his introduction to his commentary on the *Canon of Medicine*, Quṭb al-Dîn al-Širāzî (d. 1311) observes that early commentaries on the *Canon* by those “eminent scholars who emulated his [Faḥr al-Dîn's] writings (*al-šurûḥu l-latî li-l-muqtafina ✠atāruhu mina l-fuḍallâ*) such as Quṭb al-Dîn al-Miṣrî, Afḍal al-Dîn al-Ḫūnaḡî, Rafiʿ al-Dîn al-Ǧîlî (d. 641/1244)18 and Nağm al-Dîn al-Nahḡâwânî (d. 1252) did not add anything of substance to what the Imam [Faḥr al-Dîn al-Ｒāzî] had written. They wrote what he had written, and were silent about what he omitted, save for trifling, paltry things of no value (*allāhummâ illâ ma huwa nazarun yasirun layṣa lahu qadrûn*).19

Endress, on the other hand, focuses primarily on the reception of the *Canon* prior to Fāhr ad-Dīn’s commentary by the likes of Ibn al-Tīmīḏ (d. 1165), who “introduced the Ibn Sīnā’s *Qānūn* into the study of medicine,” Ibn Ğumay’ (d. 1198) and Ibn Ğaylān al-Balḥi, 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-Tīmīḏ’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-Tīmīḏ and Ibn Ğumay’, “took to reading Ibn Sīnā’s *Qānūn*, the philosophers, and the philosopher-physicians starting with Fāhr ad-Dīn al-Rāzī, in their turn started reading theoretical medicine in the *kulliyāt* of Avicenna’s ever more popular handbook.”\(^{30}\)

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 Fāhr ad-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 Fāhr ad-Dīn played in the *Canon* commentary tradition, there has been no effort to qualify the types of exegetical methods Fāhr ad-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 Fāhr ad-Dīn’s *Pointers* commentary, all of which fall


\(^{31}\) 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 (istiqāṣā)” 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

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 Zakariyā al-Rāzī in *Doubts on Galen* (*Kitāb al-Ṣūkūk ‘alā Gālūnūs*) 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 Ṣādıq (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-Qifti’s account of Faḥr al-Dīn’s career in dating it to 580/1184.³⁴ Altaş says the

³³ Altaş, Eşref, “Fahreddin er-Razı’nın Eserlerinin Kronolojisi,” in *İslâm Düşüncesinin Dönüşüm Çağında*, eds. Ömer Türker and Osman Demir (İstanbul, ISAM, 2011), 91–164, 103.

following:

Written between 573–574/1177–1178. Written in Saraḫs before the 
Mabāḥīṭ and Mulāḥḥāṣ.
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 Sinā’s medical work the Canon. Whilst Rāzī was a guest of the physician
Ṭiqat al-Dīn ʿAbd al-Raḥmān ibn ʿAbd al-Karīm al-Saraḫsī, this work was a result of re-
search and discussion between them, and was dedicated to him on account of [al-
Saraḫsī’s] hospitality. Ibn al-Qīṭī says that Rāzī was his guest in Saraḫs 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-Šābūnī died 16 Safar 580/30 May 1184 and, since Mabāḥīṭ and
Mulāḥḥāṣ were written around 575/1179 prior to his sojourn to Transoxiana, the most suit-
able date for the work is between 573–574/1177–1178. There are references to the commen-
tary on the Canon as one of “our great books,” “our great book” and also al-Fīrāṣa is
mentioned.

Thus, in support of his chronology, Altaṣ cites the fact that the commentary on the Canon is cited
in the Investigations in the East (al-Mabāḥīṭ al-Maṣrīqīya), which Altaṣ says was written around
574–575/1178–1179,35 and in the Précis of Logic and Philosophy (al-Mulāḥḥāṣ fi l-mantiq wa-l-ḥikma),
which Altaṣ 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-iṭidal) and imbalanced mixture of the primary qualities hot, cold,
wet and dry.37

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Ibn al-Qīṭī, Tārīḫ al-ḥukmā’ī, eds. Augustus Müller and Julius Lippert (Leipzig: Dieterich’sche
Verlagsbuchhandlung, 1903), 291.
36. Ibid., 112.
37. Faḥr al-Dīn al-Rāzī, al-Mabāḥīṭ al-maṣrīqīya fi ‘ilm al-ilāḥiyāt wa-l-ṭibī‘īyāt (Hyderabad:
Maṭba‘at maṣlis dā‘irat al-ma‘ārif al-Niẓamiyyah, 1343 [1924 or 1925]), 2:159, l.20–160, l.11. I am
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.
Din’s career. Altāṣ’s early dating of the Canon, however, sits uneasily with the idea suggested by Ibn al-Qīṭī—an idea which Altāṣ appears to second—that the commentary on the Canon was written during the early part of Faḥr al-Din’s purported sojourn into Transoxiana. Frank Griffel has expressed strong reservations about the extent and accuracy of Ibn al-Qīṭī knowledge of Faḥr al-Din’s early career. Indeed, if it were written as early as Altāṣ says, I find somewhat suspicious Faḥr al-Din’s references to ʿAbd 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-Din’s sojourn to Bukhara. Faḥr al-Din must have been in Transoxiana some time prior to Nūr al-Dīn al-Šābūnī’s death on 16 Safar 580/30 May 1184, since this event is mentioned in the Munāzāratī. 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-Din’s career that previously thought. 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. Nevertheless, in the the brief remarks in the introduction to the

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38. Ibid., 103. Though rejecting the dating of the Canon commentary to 580/1184, Altāṣ accepts that Faḥr al-Dīn wrote the commentary for ʿAbd al-Karīm al-Saraḥsī whilst in Saraḥs on his way to Transoxiana.

39. Frank Griffel convincingly shows that most of al-Qīṭī’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.”


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), ʿAbd al-Laṭīf al-Baġdādī (d. 629/1231), Faḥr al-Dīn al-Rāzī (d. 696/1299),” Mélanges de
Canon commentary that touch on metacommentary, it is evident that Faḫr 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 Faḫr 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 philosopohical debates based on Avicenna’s writings. On the other hand, in the introduction to the Canon we see a Faḫr al-Dīn who struggles to identify what aspects of his commentary method he believes are novel. Shihadeh observes that Faḫr al-Dīn deliberately employs terms such as “gleaning (taḥṣīl),” “critical investigation,” “verification (tahqīq),” “blind imitation (taqlīd),” “painstaking investigation (istiqaṣā’),” “in depth probing (ta’ammaq),” “certainty (yaqīn),” “doubt (ṣakk),” “procedure (tartīb)” and “well-organised compilation (talfīq)” 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 Faḫr 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 Faḫr al-Dīn was composing the commentary on Pointers as well as the early philosophical works such as Précis and Investigations in the East, Faḫr al-Dīn was able to assign these terms a precise meaning in relation to his exegetical method. For example, Faḫr al-Dīn describes the process of “gleaning (taḥṣīl)” in detail:42

of gleaning (taḥṣīl) what we have found in the books of our predecessors...in such a way that we select the pith (lubāb) from each topic, avoiding excessive proliﬁcity 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.

42 Shihadeh, “Al-Rāzī’s Commentary,” 300.
Likewise, the ordering of the book or commentary he describes as follows:\footnote{Ibid.}{43}

our novel ordering (\textit{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 Faḫr al-Dīn characterises what he names “painstaking investigation” as follows:\footnote{Ibid.}{44}

the painstaking investigation (\textit{istiqṣā'}\textsuperscript{3}) of questions and answers, and the in-depth probing (\textit{ta'ammut\textsuperscript{3}a}) of the oceans of problems in such a way that the proponent of each thought-system (\textit{madhāb}) 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 (\textit{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) Faḫr al-Dīn provides a conclusion to the problems under discussion. This step-by-step procedure is what the terms “ordering (\textit{tartīb})” and “synthesising (\textit{talīfīq})” in the process of compiling or commenting on a book refer to. In similar fashion, “painstaking investigation (\textit{istiqṣā'}) 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 Faḫr al-Dīn can find or can supply on his own on the basis of the proponents’ own

\footnote{Ibid.}{43}
\footnote{Ibid.}{44}
principles. If arguments are weak or none are forthcoming from the text, Faḫr 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* (*Nihāyat al-ʿuqūl*), Faḫr 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, Faḫr al-Dīn uses “taḥṣīl,” “tartīb,” “tāʾammūq,” “lūbāb” 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 Faḫr 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 Faḫr 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, Faḫr al-Dīn, speaking about himself in the third-person, says:

> العلم صار كلاً في هذا الزمان على كل أصحابه ووبالا على محبيه وطلابه. فترى الرجل بعد أن أفنى في تحصيله زمانه وفق الفقه أتاره وأفاقه وتبين بحل الغموض في العلوم وإظهار ما فيها من السر المكتمل مسموعًا بسبب ذلك عن جميع المرادات مدقعًا عن كل المباعي والطلاب.

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 [Faḫr al-Dīn is referring to himself] who has spent his years **acquiring it** [that is, knowledge, sc. *al-ʿilm*] 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 arranging it, I dedicated it to the the eminent šayḥ, the verifying philosopher who embodies religion's trust and Islam's nobility, the master of the philosophers and the physicians 'Abd al-Karīm al-Saraḥṣī.

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 (talḥīṣīḥī) to putting in its final arrangement ("arranging it (tartībiḥi)").

Similarly, “pith (lubāb)” 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-ṭibb] 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 pith, plunge deeply into its depths, and ascend to its lights.

45. For this meaning of lahḥaṣa/talḥiṣ, see Manfred Ullmann, Wörterbuch der klassischen arabischen Sprache, vol. 2/1 (Wiesbaden: Harrassowitz, 1983), 428 [lahḥaṣa], 429 [talḥiṣ].

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

ولما كان كتاب القرن لشيخ الرسوم أحسن كتاب صحف في هذا الكتاب بإتفاق أولي الألباب لم أن الكتاب الأول منه تميز عن سائر
كتبه باللطائف الحكيمة والتفاصيل العلمية والكتاب العربي والأوامر العقيدة التي حارت أذهان أنباء الرومان عن إدراكها وخارات قواهم عن
الوصول إلى دري أفلاكها صرفت نهابا وكثير وثب كثيب غابة وهمي وهمي إلى تفسير عيونه وشرح موته واستيضاح مشكلاته
واستخراج معضلاته والاعتبار عن مساعيه إن قعت في أثناء كلماته وامكناكن لعقل المتلعنين ضميتها في سياق عباراته.

The scholars being in agreement that the *Canon* by al-Šayḥ al-Raʾis 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 Faḫr al-Din distinguishes the primary or main portions (ʿayūn, mutūn) of the the *Canon* from those that are, for him, secondary. In some ways recalling the method used by Šaraf al-Din al-Maʿūdī in his commentary on *Pointers* but also Ibn Ġumayr’s glosses on the *Canon*, Faḫr al-Din commentary on *Canon*, Book One proceeds fašl-by-fašl. At no point does Faḫr al-Din 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 (muʿdilāt) in the text. Far from engaging in an impartial survey of every known authority and systematically vetting the true from the false, Faḫr al-Din 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” Faḫr al-Din 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 Faḫr al-Dīn’s Commentary on the Canon

This is what Faḫr al-Dīn says; what he does in the commentary on the Canon is quite another story. That is, after analysing Faḫr 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 Faḫr 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 583/1184. For it seems that by the time Faḫr 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 Faḫr al-Dīn barely alludes to this fact. I shall substantiate this claim by examining how Faḫr al-Dīn comments on a chapter (faṣl) on compound diseases (al-amrād al-murakkaba) in his commentary. Following Shihadeh, I first examine how Faḫr al-Dīn imposes his understanding of the chapter’s structure by lemmatising the text into separate “research topics (abḥāṭ, mabāḥīṭ, buḥūṭ sg. baḥṭ).” After this, I shall examine the various techniques Faḫr 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 Faḫr al-Dīn partitions the chapter.
<table>
<thead>
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<tbody>
<tr>
<td>Definition of compound diseases; examples; swellings (ṣwar, sg. war); every kind of disease is found in cases of swelling; wherever there is swelling there is dissolution of continuity (tafarraq al-ittṣāl)</td>
<td><strong>Block A:</strong> “This discussion calls for four investigations (mabāḥīṭ):”</td>
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<td></td>
<td>1. Divisions of diseases that are in aggregate (al-amrād al-muǧṭāmi’a)</td>
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<td></td>
<td>2. How a single disease comes about from a number of diseases in aggregate</td>
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<td>3. The reality of swelling</td>
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<td></td>
<td>4. Clarifying that swelling is a compound disease</td>
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<tr>
<td>Parts of the body are affected by swelling; bones are affected by swelling; food can cause body parts to swell;</td>
<td><strong>Block B:</strong> “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.”</td>
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<tr>
<td>Definition of catarrh (nazla);</td>
<td><strong>Block C:</strong> “This begins the division of swellings.”</td>
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<tr>
<td>Causes of swelling; swellings are prone to having natural and unnatural discharges;</td>
<td><strong>Block D:</strong> “The purpose of this discussion is to search for not the conditions of swelling, but for certain rulings about the cause of swelling.”</td>
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<tr>
<td>Swelling can be classified according to its properties (fusīl, sg. faṣīl); 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-māţiya) and air (al-riḥiya); division of swelling into hot swelling and swelling that is not hot; hot swelling caused by phlegm conventionally called flaǰmānī; hot swellings caused by yellow bile conventional called ʿerṣīpela (humra); abscesses (hurāğ) and plague (ṭāʿūn); how hot swellings appears at the beginning, middle and end; swelling resolves either by dissolving (tabullul), or it suppurates (taqayyuh), pus gathers (gamʿ midd), or a the swelling transforms into a tumour (istihāla ilā l-ṣalābā)</td>
<td><strong>Block E:</strong> “Now he turns to explain the division of swellings.”</td>
</tr>
<tr>
<td>Swellings that are not hot are caused by black bile, phlegm, watery fluid and air; three kinds of swellings caused by black bile; tumours, cancer (al-saraṭān) and swellings in the glands (al-ḥanāẓir) and leprous growths (al-sula’); distinction between tumours and cancer</td>
<td><strong>Block F:</strong> “He turns once again to division, commencing with the division of cold swellings, which are four....”</td>
</tr>
<tr>
<td>Two kinds of swellings caused by phlegm: hard swellings and light leprous growths; swellings caused by phlegm differ based on whether the phlegm that causes them is soft or hard; swelling caused by water; dropsy (al-istīṣāqāʾ); 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 suppuration when the body parts are affected by swelling, for example dropsy or elephantiasis (al-ṣaḍām); 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-taʃṣīl)</td>
<td><strong>Block G:</strong> “...and the rest of the section is obvious (wa-bāqī l-faṣīl zāḥīr).”</td>
</tr>
</tbody>
</table>
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 (*mabāḥit*),” 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*.\(^{50}\) 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-aḍḍā’ al-layyīna*), and something that resembles swelling in the


\(^{48}\) Shihadeh, “Al-Rāzī’s Commentary,” 309.

\(^{49}\) Ibid.

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.\footnote{53} About which Faḫr al-Din has the following to say:\footnote{52}

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 (\textit{lā yatamaddadu}), 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]

\begin{footnotesize}

\footnote{52} For lemma from the \textit{Canon}, see Avicenna, \textit{al-Qānūn fī l-ṭibb}, 1:76–7.

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

Faḫr 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 Faḫr al-Dīn, this sentence marks the beginning of a new discussion about where in the body swelling can occur. Faḫr al-Dīn, who evidently found nothing to dispute in Avicenna's words, nevertheless seems to have found Avicenna's talk about "something like swelling (ṣayʿun ṣabihun 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 Faḫr 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 Zakariyā 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 Faḫr 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 Zakariyā that bones and the brain do not swell. Faḫr al-Dīn pursues this goal in several stages. First, he paraphrases Muḥammad ibn Zakariyā'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 Zakariyā’s conclusion is false because it does not follow from true premises. Faṭr al-Dīn then produces a battery of arguments, asserting, against Muḥammad ibn Zakariyā, that the bulk of the bones and the brain do in fact expand as a natural consequence of drawing in nutriment from food. Faṭr 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 Zakariyā’s doctrine rather than to refute it outright. One major shortcoming in Faṭr al-Dīn’s argument is that he misinterprets—most likely deliberately—Muḥammad ibn Zakariyā’s views about how bones and the brain increase in size. In Section Four, we shall see that Muḥammad ibn Zakariyā 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 Zakariyā had in mind in the *Outstanding Book*. As the passage is quoted by Ibn al-Quff, Muḥammad ibn Zakariyā 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 Zakariyā, do not permit the body part to expand (*tamdid*) 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 Zakariyā’s “minor premise,” Faṭr al-Dīn offers a deliberately tendentious interpretation of Muḥammad ibn Zakariyā’s claim. Faṭr al-Dīn ignores, in effect, the fact that Muḥammad ibn Zakariyā’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 Zakariyā would not have disputed in the first place—were sufficient to undermine Muḥammad ibn Zakariyā’s position.  

54. Faṭr 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 Faḫr al-Din comments on. The Table shows that Block G is a rather long portion of the chapter, which discusses several different topics. According to Faḫr al-Din’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, Faḫr al-Din gives all his attention to resolving a conflict between Avicenna and earlier medical authorities, ‘Alī ibn ‘Ab-bās al-Maḡūsī (fl. 4th/10th c.) and Abū Sahl al-Misihī (d. 1010), who classified scrofula (*al-ḥanāẓir*) and leprous growths (*al-sula*) as types of swelling caused by phlegm rather than black bile.

...
The swelling and when the swelling becomes apparent which disappears when it moves to the knee joint, and whether the swelling moves or not moves, the swelling is called scrofula.

[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 šaykh 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†, or they are abscesses such as scrofula and hard leprous growths.” At the end of the book on swellings, al-Masīḥi 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-Mağūṣi, 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 Faḫr 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 Faḫr 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 fi 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 Sayḥ 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 (masāmīr).” 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 (ʿaṣīda)\(^57\), 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-ʿaṣīd) 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 ʿaṣīda and ʿaṣīda have the same meaning. Albert Kazimirski, *Dictionnaire Arabe-Français* (Paris: Maisonneuve, 1860), 2:270 (ʿaṣīda): “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-’asab) 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-yursatan), 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 fi awwali kawnihā ṣubbatan).” 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 (baḥt) (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-Mağusi, al-Masīhi and Avicenna elsewhere in Book One, however, class them as swellings caused by phlegm (balğamiya). 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 (tuṣbihu) 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 balğamiyya) 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 (muṭṭarib).”

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 (mabāḥīṭ), which tend to focus on more philosophical principles; and he prefaches 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

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⁵⁸ Compare this list with the one in Shihadeh, “Al-Rāzi’ Commentary,” 313: “1. Identifying the
Canon as well. Among the exegetical tasks that Faḫr 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 (taḥqīq) 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 Ḫunayn ibn Ishāq (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 (gharaḍ, maqṣūd, maṭlūb); 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 Shifā; 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.”

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 Abi Ṣādiq's (d. after 1067) exegetical strategies imitate Galen's actual commentary practice more than Galen's restrictive prescriptions in his Hippocratic commentaries. 60 That is to say, the shifts evident in Ibn Abi Ṣādiq's commentary on the Aphorisms do not involve the broad shifts in commentary structure, argumentative style, medical-philosophical authority and discursive strategies that Faḫr 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.” 61 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 Muhammad ibn Zakariyā al-Rāzī (d. ca. 925) at the opening of his Doubts on Galen (Šukūk ‘alā Ġālinūs) can we appreciate how unorthodox Faḫr al-Dīn's exegetical method in the Canon must have appeared to scholastic physicians in the twelfth and thirteenth centuries.

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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.  

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 criticises his peer for failing to comment on Hippocrates’ text in the correct way, namely the way that Galen thought commentaries should be written.  

Ἐν τῷ τρίτῳ τῶν εἰς τοὺς ἀφορισμοὺς ὑπομνημάτων τῶν ἀφορισμῶν ἐξηγησόμεθα. μᾶλλον μὲν οὖν ὅσον ἐν αὐτοῖς ἀσαφὲς ἐστίν ἔργον γὰρ τοῦτο ἐξηγήσεις, οὐ μὴν ἄλλα καὶ τὴν ἀπόδειξιν ἐκάστου τῶν ὀρθῶς εἰρημένων προστιθέντως, ἐπειδή καὶ τοῦτ’ ἔστιν ἐθος ἐν τοῖς ὑπομνημασίας γίνεσθαι.  

θαυμάζω δὲ κἀνταῦθα τὴν ἀνωθαλίαν τοῦ Λύκου γράφοντος εἰς ἐπειρίαν καὶ τήρησιν ἀπαντοῦντος, ἀλλ' εἰς ἐμπειρίαν καὶ τήρησιν ἀναπέμψαντος ἀπάντα, καίτοι γ’ ἄλλους πολλοὺς ἀφορισμοὺς ἐξηγούμενοι αὐτὸς ἐπισκέπτεται λογικῶς ὑπὲρ τῆς ἐν αὐτοῖς ἀληθείας, οὐκ


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 (ṣāḥ al-ġāmiḍ min qawlihi, ʾen āyūtīs ʾāṣafēs ēstī safiṣiṣonēts) in Hippocrates’ words because this is what is proper to interpretation (al-amru al-hāṣṣu b-t-tafsīr, ērγon gāf tōu tôi dioun ēpfigēsisew). 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 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.
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 consistently. 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 experiences.

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 criticises 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 criticism 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.


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. According 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 ταύτα τὰ βιβλία καὶ τὰ τῶν Ἀφορισμῶν, <ἐν> οἷς ὡδὲ πως ἔγραψε: “περὶ δὲ τῶν ὦρέων, ἢν μὲν ὁ χειμών αὐχενήρος καὶ βόρειος γένηται, τὸ δὲ ἔχρ ἐπομβρον καὶ νότιον, ἀνάγκη τοῦ θέρους πυρετούς ζεῖς καὶ ὀφθαλμίας καὶ δυσεντερίας γίνεσθαι.” τῇ πείρᾳ γὰρ μόνη τούτῳ ἐγνώσθαι φησιν ὁ Κόιντος ἀνευ τοῦ κατὰ τὴν αἰτίαν λογισμοῦ, πρῶτον μὲν αὐτὸ τοῦθ’ ἀμαρτάνων, ** ὡς ἃ τὰς αἰτίας, ὡν εἶπε κατὰ τοὺς Ἀφορισμοὺς τούτους ὁ Ἰπποκράτης, αὐτὸς

His first error was that he was not aware that Hippocrates described the causes of the things he mentionend 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 (fätilatānī). 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

[occur.]

[He] cannot prove that they will occur. We will avoid the diseases which precede and follow that season and those that are occasioned by the wind or those that are due to the state of the body. Thus, we can avoid them if we know that the corruption has occurred and is there. The state of the body will have a great effect upon the corruption and make us aware of the state of the corruption. The corruption occurs and is caused by the wind. The wind is caused by the state of the body. The corruption occurs and is caused by the wind. The wind is caused by the state of the body.
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.\textsuperscript{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 L1. In L1, 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 \textit{Epidemics}, Quintus should have referred to what Hippocrates says about the seasons and ages in the \textit{Aphorisms}, Book Three and in \textit{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.\textsuperscript{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 \textit{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 (\textit{al-mizāġ, ἡ κρᾶσις}) 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.

\textsuperscript{68} Translation is Vagelpohl’s.

\textsuperscript{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 his exegetical method with those adopted by his predecessors.\footnote{71}

[13a] 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.\footnote{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,

\footnote{70} Hippocrates, Oeuvres complètes d'Hippocrate, ed. Émile Littré, vol. 5 (Paris: Baillière, 1846), 338.  
\footnote{72} Reading “...dikru l-mufassirîn...” 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 LL1–2.73

[1.3b] 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, Tağīr Ġalīnūs li-kitāb Afidīmiyā, 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 well-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 ἀμείνον ἀνηκοέναι καθόλου περὶ πάσης ἐξηγήσεως, ὡς ἦστιν ἡ δύναμις αὐτῆς, δοκᾷ τῶν ἐν τοῖς συγγράμμασιν ἦστιν ἁσφάλις, ταύτης ἐργάσασθαι σαφῆ, τὸ δ' ἀποδείξας τι τῶν γεγραμμένων ὡς ἀληθῶς ὡς ψεύδος ἐλέγξαι, καὶ εἰ καθηγόρησε τις σοφιστικῶς ἀπολογήσασθαι, κεχώρισται μὲν ἐξηγήσεως, ἐβίβασθαι δὲ γίγνεσθαι πρὸς ἀπάντων ὡς εἰπεῖν τῶν γραφόντων ὑπομνήματα. καὶ νὴ Δία οὐδὲν κωλύει καὶ τοῦτο μετρίως ἀπεσταθεῖ τὸν ἐξηγητὴν. τὸ δ' ἀγωνιζόμεθα τελέως ὑπὲρ τῶν τοῦ γράφοντος δογμάτων ἐκπέπτωκε τὸν ὅρον τῆς ἐξηγήσεως, οὐ πρὸς τούτον οὖν τὸν σκοπόν, ἀλλὰ πρὸς τὸν εἰρημένον ἀποβλέπων ἐγὼ προσθήκαι τὰς ὄντως ἐξηγήσεσιν ἐκάστοτε βραχεία 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,

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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 (πίστις). 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,”75 and in L3b he criticises commentators

75. “...um nicht weitläufig zu werden, in Wenkenbach’s edition, 412, L18: tağannuban minni 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 Zakariyā al-Rāzī’s Doubts on Galen: A “Commentary?”

tatwil.
Abū Bakr Muḥammad ibn Zakariyā al-Rāzī was deeply influenced by Galen. In the introduction to *Doubts on Galen*, Muḥammad ibn Zakariyā 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 Zakariyā 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 Zakariyā'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.

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-faylasūf)”) 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*,

77. Ibid., 49–1.
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 Zakariyā 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 Zakariyā sought to settle whether a huge number of philosophical 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 Zakariyā, particularly 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 Zakariyā 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 Zakariyā about Galen’s philosophical example and what he sought to imitate in Doubts on Galen.  

[F.6] 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-witted his nature, and how many sources he used to draw from (wa-kātiratī tahṣīliḥī).

This is how Muhammad ibn Zakariyā 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 Zakariyā’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 Hippocrate-
ic commentaries, it strikes me as unlikely that Muhammad ibn Zakariyya 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 Muhammad ibn Zakariyya 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.  

Based on his work on the commentary tradition on Avicenna’s *Pointers and Reminders*, Robert Wisnovsky has identified several exegetical functions that verification (*tahqiq*) 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.


82. Wisnovsky observes that these techniques were well-established among Greek Aristotelian commentators. See Wisnovsky, “Avicennism,” 355.
*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 *harmonising* “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 Zakariyā 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 Zakariyā 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-Faraḵ 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.

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86. Ibid., 356–7.

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 (yakûnu ma’ahā waramu l-dimāq=en toisi phrenetikoisin epiphaînetai).” 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 (farānītis, al-sirsām88), erysipelas (al-humra) and lethargic fever (liṭargūs89) 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.9 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 Zakariyā and Faḥr al-Dīn’s defense of Avicenna’s doctrine in the Canon that bones and the brain swell against Muḥammad ibn Zakariyā’s view that they do not.92

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89. Ullmann, Wörterbuch, 391 [Entry ḥ (ḥ) lḥārīyāt]. Avicenna, Canon, 2:50.
90. Avicenna, Canon, 2:50.
91. Ibid., 44–52.
Having understood this, we say: “In his book that is known as The Outstanding [Book] (al-Fāḥir) [Muḥammad ibn Zakariyā] al-Rāzī holds that the brain does not swell, nor does bone. He said: ‘That is because the occurrence 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 (fāsid) on the basis five considerations…”

Ibn al-Quff then carefully paraphrases Faḥr al-Dīn’s five arguments against what the latter called Muḥammad ibn Zakariyā’s “minor premise (ṣuğrāhu)” 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 Zakariyā would have constructed against Faḥr al-Dīn’s criticisms based on the medical theory that both thinkers shared. Ibn al-Quff defends Muḥammad ibn Zakariyā, 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 Zakariyā 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 Fahr al-Din'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.

واللازم أن يجيب عن هذا الأول ويقول المتمدن الحاضل للمعنى والدماغ والمأمور غير المتمدن الحاضل لهما بالزيم من جهة الفاعل والمادة ونفس المتمدن. أما الفاعل فإن الفاعل للمادّة الطبيعية البدنية المكنت وفي الدّماغ لقيّم الفاعل للمادّة الطبيعية للمادة المومية أو حركتها أو هي نفسها. وأما المادة فإن المادة المادّة صالحة مأومة ومادّة الزيم فاضلة مقنعة. وأما النفس المتمدن فإن الفاعل في المادّة في الأفق الثلاثة على التناسق الطبيعي. والزيادة في البطن في بعض الأوقات دون بعض. وإذا كان النمو عبارة للمتمدن بهذه الأرض فلا يجوز أن يقتضي أحداها على الآخر. والجواب عن النتيجة أن نفوذ الغداء في جوهر الأعضاء أمر طبيعي مأوم. وإذا كان كذلك فلا يلزم من قول الطبيبي قول ما ليس طبيبي. والجواب عن النتيجة كأن الدّماغ لزج إذ لم يكن يعني بالوزارة الدّموما وغلظ القوايم مع قول المتمدن كالخاط. فإن عني بها الأول فقل ذلك تمّ الدّماغ حتى اليوم. وإن عني بها النتيجة فهو بالنصّيح قد دلنا على أن جوهر الدّماغ ليس هو ذلك. والجواب عن الرأي أن سواه الأقدام واحترامها لا تقارن زيادة البطن. وإذا كان كذلك فإن ذلك لفي الدّماغ فضل وارع عليها بل ذلك لصار مراها في نفسها بحيث أنها لم تصلّغاد الوارد عليها بما ينبغي وتحديده به والجواب مع الأقضاء ما ذكرناه في الأول أو قول ولوم الأقدام وحلص لها ما ذكرنا فلا ينبغي أن يقتضي عليها العظام فإن جوهرها غير جوهر العظام بدلا على هذا العقل والنقل. أما الأول فمس ووجهين أحدهما أنها آوى حسا من العظام بل الأقدام يستقلون أن العظام عيدة حق ولجيّن لها حس. وأما الثاني فإننا إذا عرضنا الأقدام للفساد فإننا رأى الفساد يسري إلى بعضها دون بعض ويظهر هذا ظهورا نينا في أسنا الحيوات الوظيفية الجبحة. وأما النقل فإن الإمام أقررا يقول في حاسمة الفصول البارد ضر للعظام والأقدام والنصب والدماغ والنجاح. وأما الاحترام فأفعال مواقف لها. فأقول الأقدام بالذات فيما عن العظام.

واعلم أننا أقسمنا في هذه المسألة كان الحق فيها مع الرأي في أمر العظام والدماغ. وذلك لم يحرم الشيعي الرئيس بعدد أربع رئيسا في البيوض بها. بل قال بعضهشبه باليوم يعدت لحجمها ويددوها ولا يعيد أن يكون القابل للمزاب بالذات بالذات قبلا للفساد. وبهذا فهذا الشاعر الذي ذكره ليس يصبي ويشبه في سن السن لحسن الأعضاء فيه تكون قابلة للنفاذ. وأما الدّماغ فإن جزم ومعلوم إنما ذكر الرأي حتى أن في بعض الأقوال تفسين الأخوان وتفصيل مطلب المفهوم.

[Muḥammad ibn Zakariyā] Ṣāzī 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-naqāl) 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 the 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 statement 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 Faḫr 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 Faḫr al-Dīn’s commentary on the Canon. The manner in which Ibn al-Quff defends the absent Muḥammad ibn Zakariyā recalls the “painstaking investigation (al-istiqṣā’)” that Faḫr 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 Zakariyā’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-inṣāf), played a central role. It is his commitment to impartial consideration of Faḫr al-Dīn’s, Muḥammad ibn Zakariyā’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 Faḫr al-Dīn’s exegetical method, namely the anti-

ethical attitude he adopts toward partisanship. For Faḫr 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."  

Like Faḫr al-Dīn, the goal of the critical attitude that Ibn al-Quff adopts toward Avicenna, Muḥammad ibn Zakariyā and Faḫr al-Dīn is not to engage in refutation or apologetic as an end in themselves; the criticism is, for Faḫr al-Dīn as well as Ibn al-Quff, "methodical."  

Finally, Ibn al-Quff's appeal to "reason and authoritative texts (al-ʿaql wa-l-naql)" recalls a familiar practice in Faḫr 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 Qurʾān and hadīt, for Faḫr 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 Faḫr al-Dīn thought about philosophical authority and the task of philosophical commentary. For Faḫr 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 Faḫr al-Dīn was the the best way to comment not only on Avicenna's texts, but on Hippocrates' Aphorisms as well.  

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

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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 Faḫr al-Dīn's students such as al-Ḥusrawšāhi and other physicians who engaged in the Canon-commentary tradition, such as al-Sāmīrī, Ibn al-Nafis and Ibn al-Mинфāṭ.
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 aetiology. 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 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 الشيطان رفع أنه ليس كل سوء مزاج مختلف مؤلم بل الحر والبارد مؤلمان بالذات والباب مؤلم بالعرض لأنه فيه تفرق الأصلان من شدة التقيد. وأما البارد لا نؤمن بهذا لأن الحر والبارد كفيفان فاعلان وبارسان ورطب كفيفان اتفاقان فواهمما ليس بأن يؤثر بهما جسم في جسم بل بأن يتأثر من جسم. وأعلم أنك قد عرفت أن عند الشيطان سوء المزاج سبب ذاتي لألم عند جالينوس سوء المزاج إنه يؤول لأنه يتعجب تفرق الأصلان. فإذا أخذنا بنمذجة جالينوس لذ أن يقال الحر والبارد مؤلمان لأن من شأنهما تفرق الأصلان وليس من شأن البارد والبيض ذلك. وأما إذا أخذنا بنمذجة الشيطان يبطل هذا الفرق. بل يجب أن يحكم بأن سوء المزاج البارد أو البيس مؤلمان بالذات لأن حد الألم عند إدراك المنفية والرطب والبيض الخراجان عن الاعتدال منفية فيكون إدراكهما إدراكا للمنفية وهذا هو نفس الوجع. فإن قيل: الشيطان إنه يحسن إذ ادراكه عن غيره والرطبية والبيوية كفيفان اتفاقان لا فإن الشيطان في كتاب النفس

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The fourth investigation, which is that the Šayḫ thought (zaʿama) that not every irregular noxious mixture is painful, but that the hot and the cold are painful intrinsically, and the dry is painful accidentally 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 Šayḫ, 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 Šayḥ’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 (ḥāḍā huwa nafsī l-waḡāʾī).

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 Faḫr 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 (ḥiss) is a kind of perception (ʿidrāk); (P3) every perception of the irregular mixture is perception of what is contrary (granted, ʿidrākun ʿāl-munāfī); (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, Faḫr al-Dīn takes Premises 2–4 for granted in this investigation. P2 is assumed because sensation (al-ḥiss) is a species of perception (al-ʿidrāk). 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 Faḫr 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 Faḫr al-Dīn discusses in investigation one. P1 is disputed, however, and receives all Faḫr 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,
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
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-mahsūs] 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-mahsūs] 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-dātiḥā),” 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 compression, the expanding, the wetness) that these object imbue the sense faculty with. Fāhr 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. Fāhr 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*, Fāḥr 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 Fāḥr 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 Fāḥr 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 Fāḥr 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, Fāḥr 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. Faqr al-Din'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 Faqr al-Din's commentary)
      i. First doubt on Faqr al-Din's Objection to Proof One
      ii. Second doubt on Faqr al-Din'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 Faqr al-Din 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 Faqr al-Din's proofs for his position (stated in E)
   1. Rebuttal (jawāb) 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-wasiṭatih)"
   a. Two Proofs
      i. Proof One
      ii. Proof Two
   b. 2. Summary of Avoerroes' position
      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

As usual, Ibn al-Quff begins with “Galen and his ilk (al-fāḍilu Ǧālinūsu wa-širatuḥu),” observing, however, that “we do not find that they have any proof (dahi)” for their position. Ibn al-Quff then proceeds to supply evidence for their view. Surprisingly, Ibn al-Quff sides with Averroes on this question in no uncertain terms:

The Judge Abū al-Walid 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.


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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. al-ḥāssa al-lamsiyya*] 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 Sinā 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 Sinā 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 *imām* [that is, Ibn Ruṣd], 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-Din’s position based on what Ibn al-Quff purports is a complete survey of Faḥr
al-Din’s writings (ḥāda mağmū’u mā dakaṭarahu l-imāmu Fahr al-Din fi ǧāmiʿi taṣānīfī), and then presenting as many objections to it as he can muster.

Wahshīn’ al-Imām Fāhr al-Dīn bi al-maṭṭir fī al-dīn al-falāsīfī li al-ʿaṣāba’ al-falāsīfī wa al-dīn al-falāsīfī li al-ʿaṣāba’ al-falāsīfī...
The *imām* Fāhr 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

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 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 imām 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-ʿaḍāʾ] 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-ʿudw] 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—concerns 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 imam'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 Faḫr 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 Faḫr 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 Faḫr al-Dīn’s doctrine. As we have also seen, Ibn al-Quff also rejects Faḫr al-Dīn's view that noxious mixtures of any quality cause pain intrinsically, not accidentally. Yet, how Ibn al-Quff structures his argument and the techniques he employs in this investigation imitate Faḫr al-Dīn’s verification techniques. In imitation of Faḫr 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 Faḥr 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 Faḥr al-Dīn’s thought on the aetiology of pain, for his words recall some of the themes and prescriptions that Faḥr 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 (ṣūʿ al-mızāğ al-muḥtālīf), which causes pain, and a regular noxious mixture (ṣūʿ al-mızāğ al-muttaṣafq), which does not cause pain, Ibn al-Quff says that he treats this question “in great detail (aṯnābā)” and “confirms it (taqrīrimī)” exhaustively “from the imām’s point of view and on the basis of doctrines he adheres to, by way of authoritative texts and reason (mīn ğīhāti l-imāmī fīmā tamassaka bihi mina l-wuḡūhi l-naqīṭāti wa-l-ʿaqīṭā).” First, Ibn al-Quff’s reference to the fact that his analysis proceeds from the “authoritative texts and reason” recalls similar phrases in Faḥr al-Dīn’s commentary on the Canon. For example, in the second investigation in his commentary on the section on pain in the Canon, Faḥr 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, Faḥr 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 naqīl, meaning surveying mainly Avicenna’s medical and philosophical 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 Faḫr al-Dīn's arguments are confirmed (taqrīr) on the basis of doctrines that Faḫr al-Dīn himself upheld, rather than introducing propositions into the discussion, for which there is no textual evidence that Faḫr al-Dīn would have agreed with them. Ibn al-Quff is careful, in other words, to distinguish his rebuttals to Faḫr al-Dīn from the kind of criticism that Faḫr al-Dīn condemns his contemporaries, such as al-Masʿūdī in early works such as the Rebuttals (Ḡawābāt).

The evidence in the section shows that Ibn al-Quff's commentary on the Hippocratic Aphorisms is modelled on Faḫr 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 exegetical elements that make up the method of verification in Faḫr 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 Faḫr 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 criticise 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 Faḫr 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 Faḫr al-Dīn's contributions to medicine. I showed, however, that by the end of the thirteenth century, Faḫr al-Dīn was esteemed highly by physicians and philosophers. For his part, the authority that Ibn al-Quff allots to Faḫr al-Dīn's medical thought is in large part owing to the fact that he was educated in the Levant at a time when Faḫr 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 Faḫr al-Dīn as an authority, it is puzzling that Ibn al-Quff rarely cites Faḫr 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. 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-Rāzi’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 Sarāḥs 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-Sarāḥsī, 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*, 49). 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.”
commentary is corroborated by the fact that at the time of composing the commentary on the Canon Faḫr al-Din was not yet able to articulate the important elements in his analytical method.

In attempting to gauge the legacy of Faḫr al-Din'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 Faḫr al-Din 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 Zakariyā al-Rāzi'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 Hippocrates' words conform to the prescriptions Galen made about 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 Zakariyā al-Rāzi 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 Zakariyā'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 Aphorism, 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 Faḫr al-Din'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 Faḫr al-Din wrote his Canon commentary. Of course, Galen remained important for Ibn al-Quff, and so did Avicenna, Muḥammad ibn Zakariyā, 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 Faḫr al-Dīn’s style of inquiry. Gerhard Endress says that where al-Gazâli gradually adopted and synthesized parts of Avicenna’s philosophical thought over a lifetime, Faḫr 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 synthesized into an increasingly unified picture of the Islamic sciences and their interrelationship. 29 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-Mинфāḥ, Ibn al-Nafis, Ya’qūb al-Sāmīrī and Šams al-Dīn ‘Abd al-Ḥamīd al-Ḥusrawštāḥī, 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 Faḫr 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 Faḫr 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 interests 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 Faḫr 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 philosophical lore.

Bibliography


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Ibn al-Quff. al-Uṣūl fī šarḥ al-Fuṣūl. MS, Istanbul, Yeni Camii, ms. 919.


Appendix

The following three texts are referred to extensively in this paper. The stemma for Faḫr 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 Faḫr 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 Faḫr 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 Canon

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.

There is a partial transcription of Faḫr al-Dīn's introduction in based on the manuscript Konya, Yusuf Ağa ms. 498; see Albert Dietrich, Medicinalia Arabica: Studien über arabische medizinische Handschriften in türkischen und syrischen Bibliotheken (Göttingen: Vandenhoeck and Ruprecht, 1966), 78–9.

102.  There is a partial transcription of Faḫr al-Dīn's introduction in based on the manuscript Konya, Yusuf Ağa ms. 498; see Albert Dietrich, Medicinalia Arabica: Studien über arabische medizinische Handschriften in türkischen und syrischen Bibliotheken (Göttingen: Vandenhoeck und Ruprecht, 1966), 78–9.

103.  عفوك الله قال ... الرازي في الله
أما بعد [P 10a]
٠٠٠

على محمد[٠٠٠] سيد الأنباء وعلى آل وأصحابه صفة الأولاء ।


١٠٤.] أئلاوة P. افة P.
١٠٥.] add. أئَلَاء P.
١٠٦.] P. مدع : معلم P. G.
١٠٧.] أئَلَاء P (فَنات) G. معد P.
١٠٨.] أئلاوة P. مدع P. G. محمد
١٠٩.] أئَلَاء P. (الأولية) أئلاوة P. G. add.
١١٠.] P. مدارج P. G. (مُهَدْلَة) المدارج
١١١.] أئلة P. G. مدارج P.
١١٢.] أئَلَاء P. ونحوه P.
١١٣.] أئَلَاء P. Aئلة P. G. مدارج P.
١١٤.] أئَلَاء P. G. Aئلة P. G. الحكيم
١١٥.] أئَلَاء P. G. ونحوه P. واطلاع على نهاية أقدام العقلاء
١١٦.] P. G. مدع : (مَاذَا) معايي P. G. معيي
١١٧.] Aئَلَاء P. G. شرينة P. G.
١١٨.] أئَلَاء P. G. فئت P.
١١٩.] G. in marg. Aئلة P. في معارج Aئلة P. G. في معاید Aئلة P.
١٢٠.] in marg. Aئلة P. P. and Owen P. G.
١٢١.] P. G. in marg. أئَلَاء P. P. Owen P.
فلاً موضوع 122 نظره 123 بدن الإنسان الذي هو أشرف الأجسام في هذا المكان. وأما ثانياً فلا اعتضاد مقاعد 124 قواعد، واضح الحجة 125، ولا تهربان. ولمما وقفت على كمال هذا العلم ومنفعته وعلو درجه ومرتبته أردت الخروج في عباءة 126 والتزوي في غابة 127، الوصول 128 إلى لبابة، والعمق 129 في أعواء 130 والعمق 131، أوهير. ولمما كان كتاب القانون للشيخ الرئيس أحمد كتب صحف في هذا الباب بتفاقم أولي الألفاب ثم أن الكتاب الأول منه تميز 131، صار كتب بالمطافين الحكمة والتفاصيل العلمية والنكت الغريبة والأسرار العجيبة التي 133 حارب أدبه أبناء أرض عن إدراكها وخارف قواهم 134، عن الوصول إلى دري أفلاها صرفت نهاية، وكم 135، وكادي 136، وثبتت 137 غابة وهمي وهمي 138، إلى تفسير عيونه وشرح ميتون 139، واستخراج مشكلات [12] [G 2a] واستخراج معضلات [12] [G 2a] [G 2a] [G 2a].
Emergence of Verification [v9]
Emergence of Verification [59]


والفمني [158] في قوله:

أذى هذا الزمان أهلي فأعلمهم دم وأرحهم. [160] وعند

وأكرهم كلب وأعصرهم عمى [161] وأشهدهم فيهم [162] وأشجعهم قرد

جل العلم صار كلاماً في هذا الزمان على كل أصحابه ووباراً [163] على محبه وطلبه. فيل [164] الرجل بعد أن أقى في تحسينه زمانه وفق


المواد مدخلاً عل كل البصعي والطلبات. [169] هذا ولكن الله تعالى بفضله العليم وطهله الحسيم [170] وإنعامه العام وإكرامه التام عوض

أهل العلم من السعادات [171] الحسيمة الحبب بالسعادة الكريمة العقلية، ومن الفنون الدينية [172] للغد المرفأ

[Ox 5b]

156. للاخس [Ox, G, P].
157. للاخس [Ox, G, P].
158. فالمنتي: [Ox, G, P].
159. قوله: [Ox, G, P].
160. اذخى منه: [Ox, G, P].
161. عمى [Ox, G, P].
162. فهد [Ox, G, P].
163. وبال: [Ox, G, P].
164. فتري [Ox, G, P].
165. الثاني [Ox, G, P].
166. بحل: [Ox, G, P].
167. في [Ox, P, G].
168. العلم [Ox, G, P].
169. والطلبات [Ox, G, P].
170. الحسيم [Ox, G, P].
171. السعادات [Ox, G, P].
172. الدينية [Ox, G, P].


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174. ] G, P.
175. ] G, P.
176. ] G, P.
177. ] G, P.
178. ] G, P.
179. ] G, P.
180. ] G, P.
181. ] G, P.
182. ] G, P.
183. ] G, P.
184. ] G, P.
185. ] G, P.
186. ] G, P.
187. ] G, P.
188. ] G, P.
189. ] G, P.
B. On Compound Diseases


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


191. وَحَدَتِ P.

192. مُتَقَلِّبَةَ: (بَعْنَاء) G.

193. لَوْقَيْ P.

194. القُلُبَ (بِالْكُلُّ) G.

195. أَنَّهَا P, G.

196. مِنَ P, G (ضَمَّ): om. G.


198. مَعْرُوِيَ G: om. P.


200. مِسْلَظَ P, G: om. P.

201. اَشْرَعَ P.

202. مُشَكَّلَاتَ in marg. Ox.

203. تَكَابُ G, G: om. P.

204. أَلاَّ تَرُتِّبْ P.
Paris, Bibliothèque nationale de France, MS hebr. 1208, fols. 69a, l.1.6–72a, l.16.

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

الفصل الخامس في الأمراض المركبة إلى قيّه والروم يعرض للأعضاء المركبة.

التفسير هذا الكلام يستند إلى أربع ملاحظة. الأول ذكر أقسام الأمراض المجمعة. الثاني أنها كيف ينبغي أن يكون حتى يحصل من اجتماعها. رد أربع. الثالث حالة الروم وحده. الرابع بجان كونه مرضًا مركبًا.

البحث الأول فاعل أن اجتماع الأمراض على سنة أوجه، الأول أن يوجد مع المرض السريري مرض آخر مزاجي. الثاني أن يوجد مع مرض السريري مرض تركيكي كما إذا كان مع الحمى دمل. الثالث أن يوجد مع تعرق الأمصال كما إذا كان مع الحمى فرحة. الرابع أن يوجد مع المرض السريري مرض تركيكي كما إذا حصل في المجاري، ورم يضيفها فإنه زيادة في المقدار وساعد للمجاركي وهو مرضهم.

الخامس أن يوجد مع المرض السريري تعرق الأمصال كما إذا قتل سلامية من سلالات الأصابع فإنه من حيث هو قتل فهم من جنس تعرق الأمصال ومن حيث أنه نقصان. [P 69b] العدد فهو من جنس أمراض التركيب. السادس أن يجمع الأجناس الثلاثة بالромم.

205. J Ox: ألا P.
206. OX: الروم G.
207. J ox: عو G.
209. G, أنتمانون J Ox: أعط G.
210. J Ox: ألا P.
211. OX: ألا P.
212. J ox: دمل P.
213. J G: ألاواتالا G.
215. J ox: قدما P.
216. J ox: المجاري (הלמד זיו) G.
217. J Ox: وهو P.
218. J ox: ألا P.
220. إذا J وتر P.
بقوله النبي ﷺ إذا كان بها رمود وحبيبة قد انفجرت، وخرجت الطيارة القرنية (G 101b)، وكأنما تفقت الهجة عن موضوعها، ونزل فيها الماء وتست فيها ظهره. فإذا كان كذلك فقد حدث بها سنة أمراض أحدها رمود وهو ذو قرار وثاني انفجار القرحة. وهو فرق الاتصال والثالث تنوع الطريقة العمية وهو مرض آلي من باب المقدار. الرابع روال النفق (G 106b) عن موضوعه وهو مرض آلي من باب الوضع. الخامس الامام وهو مرض آلي من باب المسألة. السادس الطيارة وهو مرض آلي من باب زيادة العدد. فهذة سنة أمراض حائدة في عضل واحد.

البحث الثاني (154) في أنها كيف ينبغي أن يكون حصول من اجتماعها مرض واحد. فقوله: لعمة حصول الأنواع السنة من المرض فيها فلم يحصل من اجتماعها مرض واحد بل كل واحد منها تتميز بنفسه عن الآخر، ولكل واحد منها سبب على حدة وعلاج على حدة حتى أنه لمزل الواحد. منها بقي الباقى. فأما إذا حصل من اجتماعها حقيقة واحدة ذات سبب معين وعلاج معين.

ويعتبر أنه مني زال البعض زال الباقى كان ذلك مرضًا متحدة (155) عرب أسواق الأمراض.

221. انفجرت G.
222. وفيرة P.
223. ونزل G.
224. القرحة G.
225. النفس P.
226. الماء G: علاب P.
227. الثاني G.
228. بال P.
229. منها P.
230. البضاعة P.
231. متحدة P.
232. مركب P.
البحث الثالث في حقيقة الورم. أعلم أن بين الأعضاء البيئية فرجاً، كثيرة و لكنها غالباً غائبة عن الحس في الأعضاء البيئية لإطراق بعضها على البحر. ولكنهما ظاهرة في الأعضاء الصلبة كمشابه العظم. ثم أنه يمكن أن يتم انسداد جزء من العروق والأنف، إذا و بالذالك حتى تصل إلى جملة العروق الصغرى والكبيرة.

أولاً العروق العظام التي في العضو تم تدريج إلى العروق الصغرى، ولا يزال ذلك حتى تصل إلى جميع العروق الصغرى والكبيرة.

ثم أن الفضيل إن كان أكثر من ذلك، كأنما زيحة الاصابات بالفيروسات، أم عظام [G P (1024)] oligopaths، و سأل منها الفضيل على الراح في الحفر التي في جرم الأعضاء البيئية التي يمكن توصيفها، ولا شك أن ذلك الميل يؤثر في جميع من بين الفضيل. مراجع في ذلك 246 هو الورم [Ox 1074] و جزء أنه تمدد يحدث 246 للعضو من قبل اصابات مادة ربدية 247 إليه، وإنما قناة تمدد ولم تتم غفلة حتى تدخل في الأورام الريحية.

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233. [Ox, P: i P.
234. [Ox, G: فرجة P.
235. [Ox, P: ولكن G.
236. [Ox: بعض G, P: (بائى).
238. [Ox: أنه G: Om Ox.
239. [Ox: تملا P.
244. [Ox: وذلك G, P: (وما).
245. [Ox: فانتفاني في ذلك.
246. [Ox, G: ريدا P.
247. [Ox, P: (ريد).
248. [Ox, P: om G.
البحث الرابع في أن الورم مرض مركب من الأجزاء الثلاثة إما أن فيه سوء مراح مادي فإن فيه خطط مرض ثم أن سوء المراح

بوجب تفرق الأنصال وهو توسيع تلك المنافذ ثم أن تلك المادة بعد تفريغها للاتصال تغمر الأنسجة وتزيد في مقدار [P 70a]

العضو وربما يزيد [P 251] العضو بحيث يسمع أن يقرب مما من شأنه أن يقرب منه [P 252] أو بعد مما من شأنه أن يعد عنه وذلك هو مرض

العضو.

قال الشيخ: والورم يعرض للأعضاء الليبية إلى قوله وكلا الورم ليس له سبب يدأ [P 253].

التفصيل: إنما فرع [P 255] بيان حقيقة الورم، شرع في بيان العضو الذي يعرض له الورم، ومن الناس من رأى أن العضو الصلب كالعظام أو

الأنسجة كالدماغ فإنه لا يبود لأنه لا يبود لا يبود وما لا يبود لا يبود، وصغير فياسهم كاذبة. أما أول [P 256] لأن الدماغ والعظم مرض لهما


هذين الوجوهين نقص الأجزاء الغذائي فيه. فتلك [P 260] الأجزاء كما أنها قد تصلح تفتكن عشاء أمكن أيضا أن تفسد. وإذا فسدت


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249. [P 254] P: ألا اللب P.

250. [P 255] G: تفرق: (مضر) G.


252. G: يزيد P: يزيد G.


قال الشيخ: وكل يوم ليس له سبب بل يشبه البدني 278. يتضمن انتقال مادة من عوض إلى ما تحته فيمسى 279. تزلا.

النص: هذا 280. شروع مه في تقسيم 281. الأورام. وأعلم أنه يمكن تقسيمها على وجه كثيرة بعضها بالفضلل الذاتية وبعضها بالخواص العرضية. وهذا الذي ذكره الآن تقسيم بالخواص العرضية 282. فإنا 283. نقول: الورم إذا ما يكون حدوثه بسبب مادة دهنية تزلى إلى العضو

264. بمدهما [Ox, G: تفيدنها] P.
265. هذا [Ox, G: دهذ] P.
266. فعالظان [Ox: لالفظان] G: P.
267. فنوق [Ox, G: Miqd.] P.
268. كانت [J, G, P: كان (تعتقد)] Ox.
269. تخضر [Ox, G: هدبر] P.
270. فنوق [Ox, G: بدعع] P.
271. الفضلات: (الألفاظ) [Ox, P: G.
272. خامسا [Ox, G: نكما] P.
273. الأسنان [Ox, P (الاسم): om. G.
274. مائة [Ox, G: قابلة: (الاسم) P.
275. المحاذية [Ox, G: ألمائمة] P.
276. إذا [Ox, G: ذاك] P.
277. الانسحاب [Ox, P (الاسم): (الاسم) G.
278. البدني [Ox, P (الاسم): P.
279. فيمسى [Ox, G: تسيم] P.
280. هذا [Ox, G: دهذ] P.
281. تقسيم [add. لاقسم] G.
282. وهذا الذي ذكره الآن تقسيم بالخواص العرضية [Ox, P: (أو) آليد دهذ كلام الكلامات الأعلى) P.
283. إذا [Ox, G: ونظ] P.
من عضو آخر فوق. وأما أن لا يكون والقسم 281 هو الرئة، واعلم أن هذا لأنماط يكون لأمور ستة: قوة العضو الدافع وضعف القلب وكثرة المادة وسعة المحادي وضعف غادة العضو القابل 282 وكون القابل أسفل من الدافع، ومن ثم حدث في عضو من الأعضاء ومدفعة ذلك من فصل مدة 283 اصبت إليه من غزوة ومن ثم حدث قليلاً فقيراً احتمل كلي 280 الأمين.

قال الشيخ: وربما كان السبب المادي إلى قوله والأورام قد تفضل بعض متفسرة.


قال الشيخ: والأورام قد تفضل بعض متفسرة المختلفة إلى قوله وأما الأورام الغير الجيدة 288.

التفسير: الآن عاد إلى بيان 289 تقسيم الأورام وذلك التقسيم يمكن بيانه من وجه كبير إلا أن الأولى تقسيم بالاعتبار الفصول الكاذبة عن الأسباب الطبية للأورام وهي ستة: الأخلال الأربعة 290 والسليلاني والريح. ثم أنه جعل هذا التقسيم علة لنمو آخر من التقسيم وهو

298. لأن] Ox: om. G.
299. الأرعة] Ox: G: أدلر P.
300. السنة] Ox: G: أدلر P.
301. مما] Ox: G: مس P.
302. بالفصل: (كالفرزي) G.] Ox, P (بالفصل) G.
303. نوعاً] Ox: G: نوعين P.
304. الذي ذكرها في: (اللر دير فسم) G.] Ox, P (اللري دير فسم) G.
305. معالجات] Ox, P (المعالجات) G.
306. نوعاً] Ox: G: نوعين P.
307. من هذا الكتاب ... قال الأورام الباردة] Ox, G: om. P.
308. كاستفساء] Ox: G: كاستفساء P.
309. هذا] Ox: G: كاستفساء P.
312. المعاينات] Ox: G: المعاينات P.
313. واقعاً] Ox, G: واقعاً P.
314. الحادة] لها G.

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315. [Ox, G: ] وقف P.
316. [Ox, G: ] هذا P.
317. [Ox, G: ] الحار P.
318. [Ox, G: ] هو P.
319. [Ox: ] مرض من P.
321. [Ox, G: ] إما P.
322. [Ox, G: ] واما P.
323. [Ox, G: ] إذا P.
325. [Ox, P: ] وإن كان لا يمكنه ضجة وحالاته G.
326. [Ox: ] كالبلغم P.
328. [Ox, G: ] ودد P.
329. [Ox, G: ] أحمد P.
في السلاح أن ينضح، والنضع بلحقيه [G 104a] أن أظهراً تولى المدة والآخر جمعها. ثم 333 ذلك 334 الجمع. 


قال الشيخ: أما الأوامر العبري الحارة إلى قوله وأما جنس الأوام البلامية.

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330. [Ox, G: يلبسه P.]
331. [Ox, G: om. P.]
332. [G, P: جمعها (الماتى) Ox.]
333. [Ox, G: يلزماً P.]
334. [Ox: ذلك G, P (٨٩٠).]
335. [Ox, P: للقرحة (٢١٣٠).]
336. [Ox, G: والى G.]
337. [Ox, P: (٨١٣٠).] [Ox, G: om. G.]
338. [Ox, P: إلى قرحة وهو G.]
339. [Ox, P: (٨١٣٠).] [Ox, P: إلى قرحة من...هدتين الوصفين وهو G.]
340. [Ox, P: (٨١٣٠).]
341. [Ox, P: فالقسم G.]
342. [Ox, G: تلب P.]
343. [Ox, G: صاحب الكتاب G.]
344. [Ox, G: رفع P.]
345. [Ox, G: غير (٨١٣٠) G.]

346. [Ox, P (Pابعد: (٢٤٣) G.

347. وشرع [Ox وشرح: (٣٢١) P: om. G.

348. [Ox, P (ف التحقيب القرآني): om. G.

349. [Ox, P: للنغمات الغاية P.

350. [Ox, G: G. السلم

351. هذا [Ox, G: زهد P.

352. كلامه في آخر (١٠٩) G.

353. وحصر: (١٠٩) P: Ox, G.

354. [Ox, G: ألداسي P. الجنسين

355. [Ox: بالسلع G. بل جعل من هذا الباب العدد التي منها الخنار والسلع

356. [Ox, G: كاندا P.

357. [Ox, G: تكلم P.

358. [Ox, G: بلغة بلغية P. دللماتي غالية P.

359. [Ox, G: عصيدة: (٢٤٣) P. كعصيدة G.

360. [Ox, G: لا P.
أنا جعلناها بلغة لأن أصل ذلك العصبة. بلغع عرض له أن يس قاراد غلظة هذا كلامه في هذا الموضع. والجملة فكلامه في هذا المعنى مضطرب. وقوله الأوامر الصليبة السوداوية تبتدأ في أول كونها صلة وقد تنقل إلى الصلاة وخصوصاً الدموية وقد يعبر ذلك أيضاً في البلغة أحياناً. فالمراد منه أن أحد نويعي اليوم السوداوي وهو الصلاة قد يكون تكونه عن خلط حدث

له اتباء وقد يكون حدوثه من قبل أن يحصل نوع آخر من اليوم ثم أن مادته تغلف في اليوم الدموي وقد يكون أيضاً في اليوم البلغي. فأما ما ذكره في باب الفرق بين الغدد والعسل وبين تعقد العصب فكلمة ظاهر والذين يلحق به أن تعقد العصب لا يتحرك إلى قدم وأخفق بل بئسه وبسية. وأما السلع فإنها يتحرك 378 إلى الجوانب كلها.

وباقي الفصل (G 105a ظاهر).

361. أنا جعلناها ] G, P.
362. العصب (النؤوي) Ox : om. G.
366. وهر ] G, P.
368. أن ] G, P : أنت P.
369. يحصل ] P : هل P.
377. وبرة ] P : مزج G.
379. ظاهر ] لله الموافق.
C. On Pain and Pleasure


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

Paris, Bibliothèque 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.

يمكننا أن نعلم فيه 393 بما ينافي 394 بنائياً وما يكون منافياً له. ففي تلك الحالة إدراك المعاني والمفاهيم يكون حاسلاً وإن لم يكن الألم والذلة حاسساً بل وقت كوننا ملتزمين هكذا ينافى كوننا 395 والعكس. فإذا كان إدراك المعاني المفاهيم 396 الحساس عند وقت ومعادلة الألم، فإن اللذة والألم يمكن أن 397 يؤديان اللذة والألم يمنع الحساس عند وقت ومنع الألم 398 للفهم معاً للاستقرار 399. فإن قلقًا بين إدراك المعاني والمفاهيم في الصورة التي 396 [ذكرت هما المعاني صريحة 396] غير حاسال مفاهيم الشكل 390. فقولًا风景区 هذا، زيادة في الحد وهي مع ذلك غير دافع للإشكال 399 [أعمال 398] لذة ومنعه. إن الحساس في هذه الصورة هو العالم 394 فأما في الحساس، إن أدمار المعاني والمفاهيم في إنقاصي وهم ما لا 396 إدراك المعاني والمفاهيم غير والإدراك غير 405. فقول الإدراك على قسمين منهما ما ينافى على حساس مدركه 406 في الحالات ومنه ما لا

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393. P (ف): om. Ox, G.
394. P: ينافي G
395. G: يمكن منح
396. P: يمكن (نافذة) منح Ox.
397. G, P: يمكن منح (نافذة) منح Ox.
398. G, P: يمكن منح (نافذة) منح Ox.
399. P: يمكن منح (نافذة) منح Ox.
400. P (خ:): om. Ox, G.
401. G, P (ح): السؤال: (الحالة) منح Ox, G.
403. G, P (ح): حاسال Ox, P.
404. G, P (العلم): الحالة Ox, G.
406. G, P (م:): منح Ox.
KABIMULLAH

Emergence of Verification [93]

... يتوقف. والأول 406 هو الحواس الخمسة 408 فقالوكم 407 اللذي إدراك الملائمة إن عنيتهم به 408 القسم الأول لومكم حصر الأمل والندة في الإدراكات الحسية وفاؤ 411 اللذات 412 والألم 413 العقلي. وهذا مخالف الحق ولهما هو كالالتفاق عليه بين 414 الفلاسفة وإن 415 عنيهم به ما يتناول 416 القسمين لومكم الشك المذكور. فإذن لا بد هاهنا من الاعتراف بأن 417 اللذة العقلية أمر معابر 419 نفس 419 العلم حاصل منه. ومما اللذة الحسية فهل هي أمر حاصل مع الإحساس بالملامات أو هو نفس الإحساس بهذا 420، وذلك المشكل. ونقوله 423 فأما اللذة العقلية فهم جهده بأنه إدراك الملائمة وافقنا 424 على أن العلم بالبديهي والعلم بالسماوات 425 قد يكون حاصله عندما لا...

427. ] Ox, P (ضارم G.
428. ] G, P (لدید G.
429. ] Ox, P (بشیء: (بکالاسی G.
430. ] Ox, G: کری G, P.
431. ] Ox, G: نوم P.
432. ] لدید فقول: : om. G.
433. ] Ox, P (هی: (په G.
434. ] Ox, G: ملائم P.
435. ] دم اهلیوما G, P.
436. ] البثث الثاني Ox, G: فانه البلاط P.
437. ] هذا Ox, G: دید P.
438. ] بين Ox, P (من: (بکی G.
439. ] التفریق: (الباتیم G.
440. ] أمیر Ox, G: نوم P.
441. ] add. del. P.
442. ] قائم G, P.
443. ] للامیر: (الامیر G, P.
444. ] علة G, P.

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الكم 445. الثاني وهو أن الطعام والنمو إنما يحصلان بأن يتفق 446. أصال العضو وينفذ في الفرج المستنجذية 447. للأجزاء 448. الغذائية مع أنه ليس هناك ألم. ومعناه أن 449. إنما لم يؤلم لأن ذلك الكام للفقر 449. أمر طبيعي ولم يحدث عنه مزاج 450. . وذلك يدل على أن الفقر ليس سبباً للألام لأنه يتفق لم يكن 451. موضع العضو يتفق عند الفقد والنمو. 452. وذلك بالنقل ولا ثم بالنزول ثانياً. أما النقل فقد صرح الشيخ بذلك في موضع 453. من كتاب الشفاء فمنه أن حكى في الفصل السادس 454. من المقالة الثانية من الفن الأول من الطبيعية عن أصحاب الخلاء أنهم احتاجوا 455. على وجود الخلاء بأن قالوا 456. النامي إنما مما 457. لفظ شيء فيه. ولا شك أن ذلك الشيء ينفذ لا في الخلاء بل في الخلاء، ثم أنه أوجب عن ذلك في

الفصل الثاني فقال: وَأَمَّا حَدِيثُ النَّامِي فَإِنَّ الْعَذَا بَيْنَ بِينَ مَتْمَاسِينَ مِن أَجْرَاءِ الأَعْضَائِ بِحُرْاَبٍ ۖ فَبِكَتَارِشِكَرٍ مَّيِّض: [G 129a] 

[461] [v.9] 

[462] [v.9] 

[463] [v.9] 

[464] [v.9] 

[465] [v.9] 

[466] [v.9] 

[467] [v.9] 

[468] [v.9] 

[469] [v.9] 

[470] [v.9] 

[471] [v.9] 

[472] [v.9] 

[473] [v.9] 

[474] [v.9] 

[475] [v.9] 

[476] [v.9] 

[477] [v.9] 

[478] [v.9] 

[479] [v.9] 

[480] [v.9]
الطول أكثر كثيرة مما ترمي في العرض. والراحة في الطول أصعب من الراحة في العرض وذلك لأن الراحة في الطول يحتاج فيها إلى تنفيذ الغذاء في الأعضاء الصلبة من الأطاع الفعالة في أحلافها طولا لتنفسه ويبعد.

هذه المواضع الثلاثة مرتبطة في أن النمو لا يحدث إلا عند تفرق الآت علاع وحفل تفرق الآت علاع. 

وأما البقاء فإن الأعضاء لا شك أنها في النحل ولا معنى للنحل إلا أن ينفصل عن العضو جزء. كان متصلا به والراحة إلى الغذاء للانفعال مثل ذلك الحجر بالغذاء. فإن تفرق الآت في بعض الأعضاء عند أهل ألفلا الأطفلا علاع ثم أن هذا الفعل ليس شيئا يختص به. ظاهر الغذاء دون بذاء لأن النحل هو الحركة وهي سارة في ظاهر الغذاء وبدائه فوجب أن ينفصل من الأجزاء من باطن G، العضو كما ينحل من ظاهره، ونحل في النمو لا يتم إلا بفرق الآت علاع فإن الوضع، والذين لا تقدور ونحوه فإن لنا لا

482. ] G, P (ألاطلاع), Rahman: G. 
484. ] G, P (ب): P. 
485. ] G, P: P. 
486. ] G, P: P. 
487. ] G, P: P. 
488. ] G, P: P. 
489. ] G, P: P. 
490. ] G, P: P. 
491. ] G, P: P. 
493. ] G, P: P. 
494. ] G, P: P. 
496. ] G, P: P. 
497. ] G, P: P. 
498. ] G, P: P.
إنه لا يفي بتعاقب العضوى فبألاضى خدا ففصر ذلك العضوى لا يحصل الألم، فقول: إن كل واحد من تلك العضوى فإن كان صغيرًا فبألاضى خدا لأن النعمة والنمو شيء غير مختص بحرة من البدن دون جزء بل هنا حاسلون في جملة الأعضى وهمة لا يليم إلا بهذا النوع من النعمة. فإنهم هذا النوع من النعمة أمر حاسل في جملة الأعضى وإذا كان ذلك فلو كان تفرق العضوى الأعضى من حيث أنه تفرق مؤلهة لكاتن الآلام حاسل في جملة البدن لم لم يكن كذلك علمنا أن النعمة غبر مؤله بل إما يلزم إذا حصل معه سوء مراح. فإن قيل: هذه العضوى مؤلهة إلا أن تلك الآلام لما دامت بطل الشعر بها. فقول: أء أولاً فلن تطيب بالألم؟ إلا هذا الأمر المحسوس ولا يشك أنه غير حاسل بسبب النعمة والنحو وليس كلامًا إلا في ذلك فإن آليم أرأ آخر كان وقف الآلام عليه وعلى ما نحن فيه باشراك الاسم. وأما ثانياً فإن الوجع الحاسل من تفرق الأعاجيل لم صار لكونه مأولة غبر محسوس وجب أن يكون كل ويع...

130a

130b

518. ] G, P. OX, G: أَلَا إِن أَن


520. ] G, P. OX, G: وَجَبِيَ G.


522. ] G, P. OX, G: طَلْبَتَـا P.

523. ] G, P. OX, G: مَزَايِل P.

524. ] G, P. OX, G: جَرْم P.

525. ] G, P. OX, G: مَا تَهْلِكَ P.

526. ] G, P. OX, G: مَا عَلَيْكَ P.

527. ] G, P. OX, G: عَلَيْهِ P.

528. ] G: om. OX, P.

529. ] G, P. OX, G: دَمَـاَ، دَمَـاَ P.

530. ] G, P. OX, G: (مَتَّلَ عِلَى) متَّلَ عِلَى OX. مَتَّلَ عِلَى

531. ] G, P. OX, G: وَقَضَى P.


533. ] G, P. OX, G: فَلَمَـا P.

534. ] Ox, G: المكان P.
535. ] Ox, G: يذهب P.
536. ] Ox, P (المسن). G.
537. ] Ox, P: الإبل G.
538. ] Ox, G: المكان P.
539. ] Ox, G: المكان P.
540. ] Ox, G: ملاحظ P.
541. ] Ox, G: كون P.
542. ] Ox, G: كون P.
544. ] G, P: المشابه P.
545. ] Ox, G: لأنه P.
547. ] Ox, G: من P.
548. ] Ox, G: وكاننا (المسن). G.
549. ] Ox, G: نسلم P.
550. ] Ox, G: المشابه P.
551. ] Ox, P (المتفرقات). G.
من كثرت في السطح كان البعض قريبا من البعض وصارت السطح صغيرة جدا. فإذا حصلت الألام في [90a] مواقع التفقرات 555 فلكثرة 554 تلك المواقع وقرب بعضها من البعض وصغرت ما بينها من السطح بنشبة على السطح فطائر كون الوجود 552 يقود 550 على بعضها وإن لم يكن في نفس الأمر كذلك. وهذا 558 كما أنه إذا دققت 509 المقام والاستبداع والتنجmez وازدهارها ناعمة وخطرنا البعض بالبعض ياسب 556 فإنه يظهر في الحس للمجموع 554 ينفر 565 على حدة وإن لم يكن في نفس الأمر كذلك. وإذا كان هذا الاحتمال دائما لم يكن 664 القياس برهانيا. الحجة الثانية 699 قال 570 البرد موجود 700 حيث يقبل ويصم وحيث يرد وفرز
الاتصال عن البرد لا يكون حيث يبرد في أطراف الموضوع المثير. ولقول أن يقول الموضوع إذا يبرد فإنه يقتض

ويعض من ذلك الانفتاح أن تتمد أطراف عن أطراف الموضوع الحار وأن تتفجر أجراة الممتدة بعضها في بعض. وكلا

الأمين سبب للفقر الاتصال لها. أما الذي الأول فلأنه إذا تمدد طرف عن طرف الموضوع الحار انفصل عنه فبلغ

النزف. وأما الذي الثاني فلنكن ذلك جعلنا الألم الضائع قسما من أقسام الأل. وأيضا

فلأن الموضوع المثير يمكن أن يكون بعضه أبعد من البعض، ويفصل الأيدي عن البارد. وإذا كانت هذه الاحتمالات قامتة

لم يكن الباس يبرهاني. الحجة الثالثة قال الوجع لا حجة إحساس بمثل مناف بلغة من حيث هو مناف والحمد يعكس

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572. عن ) Ox, G: تُه P.
573. ) Ox, P: بُر (مُربد) G.
574. ) G, P: بل (مُربد) om. Ox.
575. ) Ox, P: المثير (المثير) G.
576. ) G, P: فقائل (القائل) G.
577. ) Ox, P: يبرد (مُربد) G.
578. ) Ox, G: يبرد G.
579. ) Ox, G: تتفجر P.
581. ) G: om. Ox, P.
582. ) G, ox: om. G.
583. ) Ox, G: البرد P.
584. ) Ox, G: الأيدي P.
585. ) Ox, G: البرد G: المثير P.
587. ) Ox, G: يبرد (مُربد) P.
588. ) G, P: يبرد P.
589. ) G, P: يعكس P.
590. ) Ox, G: يعكس P.
وكمل محسوس منافاز من حيث هو منافوض ووقع. وللقاء أن يقول إن كنت تجعل أسم الوجع اسمًا لإدراك المنافي، في ذلك مما لا منازعة فيه. ولكننا نجد من أنهما أما محسوسا منهما في نفسه إذا حمل الوجع أسمًا لذلك الأمر الوحداني لا يلزم بالضرورة أن يكون ذلك 101 الأمر هو لفصيق 99 إدراك المنافي بل احتمل ذلك واحتمل أيضا غيره وهو أن يكون الألم حالة أخرى مغايرة لإدراك المنافي حافلة معه. ومن كان ذلك محتملا لم يكن 101 الحجوم بأن إدراك المنافي ألم، فثبت أن هذه الحجوم غير برهانية. ويمكن أن نستنتج في إثبات المطلوب بأن 103 لسعة العقرب أشد إيلاما من الجراحة العظيمة، فلو 104 كان المأموم هو فرق الاتصال فقط لكان الجراحة العظيمة أقوى في الإيلام منها. ولمما لم يكن كذلك علمنا أن زيادة الألم من لسعة العقرب إنما حصل من سوء الوجع لا من فرق الاتصال (106).
قد عرفت أن عند الشيخ سوء مزاج نسب ذاتي للألم، ومثل جاليموس، سوء المزاج إما يقول لأنه يتعلق بفرق الأنصاف. فإذا أخذنا[617]
بمذهب جاليموس لزم أن يقال النار والبارد مولمان لأن من شأنهما تفرق الأنصاف وليس من شأن الرطب والبابس ذلك. وأما إذا أخذنا[618]

605. [Ox, G: أخلا P.]
606. [Ox, P, P: مولماً (نورثا).]
607. [Ox: مولماً G.]
608. [Ox, P, P: أخلا P.]
610. [Ox, G: فلة P.]
611. [Ox, P, P: اصلاً (النورثا G.]
612. [Ox: فاعلات G.]
613. [Ox, G: فيت P.]
614. [Ox: om. G.]
615. [Ox, G: أخلا P.]
617. [Ox, P, P: البابس G.]
618. [Ox: om. G.]
619. [Ox: مناقبان G.]
620. [Ox: فيكون G.]
621. [Ox: إدراك المناقي G.]
622. [Ox, G: جزء P.]

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قبل النهاية إنما يحس إذا الفعل عن غيره والوطئ والبيئة فالنقاطان لا فاعلتين فلا يفعل الحاس عنهما فلا يدركهما. وإذا لم يدركهما فأداه في كتاب النفس بين سقاد قول، فيقول: إن الشيخ في كتاب النفس بين سقاد قول، والإنسان غير محسوسين بحاسة النفس وبين في قصص الاستماعات أن الوقت بمعنى سرعة القبول للأشكال غير محسوسه. والظاهر أنه أراد بالوطئ التي زعم أنها محسوسه الكتاب، وعلى الحفظ فلا شك أن الوقت لعقلية محسوسه، وإن شئت الاستفساء في ذلك فارج إلى ما قاله في الفصل الثالث من المقالة الثانية من علم النفس من الشفاء لظلم نفسه. وأما الذي يقال إن الطرق والبيئة كما في الفصل الثالث (136أ) في فصل الآكل ولا يوجب شيء منها أن لا يكون محسوسين. وإذا لم يدركهما فإنهما محسوسان فعند كونهما خارجين عن الأعطال كاتانا من katılمان وفيكون إدراكهما

623. [Ox, G: om. P.]
625. [الحاس: نالمتائنا G, P.]
626. [وإذا لم يدركهما G, corr. in marg. Ox: om. Ox.]
628. [بمعنى P.]
629. [الأشكال P.]
630. [ألاذ P.]
631. [ألاذ P.]
632. [يقال P.]
633. [فكذلك G, P.]
634. [فدلل P.]
635. [وألا P.]
636. [يوجد G.]
637. [يكون محسوسا P.]
638. [بعد: G.]
639. [كاثن P.]
640. [مانقات P.]

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640. [فيثحري] G: يجيب Ox: وربت P.
641. (درلزام) G, P: ذكرنا G.
642. [Ox, P] G: فان (حاء) G.
643. [Ox, P] G: بحث (حاء) G.
644. [Ox, G: لام P.
645. [Ox, P] G: أن يظلم (أذن مولى) G.
646. [Ox, P] G: مرخية من جهة (مرحي) G.
647. [Ox, P] G: والتعد (الدلي) G.
648. [Ox, G: om P.
649. [Ox, G: التقيض (الأنهار) G, P.
650. [Ox, G: الأزه P.
651. [Ox, G: كان (حاء) G.
652. [Ox, G: وكان (حاء) G, P.
653. [Ox, G: الهلاك (الحاس) P.
654. [Ox, G: البهاء P.
655. [Ox, G: يشبه (رشبة) Ox.
هي أطاف العناصر فلا جرم فلا جرم فلا جرم فلا جرم فلا جرم فلا جرم فلا جرم فلا جرم فلا جرم فلا جرم فلا جرم فلا جرم فلا جرم فلا جرم ولا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرم لا جرم لا جرم لا جرم ولا جرم لا جرم لا جرس
تأملت 671 الأذن أفة 672 من صوت شديد والعين من لون مفرط كالضوء 673 فليس 674 تألل من حيث تسمع أو تصرح بل من حيث تلمس لأنه يحدث فيها 675 ألم لمسي ونائد 676 يهدد فيه بروال ذلك لدة نمسية 677. وأما الحسم والذوق فيلملان 679 ونائذان إذا تكيف بكيفية منافية أو ملائمة. وأما النمس فإنه قد يأمل بالكيفية 680 الملموسة ويلمل به وقد يألل وينل 681 عبر توسط كيفية هي المحسوس [P 91b] الأول بل بتفرق الاتصال والتباحمه 682. وعلمن أن النبي 683 قال الشيخ مشكل لأنه 684. جد اللدة بأنها إدركلمالء لا شك أن الملائم للقوة الباصرة هو الأذن 685 وللفة السامحة هو الأصوات فلاقوة الباصرة إذا أدرك الأذن والقوة السامحة 686 إذا أدرك 687.

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672. [V.9] G, P: ألم P.
674. [V.9] G: ضوء (فلاتز) P.
675. [V.9] G: فليس P.
676. [V.9] G: فيه P.
678. [V.9] P: لأن كل لدة لمسه: (بصاره دلا لان لهسي) P.
682. [V.9] G: المحسوس P.
683. [V.9] G: ولاضطراد P.
685. [V.9] P: لأنه: (لاجل) G.
687. [V.9] G: والقوة (للكو) P.
الأصوات كان ذلك إدراكا للسلوك ُأ ُ أن يكون ذلك الإدراك ُأ ُ لذة فيكون قوله البصر لا يلبذ بالألذان والأذن لا يلبذ بالآصوات. ُأ ُ 

البحث السادس

باب الأم ولفة

فصل في الرد على من جعل اللذة أمرا عامدا. إن محمد بن زكريا جعل اللذة أمرا عامدا ُأ ُ وعم أنها عبارة عن الخروج عن الحالة الغير الطبيعي وسبب هذا التنازل أن اللذة لا تتم إلا بإدراك والإدراك ُأ ُ الحسي وخصوصا الفسي ُأ ُ، بينما يحصل بالانفعال عن القدر، فإذا استفترت الكفيلة لم يحصل الانفعال فإن يحصل الشعور فلا تحصل اللذة، وما لم تحصل اللذة الفسي ُأ ُ إلا عند تبدل الحالة الغير ُأ ُ الطبيعي فإن اللذة نفسها هي ذلك الانفعال [133a] والذي يدل ُأ ُ على أن اللذة أمر وجوه.

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690. ] أ خا A
691. ] أ خا A
692. ] ت س ك A
693. ] ت س ك A
694. ] ت س ك A
695. ] ت س ك A
696. ] ت س ك A
697. ] ت س ك A
698. ] ت س ك A
699. ] ت س ك A
700. ] ت س ك A
701. ] ت س ك A
702. ] ت س ك A
703. ] ت س ك A
704. ] ت س ك A
فصل في حقيقة اللذة والألم. لما ثبت أنها أدركت 715، فأتمنى أن لا ينسى أن كلام الشيخ أن اللذة هي إدراك الملائم والملائم هو الكمال الخاص بالنفس، فإنه ذكر في القانون أن الوجع هو الإحساس بالصاع، وذكر في الفصل الأخير من المقالة العامة 712 من إدراك القضاة أن اللذة ليست إلا إدراك الملائم من جهة ما هو ملائم. وذكر أيضا في فصل المقالة العامة 710 أن القوى تشرك في شعورها بمساقتها 711 و⏰ها 712 هو الخبر واللذة الخاصة. وذكر في الأدبية الفنية أن اللذة إدراك تحوّل الكمال الخاص بالقوة الميدّرة إلا أنه ذكر في آخر هذا 714 الفصل من هذا الكتاب ما ينافض ذلك فإنه بعد أن بين 713 السبب لمثل كيف ينتج عن الخروج عن الحالة الطبيعية 715 الطبيعية، فقال قد 713 ما إن السبب في عدم الإدراك بما يستمر من الكمالات المحسوس هو عدم الإدراك وسبب اللذة عند [v.9] ابتداء الخروج إلى 711 الحالة الطبيعية هو حصول الإدراك، ونما عرض أن

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705. [Ox, G: المترثار] P.
706. فيك 705، [Ox, G: فقّر] P.
707. [Ox, G: في] P.
708. الجهة، [Ox, G: في] P.
709. [Ox, G: في] P.
710. [Ox, G: في] P.
711. [Ox, G: في] P.
712. [Ox, G: في] P.
713. هذا [Ox, G: في] P.
714. هذا [Ox, G: في] P.
715. بين [Ox, P: في] G.
716. بين [Ox, G: في] P.
717. بين [Ox, G: في] P.
718. [Ox, G: في] P.
720. بين [Ox, P: في] G.
721. [Ox, G: في] P.
كان حصول الأولاد ان الإدراك مع الخروج عن الحالة الطبيعية عرض أن كانت اللحظة مع الخروج عنها فلن أن ذلك سبب ليس كذلك.

بل السبب هو إدراك حصول الكمال لا غير. فهذا هو سبب اللحظة. أقول إنه لما جعل إدراك الحالة سببا للحظة، وجب أن يكون معايا للحظة (P 92a) لأن الشيء لا يكون سببا لنفسه وهو قد جعل إدراك الحالة نفس اللحظة في سائر المواضع فين القولين.

وإذ قد عرفنا اضطراب قول الشيخ في حقيقة اللحظة لترجيع إلى عقولنا ولتجهه. فلعلنا ندرك الحق. فقول الألم واللادة حالتان. تحدثهما من النفس وهم غياب عن الحد [...]

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722. ألالدوال: ج. P.
723. كان حصول الإدراك م...الطبيعة عرض أن ] Ox, om. G.
724. سببا: G سببا: G P.
725. هو حصول: P هو النفل أعلام: G P.
726. وهذا: ( lokal) G.
727. السبب في: ( zeb ) G.
728. G P (تسبب ألالدوال).
729. ] Ox, G: P.
730. P.
732. G: P.
733. حالتان: G.
734. G: P.
735. in marg. Ox.

735. ] Ox, P (E) هو: G. 

736. ] Ox: لأنه: G: ودلل: P. 

737. ] Ox: قد يكون حاسولاً ... عدم الألم وذلك G: ودلل: P. 

738. ] فيغرها G: P. 


740. ] Ox, G: فتحته P. 

741. ] Ox, G: فتحته P. 

742. ] G: والال: P. 

743. ] غ: فغ: G: وهن P. 

744. ] Ox, G: أدلل: P. 

745. ] Ox, G: ما يقبل: P. 

ينفع عنها الحاس بل كيفية منقطع. قبل له إن الشيب بين في ٢٤٧...<٢٤٨> أن الطرفي محسوساً ولأنا لمجد. التفرقة ٢٤٩ بين التراب وبين الماء ٢٤٩ وليس ذلك إلا للإحساس ٢٥٠ بالطرفي وأما في اللذيث ٢٥٠،...