



Bodies of Knowledge: Medicine, Memory, and Enhancement in Medieval Islam

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*Bodies of Knowledge:
Medicine, Memory, and Enhancement in Medieval Islam*

A dissertation presented by

Joseph Leonardo Vignone

to the Department of Near Eastern Languages and Civilizations
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy
in the subject of Histories and Cultures of Muslim Societies

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Bodies of Knowledge: Medicine, Memory, and Enhancement in Medieval Islam

Abstract

In this dissertation I study the privileged place of medical erudition in the ethical literature (*ādāb*) written by Muslim scholarly elites (ulema) from the tenth through fourteenth centuries. Authors of *ādāb* in this period were keen to learn whether certain activities, drugs, and surgical procedures might augment intellectual capacity on a humoral basis. In arguing for or against these interventions, they engaged in sophisticated natural philosophical discussions on the topics of scholarly aptitude, bodily health, and psychological well-being.

In the dissertation's first chapter I recount the drug and surgical therapies medieval physicians recommended for improving the functioning of the brain. In the second I situate this discourse within *ādāb*'s understanding of the human body as being ruled by its humoral nature. The precise influence this nature had over one's intellectual capacities was always open to debate, but I show that by the twelfth century authors of *ādāb* were willing to admit a degree of fluidity to natures allowing for meaningful intervention along the lines suggested by physicians. As familiarity with natural philosophy and theoretical medicine gained increasing professional prestige among the ulema, matters of mental fitness and bodily health attained an equally important devotional dimension. The third chapter explores how heavily the pietistic consequences of intellectual illness weighed on the ulema's understanding of themselves as the custodians of religious knowledge. This led authors of *ādāb* to cite the advice of medical authorities alongside recommendations made by the Prophet and his Companions in order to

protect the ulema from ill health and bad memory. Authors of *ādāb* additionally argued that the taxing nature of the ulema's education might promote such maladies in the first place. In the final chapter I therefore describe the measures they suggested for limiting the hardships of the scholarly lifestyle with specific reference to the health of the ulema's hearts and spirits.

In addition to describing the role medicine played in the professional formation of the ulema, demonstrating *ādāb*'s interest in the physical and mental health of its readership sheds further light on the natural scientific, devotional, and affective dimensions of medieval Islamic scholarly society.

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Acknowledgments

“Like most of the others, I was a seeker, a mover, a malcontent, and at times a stupid hell-raiser...but I felt somehow that my instincts were right. I shared a vagrant optimism that some of us were making real progress, that we had taken an honest road, and that the best of us would inevitably make it over the top. At the same time, I shared a dark suspicion that the life we were leading was a lost cause, that we were all actors, kidding ourselves along on a senseless odyssey. It was the tension between these two poles—a restless idealism on one hand and a sense of impending doom on the other—that kept me going.”

—Hunter S. Thompson, *The Rum Diary* (1998)

I have always believed dissertations to be a genre of autobiography. If that is true, then this dissertation reflects ten years of my own emotional, intellectual, and otherwise embodied formation as a historian of medieval Islamic societies. Like any ‘*ālim* fortunate enough to have learned their trade from the era’s finest scholars, there is an endless (and loosely alphabetically organized) *isnād* of people to whom I owe my gratitude.

I would first like to thank my dissertation committee for their tireless advice and support as this project came to fruition over the past three years. My sincerest thanks to Khaled El-Rouayheb, whose breadth and depth of knowledge inspired this project in this first place, and who, over the course of nine years, taught me to be an exacting philologist, codicologist, and translator of medieval Arabic; to Kathryn Kueny, who first began to train me as a scholar of Islam thirteen years ago, who sat with me for countless hours over that span to hone my skills and introduce me to the medieval monks and mystics I now view as old friends; to Ahmed Ragab, who believed in me from the beginning, who gave me endless opportunities to learn and grow, and who taught me by his own fine example how to be a scholar, educator, and ally of conscience; to Justin K. Stearns, whose constant insight, patience, and good humor over the last

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later fortified over countless drinks, meals, and conversations at the Republic of Prescott; I am similarly and unspeakably grateful for having met Kevin Witkow in a desert eight years ago, an exemplar of learning, compassion, and integrity whose magnificent heart lent me strength and joy when I needed them most. Other good friends, colleagues, and teachers I am so lucky to know include Guillaume Aman, Rob Ames, Youssef Ben Ismail, Elise Burton, Blaire Byg, Farhad Dokhani, Mary Elston, Mahmood Gharavi, Greg Given, Lidia Gocheva, Dorie Goehring, Ozzy Gündüz, Shireen Hamza, Zach Kerzee, Pauline Lafille, Brittany Landorf, Angela LaScala-Gruenewald, Dana Lee, Nora Lessersohn, Han-Hsien Liew, Ariana Marnicio, Adeel Mohammadi, Avigail Noy, Caitlyn Olson, Eda Ozel, Michael Pettycoardt, Nicole Pulichene, Arafat A. Razzaque, Ruby Romeu, Deborah Schlein, Shahrar Shahvand, Abbey Parker Stockstill, Axel Marc Oaks Takács, Stephanie Vecellio, Anand Venkatkrishnan, Kelsey Waxman, and Akif Ercihan Yerlioğlu.

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grandparents, as well as the many members of my extended family who toiled in this country and their own to make my path in life possible—especially Aunt Millie, Uncle Doc, Aunt Rosie, and Zio Mario. My gratitude is also owed to Msgr. Richard Guastella, Dr. Anne Mannion, and Br. Henry Wright.

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With love and gratitude for my parents and sisters, to whom I owe everything

1. Introduction

Knowledge of human hearts is the essence of Islam and its underlying realities; knowledge of human bodies is the ādāb of Islam and its legal tenets.

– Aḥmad al-Bayhaqī (d. 1066), *Manāqib al-Shāfiʿī*¹

1.1 Knowledge and the ulema

This dissertation is a study of the special place given to medicine and natural philosophy in the ethical texts (*ādāb*) written by the medieval Islamic scholarly elite (ulema) from the tenth through fourteenth centuries. In this span the ulema saw themselves transformed from a vaguely defined group of scholars engaged in the gradual elaboration of Islamic religious and legal principles into a class of elite, urban professionals claiming a unique form of intellectual and pietistic guardianship over the Islamic community. Though less politically empowered than the Christian clergy of medieval Europe, by the Abbasid period the ulema had accrued a level of patronage and institutional authority that granted them substantial influence over Islamic intellectual culture. Their formation in this era came on the heels of a translation movement that saw the first circulation of Persian, Syriac, and Greco-Roman treatises on philosophy, political theory, theology, and the natural sciences in the Arabic language. The ensuing era of literary and devotional florescence witnessed the ulema increasingly cast themselves as the divinely appointed stewards of human knowledge, who alone held the prerogative to gather, evaluate, and convey this knowledge to future generations. By the tenth century critical engagement with the philosophy, natural sciences, and medicine of precedent societies had in this manner become

¹ Bayhaqī. *Manāqib al-Shāfiʿī*. Edited by Aḥmad Ṣaqr. 2:114-5.

hallmarks of the ulema's professional activities, and the relationship of these disciplines to their intellectual and devotional commitments an area of rich debate.²

Ulema of the medieval era generally described their role as the arbiters of knowledge as twofold. The first responsibility of their class was to ensure the survival of knowledge from these disciplines that would provide for the spiritual and material welfare of Muslims through history. The second was to prevent the uncritical dissemination of knowledge whose harmful content or incoherence threatened that welfare. Historians working in the first three quarters of the twentieth century often attributed this dual enterprise to the ulema's inability to resolve their religious discomfort with discourses they inherited from non-Islamic societies. In such a view, by the twelfth century the ulema had gained enough influence with social and political leaders to lead an intellectual campaign condemning disciplines like medicine and philosophy on account of their extra-Islamic origins. Hewing instead to unimpeachable pursuits like law and prophetic tradition, the ulema were thought to have successfully pushed the study of medicine, philosophy, and the rational sciences from mainstream intellectual society. Historians writing in the last five decades have compellingly argued, however, that the ulema's misgivings about certain philosophical teachings and belief in the indispensability of certain theological principles never truly spilled over into widespread divestment from these discourses. They have shown that this emerging class of scholars was engaged in a continuous negotiation concerning not simply how they were to dispose themselves toward the multiple discourses of knowledge they had inherited, but also how they might correlate to their own intellectual satisfaction the competing claims such discourses made on matters of consequence to them. That the ulema repeatedly challenged and

2 For two classic summaries, see Gutas, Dimitri. *Greek Thought, Arabic Culture: The Graeco-Arabic Translation Movement in Baghdad and Early 'Abbasid Society*. Routledge Ltd, 2012 and Mottahedeh, Roy P. *Loyalty and Leadership in an Early Islamic Society*. Princeton Univ. Press, 1980, especially at 135-50.

refined these claims throughout the medieval period gives strong evidence that their religious sensibilities seldom interfered with their efforts to collect and transmit useful knowledge on the scale imagined by previous historians.³

Much to the contrary, in this dissertation I argue that the religious beliefs formerly thought to inhibit the ulema's intellectual commitments in truth motivated their desire to acquire and apply all forms of knowledge deemed beneficial to their professional and personal lives. In particular, proper care of one's body as informed by humoral medicine and the natural sciences was an area of concern to the ulema as they underwent professionalization from the tenth through fourteenth centuries. Recent studies on the intellectual attitudes of the ulema approaching the postclassical era have amply documented the prestige they accorded the rational

3 See Rosenthal (1970) *Knowledge Triumphant; the Concept of Knowledge in Medieval Islam*; Rahman (1987) *Health and Medicine in the Islamic Tradition: Change and Identity*; Nasr (1968) *Science and Civilization in Islam*; Leaman and Nasr (1993) *History of Islamic Philosophy*; Watt (1995) *Islamic Philosophy and Theology: An Extended Survey*; Wolfson (1976) *The Philosophy of the Kalam. Structure and Growth of Philosophic Systems from Plato to Spinoza*, volume 4. On these earlier claims, cf. Zaman, Muhammad Qasim. "The Caliphs, the 'Ulamā', and the Law: Defining the Role and Function of the Caliph in the Early 'Abbāsīd Period." *Islamic Law and Society* 4, no. 1 (1997): 1–36, "Consensus and Religious Authority in Modern Islam: The Discourses of the Ulama", in *Speaking for Islam: Religious Authorities in Muslim Societies*, ed. Gudrun Krämer and Sabine Schmidtke (Leiden: BRILL, 2006), 154–5, Wisnovsky, Robert. "One Aspect of the Avicennian Turn in Sunnī Theology." *Arabic Sciences and Philosophy* 14, no. 1 (2004): 65–100, Brentjes, Sonja. "On the Location of the Ancient or 'Rational' Sciences in Muslim Educational Landscapes (AH 500–1100)." *Bulletin of the Royal Institute for Inter-Faith Studies* 4, no. 1 (2002): 47–71, Brentjes, Sonja. "Between Doubts and Certainties: On the Place of History of Science in Islamic Societies within the Field of History of Science." *NTM International Journal of History & Ethics of Natural Sciences, Technology & Medicine* 11, no. 2 (2003): 65–79, and Khaled El-Rouayheb, "The Myth of 'The Triumph of Fanaticism' in the Seventeenth-Century Ottoman Empire," *Die Welt Des Islams* 48, no. 2 (2008): 196–221., "Sunni Muslim Scholars on the Status of Logic, 1500-1800." *Islamic Law and Society* 11, no. 2 (2004): 213–232; Good, Byron, and Mary-Jo DelVecchio Good. "The Comparative Study of Greco-Islamic Medicine: The Integration of Medical Knowledge into Local Symbolic Contexts." In *Paths to Asian Medical Knowledge*, edited by Charles M. Leslie and Allan Young. University of California Press, 1992. By the eleventh century the ulema were deeply interested in hierarchically organizing the various sciences constitutive of their education, typically placing knowledge of religion and revelation at the highest level of prestige. Following these forms of knowledge in terms of worth was medicine and other disciplines related to aspects of the material world. Despite its subsidiary relationship with the sciences above it, and the lack of status accorded to practicing physicians, medicine remained a prestigious form of knowledge in Islamic intellectual society. On this see Miquel Forcada, "Ibn Bājja and the Classification of the Sciences in Al-Andalus," *Arabic Sciences and Philosophy* 16, no. 2 (2006): 287–307, Wolfheart Heinrichs, "The Classification of the Sciences and the Consolidation of Philology in Classical Islam," in *Centres of Learning: Learning and Location in Pre-Modern Europe and the Near East*, ed. Jan Willem Drijvers and A. A. MacDonald, Brill's Studies in Intellectual History; v. 61 (Leiden; New York: EJBrill, 1995), 119–39 and J. Shephenson, "The Classification of the Sciences According to Nasiruddin Tusi," *Isis* 5, no. 2 (1923): 329–338.

and natural sciences as they matured as a socioreligious class.⁴ Fewer such studies have spoken to the role medical erudition played in the formation of the ulema's identity as a class of learned believers. Those that have done so have been obliged to grapple with the uncharitable characterization of Islamic medicine in the later period as an originally universalist discourse corrupted by the ulema's religious concerns.⁵ Scholarship in this corrective vein has usually

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- 4 In addition to the foregoing see Wisnovsky, Robert. "The Nature and Scope of Arabic Philosophical Commentary in Post-Classical (c. 1100–1900 AD) Islamic Intellectual History: Some Preliminary Observations." *Bulletin of the Institute of Classical Studies* 47, no. S83.2 (2004): 149–191 and Ahmed, Asad Q. "Post-Classical Philosophical Commentaries/Glosses: Innovation in the Margins." *Oriens* 41, no. 3–4 (2013): 317–348.
- 5 See the summary in Attewell, Guy. "Islamic Medicines: Perspectives on the Greek Legacy in the History of Islamic Medical Traditions in West Asia." In *Medicine Across Cultures*, 325–350. Springer, 2002. In particular, see for example Bürgel (1976) "Secular and Religious Features of Medieval Arabic Medicine," in which "Bedouin quackery and superstition" are claimed to be the axes along which jurists finally accomplished "the Islamic dethronement of Galen"; Klein-Franke (1982) *Vorlesungen über die Medizin im Islam*, in which speculative theologians are assumed to have been categorically opposed to medicine due to their Asharite views of causality; Behrens-Abouseif (1987) *Faṭḥ Allāh and Abū Zakariyya*, in which it is argued that the authors of late-medieval medical works aimed to cleanse medicine of extra-prophetic elements; Dols & Immisch (1994) *Majnūn* and Dols (1988) "Review: Health and Medicine", in which it is claimed the increasing religious anxieties of jurists led to their opposition to and eventual triumph over Galenic medicine. In this latter review of Rahman's (1987) *Health and Medicine*, Dols dismisses Rahman's contention that there was no palpable medieval conflict between Galenic medicine and Islam religiously-figured, calling such a view modern Muslim apologia. Such arguments are now rare but persist in some modern sources, such as in Lewicka (2012) "Medicine for Muslims?", where religious objections to philosophy and their supposed codification in endowment deeds are argued to have arrested engagement with theoretical medicine at medieval Islamic institutions of higher learning; at 612, "One of the most important features of the post-12th-century period was an increasing radicalization of Islam as well as its growing domination of the culture of Dār al-Islām. One of the results of this long-term and complicated process was that medicine, once free of theology and religion, gained a religious attribute and lost its universal character, while much of the knowledge relating to the Greek medico-philosophical doctrine fell into oblivion, either oversimplified and confused, or combined with the Muḥammadan dietary tradition as featured in the so-called medicine of the Prophet." Such a position trivializes the importance of understanding the function and content of scholarly medicine in this period and genre of writing, a discourse which eloquently spoke to the concerns of the historical actors themselves in a manner that should be taken seriously regardless of preconceived notions of what counts as science among modern historians of medieval Islamic societies. For corrective interventions, see Stearns, Justin. "The Legal Status of Science in the Muslim World in the Early Modern Period: An Initial Consideration of Fatwās from Three Maghribī Sources." In *The Islamic Scholarly Tradition*, 265–290. Brill, 2011 for an important summary of other representative works and Stearns's own intervention in this debate, and Winter's introduction to al-Ghāzālī's *On Disciplining the Soul*. Cf. Langermann (2014) "On Tajriba/Nissayon"; Brentjes (2009) "The Interplay of Science, Art and Literature", (2008) "Courtly Patronage", (2002) "On the Location of the Ancient or 'rational' Sciences", (1997) "Orthodoxy"; and Northrup (2004) "Al-Bīmāristān Al-Manṣūrī"; Joosse and Pormann (2010) "Decline and Decadence in Iraq and Syria after the Age of Avicenna?: 'Abd Al-Laṭīf Al-Baghdādī (1162-1231) between Myth and History"; Pormann, (2012) *Epidemics in Context: Greek Commentaries on Hippocrates in the Arabic Tradition*, volume 8; Gutas (2002) "The Heritage of Avicenna: The Golden Age of Arabic Philosophy, 1000-ca. 1350." In *Avicenna and His Heritage*.

focused on the enduring prestige theoretical medicine enjoyed following the career of Ibn Sīnā (d. 1037), the institutional history of medicine and physicians' clinical practice, polemics about the value of empiricist and non-elite medicines, debates on contagion and casual efficacy, and the promotion of the Prophet's own healing practices (*ṭibb nabawī*) at the presumed expense of Avicennian medicine.⁶

While indebted to these studies, this dissertation will explore a distinct strand of medical reasoning and practice elaborated by ulema who neither questioned the validity of Avicennian medical theory nor composed formally medical texts of their own. I argue that this strand of medical reasoning was fundamentally scholarly in origin and practice. It was debated and discussed in the capacious genre of *ādāb*, an Arabic literary tradition of ethical and devotional guidance that the ulema produced in the urban centers of the early- to late-medieval Middle East. Alongside voluminous secondary scholarship on the place of *ādāb* in these intellectual societies,

6 These corrective studies are, gratefully, too many to list in their full number, but see among them these prominent examples: Pormann, Peter E., and Emilie Savage-Smith. *Medieval Islamic Medicine*. New Edinburgh Islamic Surveys. Edinburgh: Edinburgh University Press, 2007; Pormann, Peter E. "Medical Methodology and Hospital Practice: The Case of Fourth-/Tenth-Century Baghdad." In *In the Age of Al-Fārābī: Arabic Philosophy in the Fourth-Tenth Century*, edited by Peter Adamson, 95–118. London: Warburg Institute, 2008; Álvarez Millán, Cristina. "The Case History in Medieval Islamic Medical Literature: Tajārib and Mujarrabāt as Source." *Medical History* 54, no. 2 (2010): 195–214; Ridwan, Ali b, Michael W. Dols, and Adil S. Gamal. *Medieval Islamic Medicine: Ibn Ridwan's Treatise "On the Prevention of Bodily Ills in Egypt"*. University of California Press, 1984; Stearns, Justin. "Contagion in Theology and Law: Ethical Considerations in the Writings of Two 14 Th Century Scholars of Nasrid Granada." *Islamic Law and Society* 14, no. 1 (2007): 109–129, "Enduring the Plague: Ethical Behavior in the Fatwas of a Fourteenth-Century Mufti and Theologian." In *Muslim Medical Ethics: From Theory to Practice*, edited by Jonathan E. Brockopp and Thomas Eich, 38–54, 2008, "The Legal Status of Science in the Muslim World in the Early Modern Period: An Initial Consideration of Fatwās from Three Maghribī Sources." In *The Islamic Scholarly Tradition*, 265–290. Brill, 2011, *Infectious Ideas: Contagion in Premodern Islamic and Christian Thought in the Western Mediterranean*. JHU Press, 2011; Varlik, Nukhet. *Plague and Contagion in the Islamic Mediterranean*. ISD LLC, 2017; Conrad, Lawrence I. "A Ninth-Century Muslim Scholar's Discussion of Contagion." In *Contagion: Perspectives from Pre-Modern Societies*, edited by Wujastyk, D and Lawrence I. Conrad, 163–77. Ashgate, 2000; Ragab, Ahmed. *Piety and Patienthood in Medieval Islam*. Routledge Studies in Religion. New York, NY: Routledge, 2018, *The Medieval Islamic Hospital: Medicine, Religion, and Charity*. New York, NY: Cambridge University Press, 2015; Perho, Irmeli. *The Prophet's Medicine: A Creation of the Muslim Traditionalist Scholars*. Studia Orientalia ; 74. Helsinki: Kokemäki, 1995, Justin K. Stearns, *Infectious Ideas: Contagion in Premodern Islamic and Christian Thought in the Western Mediterranean* (JHU Press, 2011).

I contend that these texts are a primary site where the ulema articulated their identity as socioreligious actors and enacted the processes of self-formation that transformed them into a class of professional scholars by the fourteenth century. Medical theory and advice relating to the humoral management of bodies appears prominently across this genre, growing out of natural scientific debates about the innate capacities of individual bodies and the extent to which these could be affected by surgical or drug intervention. By the tenth century the ulema understood that the communal task they had adopted for themselves—guardianship over the oral and textual means of knowledge production and transmission—required a set of intellectual skills achievable only through a specific method of education. This education was characterized via the student’s personal relationship with their teacher, at whose feet multiple texts were to be received and memorized. The student’s own perusal of such texts or attendance at a particular institution of learning was incidental to this relationship. Mastering material consisted more or less exclusively of receiving a text aurally from a teacher, orally reviewing and memorizing its contents with one’s peers under their supervision, and finally repeating the text from memory for their correction. Once satisfied with the rendition the teacher would then authorize the student to transmit the text to others in like fashion. This means of learning is the one which is extolled and indeed idealized in *ādāb*, and the role of memorization in the professional self-fashioning of the period’s scholarly elite remained rhetorically if not practically predominant well into the fourteenth century.⁷ Ulema who excelled at assimilating and transmitting large quantities of

⁷ This system is typically encompassed by the technical terms *samāʿ*, *ḥifẓ*, *mudhākarah*, *munāẓarah*, and *mujādalāh*. To these observations must be added the caveat that, while authors of *ādāb* certainly valued the memorization of texts in this manner over the student’s individual perusal of them (*muṭālaʿah*), they by no means entirely discounted the importance of the latter kind of study. Predominately aural/oral learning was certainly deemed more meaningful in a professional and pietistic sense than the simple collection and maintenance of books, but newer technologies of learning came to the fore and were justified by works of *ādāb* as one approaches the era of Ottoman suzerainty. This is true of al-Iṣfahānī (*Muḥāḍarāt* 97-8), where he records his distaste for those who rely primarily on the latter sort of learning; see also a similar poem at 151. It was an

knowledge were held in high intellectual and pietistic esteem by their fellows in the era; those who were deficient, duplicitous, or merely reticent in the practice were criticized or denigrated by the same. The consequences of failing in the mission to preserve knowledge—which is to say failing to meet the moral and intellectual strictures of one’s education—were phrased eschatologically and with visceral reference to infirmity.⁸ Amid such a pietistically and professionally contentious milieu accurate memorization served as the most resonant and prestigious skill to be developed by members of the ulema, and one inextricably linked to their embodied experience of learning.⁹

The ulema of the medieval period mined the disciplines of medicine and natural philosophy for guidance in honing these techniques of learning to guarantee scholarly success. Their citation of these discourses in *ādāb* included using concepts like inborn natures and acquirable character traits to discuss the mutability of an individual’s intellectual faculties,

opinion shared by Ibn ‘Abd al-Barr at *Bayān* 268-98, and even two centuries hence Ibn Jamā‘ah betrays hostility to those who focus their education on book learning, relating the admonition, “Woe betide him who makes teachers [*tamashyukh*] out of books!” among several others. On this see *Tadhkirah* 97-100. However, al-Baghdādī, al-Zarnūjī and Ibn Jamā‘ah made ample room for deep-reading alongside memorization proper in the training of the scholar—see El-Rouayheb, Khaled. “The Rise of ‘Deep Reading’ in Early Modern Ottoman Scholarly Culture.” In *World Philology*, edited by Sheldon Pollock, Cambridge: Harvard University Press, 2015, 201-224 and the corresponding chapter in El-Rouayheb, Khaled. *Islamic Intellectual History in the Seventeenth Century* 97-131, as well as Berkey, Jonathan P. *The Transmission of Knowledge in Medieval Cairo: A Social History of Islamic Education*. Princeton University Press, 2014, 21-43, “Tradition, Innovation and the Social Construction of Knowledge in the Medieval Islamic Near East,” *Past & Present*, no. 146 (1995): 40, and Eickelman, Dale F. “The Art of Memory: Islamic Education and Its Social Reproduction.” *Comparative Studies in Society and History* 20, no. 4 (1978): 485–516 for a comprehensive overview of memorization, deep-reading and other didactic aspects of medieval Islamic intellectual society. See also the dissertation’s epilogue.

- 8 Transmission of the following kinds of warning proliferate in works of *ādāb* beyond counting: “Any man who has studied the Quran and then forgotten it will meet God as a mutilated cripple on Judgement day,” and “No man who conceals memorized knowledge when asked about it will escape being bound by chains of hellfire on Judgment Day.” These are to be found at Ibn ‘Abd al-Barr’s *Bayān* 6 and Khaṭīb al-Baghdādī’s *Jāmi‘* 29, respectively, to be studied below.
- 9 See Konrad Hirschler, *Written Word in the Medieval Arabic Lands: A Social and Cultural History of Reading Practices: A Social and Cultural History of Reading Practices* (Edinburgh University Press, 2011), 11-31, and in particular Carruthers (2008) *The Book of Memory*, especially those sections discussing medieval European mnemonics and neuropsychology as these related to the faculty of memory among the scholars and litterateurs of the period, at 56-98.

pharmacological and anatomical knowledge to describe the derivation and application of medical procedures that might augment them, as well as *akhbār*-type historical ascription to attest to their efficacy and propriety. Rather than constitute a wholly unique feature of *ādāb*, the manner in which these multiple literary and intellectual traditions intersect in the genre further attests to the diverse set of inheritances underwriting the ulema's identity as a class of professional elites in this era. Before introducing the specific medical practices advocated by treatises of *ādāb* themselves, however, comment on the content and development of the genre is warranted.

1.2 What is *ādāb*?

The Arabic ethical tradition of the ulema was, as above, known as *ādāb*, a plural of the singular noun *adab*. Modern historians primarily interpret the meaning of *adab* in the sense of *belles-lettres*, and the plural *ādāb* in the sense of a certain profession's *code of etiquette*. In the pre-Islamic era the term *adab* had been the plural of yet another noun, *da'b*, meaning a personal habit or custom. To be possessed of good *adab* was to have cultivated a dignified and refined bearing during one's childhood. In addition to being well-mannered, individuals described as such were also wise in the teachings of their forebears and responsible for further propagating them. With the geographic spread and cultural entrenchment of Islam in the Mediterranean and Indian Ocean under the Umayyad Caliphate, this meaning was expanded to describe a then-nascent class of urban elites specializing in poetry and historical lore over the fledgling disciplines of law and prophetic tradition. By the eighth century these non-religious disciplines were referred to metonymically as *adab* and those who pursued them as *adīb*, but in keeping with its earlier signification the term still connoted a virtuous disposition independent from these

pursuits as such. In the pronouncedly more bureaucratic milieu of the Abbasid Caliphate, *adab* was increasingly associated with the refinement and wit of courtly adepts. As a cadre within the emerging urban class, these individuals viewed themselves in sharp contrast with the uneducated rural population hemming the growing cities of the Middle East, and aspired to offices in the Abbasid polity that demanded specific kinds of technical skills. It is in this era that the plural *ādāb* (i.e., “etiquette,” or more literally “sets of good habits”) began to title digests of professional intercourse that this class felt were in need of preservation and passing on as administrative and courtly roles stabilized under the Abbasids. Entries in the *ādāb* genre included treatises on the proper education and bearing of governors, scribes, courtiers, and viziers. The singular term *adab* continued to refer to poetical compilations, prose, and lore outside the domains of the religious and rational sciences. But in its newer sense *ādāb* signaled the birth of a discrete literary tradition with its own subgenres reflecting the Abbasid elite’s deepening disciplinary specialization and their desire to reflect ethically on their professional pursuits.¹⁰

Thus by the end of the early medieval era an *adīb* was one devoted to the cultivation of a highly skilled, deliberately ethical, and deeply literate profile, typically in aid of furthering one’s professional or other social prospects. Pursuing good *adab* by reading volumes of this *ādāb* had likewise come to mean seeking avenues for mobility within the new urban elite, as well as

10 See Gabrieli, F., “Adab”, in: *Encyclopaedia of Islam*, Second Edition, Edited by: P. Bearman, Th. Bianquis, C.E. Bosworth, E. van Donzel, W.P. Heinrichs and Bonebakker, Seeger A. “Adab and the Concept of Belles-Lettres.” *Abbasid Belles-Lettres*, 1990, 16–30, and Enderwitz, Susanne, “Adab b) and Islamic scholarship in the ‘Abbāsid period”, in: *Encyclopaedia of Islam*, THREE, Edited by: Kate Fleet, Gudrun Krämer, Denis Matringe, John Nawas, Everett Rowson. Bosworth, C.E. “Administrative Literature.” In *Religion, Learning and Science in the ‘Abbasid Period*, edited by Michael J.L. Young, John Derek Latham, and Robert Bertram Serjeant, 155–67. Cambridge University Press, 2006, Soravia, Bruna. “Les Manuels à l’usage Des Fonctionnaires de l’administration (Adab al Kātib) Dans l’Islam Classique.” *Arabica* 52, no. 3 (2005): 417–436. See also the introduction to Levey, Martin. “Medical Ethics of Medieval Islam with Special Reference to Al-Ruhāwī’s” *Practical Ethics of the Physician*.” *Transactions of the American Philosophical Society* 57, no. 3 (1967): 1–100.

the means of elevating of one's moral character for the same purpose. Indeed, mature works of *ādāb* phrased these enterprises as one and the same.¹¹

As mentioned briefly in the foregoing, the disciplines most commonly associated with *adab* were those believed to fall outside of religious discourses like law and tradition, including poetry, lore, philology, genealogy, and others. This accounts for the frequent translation of *adab* as belles-lettres by modern historians, who in the earlier twentieth century placed the goals of these disciplines in tension with those of the religious sciences. Whereas the one in pursuit of *adab* seeks professional advancement and a refined manner, historians such as George Makdisi and Franz Rosenthal argued that practitioners of the latter disciplines worked to acquire *‘ilm*, or moral knowledge derived from theology, scriptural exegesis, and prophetic tradition. These are the individuals who came to be known as the ulema (“those who have *‘ilm*”), and their religious commitments were argued to have grown in opposition to the pursuit of *adab*. The *Encyclopedia of Islam, Second Edition* described the two groups as such, stating that the term “ulema”

denotes scholars of almost all disciplines (*luḡha*, *ḥisāb*, etc. [q.vv.]). However, the term refers more specifically to scholars of the religious sciences (*faqīh*, *mufasssīr*, *muftī*, *muḥaddith*, *mutakallim*, *kāri*’ etc. [q.vv.])... they are regarded as the guardians, transmitters and interpreters of religious knowledge, of Islamic doctrine and law; the term also embraces those who fulfil religious functions in the community that require a certain level of expertise in religious and judicial issues, such as judges and preachers (*kādī*, *khāṭīb* [q.vv.]), the imāms of mosques, etc. The *‘ālim* is often seen as opposed to the *adīb*, just as religious knowledge (*‘ilm* [q.v.]) is clearly distinguished from the practice of “profane literature” (*adab* [q.v.]).¹²

Thus the pursuits of *adab* and of *‘ilm* were understood by twentieth-century historians as diverging paths in the professionalization of the urban elite, whose activities were allegedly

11 See Erez Naaman, “Nurture over Nature: Habitus from Al-Farabi through Ibn Khaldun to Abduh,” *Journal of the American Oriental Society*; *Ann Arbor* 137, no. 1 (March 2017): 1–24.

12 Gilliot, et al. “‘Ulamā’.” In *Encyclopaedia of Islam, Second Edition*. Leiden: Brill, 2012.

subject to religious constraint in the later Abbasid period.¹³ In the estimation of Makdisi and Rosenthal, *adab* before the eleventh century represented a universalist, humanistic aspect of Islamic intellectual society that later found its foil in the religious inclinations of the ulema. After the eleventh century these scholars were thought to have begun more aggressively co-opting discourses like philology and poetry to argue for their religious teachings.¹⁴ This suggested intrusion upon the territory of *adab* accomplished the full fledging of *ādāb* as a genre in its own right, concerned no longer with the pursuit of belles-lettres and manners for their own sake but instead with formalizing the transmission of religious knowledge:

One may...note that the concept of the absolute authority of God and the ideal of legal man developed by the *sharīʿa* conceptual system significantly shaped the other systems. Thus the *ṭarīqa* system developed compendia of rules for external behavior of *ṣūfīs*, similar to *sharīʿa*, even to the extent that it developed parallel systems of rituals on the pattern of *fiqh*. The *adab* system was also affected. *Adab*, which earlier stood for education and culture, came to stress formalism and manners. The term *adab*, particularly in its plural form *ādāb*, came to mean rules and codes of behavior.¹⁵

In this analysis historians note an outpouring of *ādāb* texts that pertain to the conduct of jurists, market inspectors, mystics, traditionalists, and pedagogues in the twelfth century. Treatises of *ādāb* related to the legal profession were authored in the greatest number, while anthological

13 Ibid.; see also Allan, Michael. “How Adab Became Literary: Formalism, Orientalism and the Institutions of World Literature.” *Journal of Arabic Literature* 43, no. 2–3 (2012): 172–19 and Sperl, Stefan. “Man’s ‘Hollow Core’: Ethics and Aesthetics in Ḥadīth Literature and Classical Arabic Adab.” *Bulletin of the School of Oriental and African Studies* 70, no. 3 (2007): 459–486.

14 See Rosenthal (1970) *Knowledge Triumphant; the Concept of Knowledge in Medieval Islam*; Rahman (1987) *Health and Medicine in the Islamic Tradition: Change and Identity*; Nasr (1968) *Science and Civilization in Islam*; Leaman and Nasr (1993) *History of Islamic Philosophy*; Watt (1995) *Islamic Philosophy and Theology: An Extended Survey*; Wolfson (1976) *The Philosophy of the Kalam. Structure and Growth of Philosophic Systems from Plato to Spinoza*, volume 4.

15 M. Khalid Masud, “*Ādāb al-muftī*: The Muslim understanding of values, characteristics, and role of a muftī,” in Barbara Daly Metcalf (ed.), *Moral conduct and authority. The place of in South Asian Islam* (Berkeley and Los Angeles 1984), 124–51, 125–6, as cited in Enderwitz, Susanne, “Adab b) and Islamic scholarship in the ‘Abbāsīd period.”

treatments of poetry, prose, and oratory were thought to have never recovered their former prominence.

It is certainly appropriate to mark a change in the emphasis of the *ādāb* genre as one approaches this period. But contrary to the early accounts given by Makdisi and Rosenthal, such a change does not seem attributable to the inevitable ascendancy of religious norms over universalist ones in medieval Islamic society. From the earliest, ulema interested in what philosophy or the rational and natural sciences might offer discourses like theology and the law justified their efforts in devotional terms, arguing that they were divinely charged with the responsibility to safeguard the transmission of all appropriate forms of knowledge through history. Any form of knowledge that heightened understanding of the created world and/or directed human attention toward the next was a boon from God that invited elaboration. The rising levels of professional and disciplinary specialization among the ulema by the end of eleventh century most aptly account for *ādāb*'s maturation into a discourse meant to ensure the proper acquisition, use, and transmission of individual fields of knowledge. Already by the end of the ninth century "the social transfer of knowledge and the intellectual development of individuals and groups were subject to the vivid scholarly interest of Muslims," and became "more evident in literary and scholarly writing during subsequent centuries."¹⁶ As positions of socioreligious authority like the jurist, traditionalist, and instructor came into fuller professional definition in the later medieval period, treatises of *ādāb* proliferated as a means by which the ulema could establish the desired qualities and behavior of those holding these offices.¹⁷

16 Günther, Sebastian. "Advice for Teachers: The 9th Century Muslim Scholars Ibn Sahnun and al-Jahiz on Pedagogy and Didactics." In *Ideas, Images, and Methods of Portrayal: Insights into Classical Arabic Literature and Islam*, edited by Wadad Kadi and Rotraud Wielandt, Islamic History and Civilization ; v. 58. Boston ; Leiden: Brill, 2005, 90.

1.3 Medicine in *ādāb*

In this manner treatises of *ādāb* written from the tenth century forward on the subject of the ulema's scholarly activities contain precious information about the formation of their identity as a class of scholarly elites. Exploring the way in which natural scientific and medical discourses are presented and deployed in this literature grants us insight not only into how the ulema disposed themselves toward these discourses as believing Muslims, but also how their professional anxieties and aspirations shaped their application in the medieval era. Authors of *ādāb* wrote their treatises for ulema seeking guidance and reassurance about their role as the sole arbiters of knowledge, casting their studious activities and conduct as deeply pious exercises in and of themselves. Maximizing one's ability to achieve great scholarly feats, such as retaining thousands of prophetic reports in one's memory or educating large swaths of Muslims free of exhaustion, became synonymous with maximizing one's piety itself. How many hours the ulema were to sleep, what company they were to keep, what dietary regimen they were to follow, in what manner they were to speak to superiors and inferiors—advice on these matters preoccupied authors of *ādāb* as they reflected on the means of scholarly success and the moral rectitude it required. Already enjoying considerable intellectual esteem by the Abbasid period, the discipline of medicine proved a remarkably persuasive idiom in which to place the exhortations and admonitions of *ādāb*. By the tenth century authors began making good use of this idiom to argue for the importance of endowed intellectual ability, physical resiliency, and emotional health to the

17 For more context and information on the genre of pedagogical *ādāb*, see also the following works by Günther: “Be Masters in That You Teach and Continue to Learn: Medieval Muslim Thinkers on Educational Theory.” *Comparative Education Review* 50, no. 3 (2006): 367–388, “Education, General.” In *Encyclopaedia of Islam, THREE*, edited by Kate Fleet. Brill. “Islamic Education.” In *New Dictionary of the History of Ideas*, edited by Maryanne Cline Horowitz, 2:640–45. New York: Charles Scribner's Sons, 2005, “‘Your Educational Achievements Shall Not Stop Your Efforts to Seek beyond.’ Principles of Teaching and Learning in Classical Arabic Writings.” In *Philosophies of Islamic Education: Historical Perspectives and Emerging Discourses*, edited by Mujaddad Zaman and Nadeem A. Memon, 72–93. Routledge, 2016.

ulema's lifestyle, relying on anatomical and pharmacological reasoning to explain how these qualities might best be fostered and safeguarded during one's education and career. With these discourses they encouraged ulema to cultivate knowledge about the nature of their own bodies, the limitations such natures imposed on scholarly pursuits, and the possibility of overcoming them through medical intervention.

The ulema's interest in the medical and natural scientific aspects of these questions has not gone unnoticed by more modern secondary scholarship. Most recently, Erez Naaman documented the Islamic reception and development of the Greco-Roman "*habitus* concept as an acquired set of dispositions, enabling social agents to function successfully in a given field and becoming their 'second nature.'"¹⁸ Citing the widespread popularity of Platonic and Aristotelian philosophy among ulema in the medieval era, Naaman shows that from the ninth century onward intellectual inheritances like the language of acquirable character traits (*akhlāq*), aspects (*hay'āt*), states (*aḥwāl*), habituations (*i'tiyād*) and inborn natures (*fiṭar*; *ṭabā'i*) broadly spread throughout Islamic scholarly society beyond the disciplines of the natural sciences alone. By the time al-Fārābī (d. 950) wrote his *Ārā' ahl al-madīnah al-fāḍilah* (*Principles of the Denizens of the Virtuous City*; hereafter, the *Madīnah*), the ideal human being was already described as possessing an excellent inborn nature arrayed with acquired character traits disposing them toward excellence, particularly in the realm of rational reflection.¹⁹ This conclusion was

18 Erez Naaman, "Nurture over Nature: Habitus from Al-Farabi through Ibn Khaldun to Abduh," *Journal of the American Oriental Society*; *Ann Arbor* 137, no. 1 (March 2017): 1–24. See also the sources upon which this piece relies: A. I. Sabra, "The Appropriation and Subsequent Naturalization of Greek Science in Medieval Islam: A Preliminary Statement," *History of Science* 25 (1987): 225–26; D. Gutas, *Greek Thought, Arabic Culture: The Graeco-Arabic Translation Movement in Baghdad and Early 'Abbāsīd Society* (London: Routledge, 1998).

19 Naaman's approach builds on precedent scholarship on the Aristotelian and Platonic inheritances embraced by Abū Ḥāmid al-Ghazālī's (d. 1111) monumental work of *ādāb*, the *Iḥyā' 'ulūm al-dīn* (*Revival of the Religious Sciences*; hereafter the *Iḥyā'*). These are discussed comprehensively at the general level by Winter in his treatment of the books constituting *On Disciplining the Soul*, as above. On this topic see also Yasien Mohamed,

enthusiastically embraced by subsequent statements of philosophy like Ibn Sīnā's *Ilāhiyyāt kitāb al-shifā'* (*Metaphysics of the Book of Healing*; hereafter the *Ilāhiyyāt*) and important early tracts on ethics like Miskawayh's (d. 1030) *Tahdhīb al-akhlāq wa taṭhīr al-a'rāq* (*Refining Character and Purifying Deeply-Rooted Traits*; hereafter the *Tahdhīb*). The popularity of this reverent, highly rational model of scholarly praxis among the ulema is hard to overstate; writing for those seeking context, guidance, and reassurance throughout their professional careers, authors of *ādāb* cast studious and deliberative acts as deeply pious exercises in and of themselves. Adherence to this form of intellectual worship was said to secure specific spiritual benefits for scholars that were simply unavailable to lower strata of society, further setting the ulema apart and above other classes of believer.²⁰ Their identity as the guardians and progenitors of knowledge already

"The Duties of the Teacher Al-İşfahānī's Dharī'a as a Source of Inspiration for Al-Ghazālī's Mīzān Al-'Amal," in *Islam and Rationality*, ed. Frank Griffel, vol. 1 (Leiden: Brill, 2016), 186–206., Sebastian Günther, "The Principles of Instruction Are the Grounds of Our Knowledge: Al-Farabi's Philosophical and AlGhazali's Spiritual Approaches to Learning," in *Trajectories of Education in the Arab World: Legacies and Challenges*, ed. Abi-Mershed, Osama (London: Routledge, 2010), 15-34 and "Islamic Education," in *New Dictionary of the History of Ideas*, ed. Maryanne Cline Horowitz, vol. 2 (New York: Charles Scribner's Sons, 2005), 640–45. Naaman builds his theoretical analysis from the work of Pierre Bordieu, particularly *The Logic of Practice*, trans. Richard Nice, 1 edition (Stanford, Calif: Stanford University Press, 1992). In a more general sense than strictly that of education, see Dimitri Gutas, *Greek Thought, Arabic Culture: The Graeco-Arabic Translation Movement in Baghdad and Early 'Abbasid Society (2nd-4th/5th-10th c.)* (Routledge Ltd, 2012) and Frank Griffel, *Al-Ghazali's Philosophical Theology* (Oxford University Press, 2009).

- 20 See Jonathan P. Berkey, "There Are 'Ulamā', and Then There Are 'Ulamā': Minor Religious Institutions And Minor Religious Functionaries in Medieval Cairo," in *Histories of the Middle East* (Brill, 2010), 9–22. The license with which medieval Muslim elites felt they could substitute their intellectual pursuits for prescribed acts of worship was an important and widespread manner of differentiating themselves from the common believer. In his magnum opus *What Is Islam?: The Importance of Being Islamic* (Princeton University Press, 2017), Shahab Ahmed phrased this license in terms of Islamic intellectual society's appreciation for the fathomless depth of the Reality underlying Quranic revelation, and for the consequentially infinite devotional, artistic, disciplinary, and otherwise expressive significations of that Reality. These significations included the cosmological worldview of the ulema, in which scholars were the finest of believers based on their peerless ability to understand and apply the spirit of that Reality to their activities. Most pertinently, Ahmed states the following at p. 406: "A society in which the idea of engagement with the Truth or Pre-Text of Revelation is a norm is a society in which people are conscious in their daily lives of the spatiality of Revelation as elaborated in discursive and social hierarchy. [It] is a society in which the Truth of Revelation/Islam is conceived as a limitless Reality whose meanings are susceptible to and available for exploration, and not merely as the limited and limiting reality of prescription. It is a society in which the enactment of the principle of meaning-making beyond the letter or beyond the form is found not only in modes of speaking, but in all variety of creative and explorative action...such as the hierarchical differentiation of discursive space into elite and common."

bound up with religious meaning, *ādāb* correlated the attainment of such devotional rigor with reputable intellectual production. In this genre the pursuit of piety became synonymous with the pursuit of knowledge, and both were achievable through diligence and perseverance. By the eleventh century the scholar's pursuit of a perfect rational capacity was thus married to their pursuit of a perfect soul and attained an important devotional dimension, especially as familiarity with natural philosophy and theoretical medicine gained increasing prestige and legitimacy among the ranks of ulema.²¹

To date modern secondary scholarship has only gestured toward how this framework of natures and character traits pervaded scholarly *ādāb*. Secondary scholarship has, moreover, generally failed to note the strongly medical inflection this framework was given by the authors of *ādāb* treatises.²² To resolve the uneven treatment of the genre, in what follows I will analyze

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- 21 The second discourse of Miskawayh's celebrated *Tahdhīb*, for instance, offers general medical advice as it pertains to the self-perfection of the student, stressing that their good manners in eating were important to their scholarly formation and that their treating food as a medicine only sparingly to be taken was essential to the health of their body. See Ibn Miskawayh, *Tahdhīb Al-Akhlāq*. Cairo: Al-Taraqqi Press, 1899, 49-50. See also Naaman, "Nurture over Nature," where the author also explores writers subsequent to al-Ghazālī through the modern era, treating few of the sources to be explored below. See also Sebastian Guenther, "Islamic Education," in *New Dictionary of the History of Ideas*, ed. Maryanne Cline Horowitz, vol. 2 (New York: Charles Scribner's Sons, 2005), 640–45, Peter Adamson, "Abū Bakr Al-Rāzī (d. 925), The Spiritual Medicine," *The Oxford Handbook of Islamic Philosophy*, 2016, 63; Mukhtar H. Ali, "The Concept of Spiritual Perfection according to Ali Ibn Sina and Sadr Al-Din Al-Qunawi," 2009. For the pietism of a particular emergent disciplinary community, see Christopher Melchert, "The Piety of the Hadith Folk," *International Journal of Middle East Studies* 34, no. 3 (2002): 425–39 and Christopher Melchert, "The Transition from Asceticism to Mysticism at the Middle of the Ninth Century CE," *Studia Islamica*, no. 83 (1996): 51–70 and Rosenthal *Knowledge Triumphant*, 70-154, and next footnote.
- 22 Roy Mottahedeh described the presence of medicine in the curricula of Turkic and Indian madrasas as merely "symptomatic of the variable content of Islamic education," noting its conspicuous absence in the Arabic- and Persian-speaking quarters of the Islamic world. See "The Transmission of Learning: The Role of the Islamic Northeast." *Madrasa: La Transmission Du Savoir Dans Le Monde Musulman*, 1997, 63. Medicine was nevertheless widely present in Arabic and Persian texts descriptive of the ulema's education. The medical idiom described above was discussed in cursory form in Timothy Winter's introduction to Ghazzālī, *On Disciplining the Soul & On Breaking the Two Desires: Books XXII and XXIII of The Revival of the Religious Sciences = Kitāb Riyāḍat al-Nafs, & Kitāb Kasr al-Shahwatayn: Iḥyā' 'ulūm al-Dīn* (Cambridge, UK: The Islamic Texts Society, 1995), I-XCII. Winter cites the earlier text, Jaeger, Werner. "Aristotle's Use of Medicine as Model of Method in His Ethics." *The Journal of Hellenic Studies* 77, no. 1 (1957): 54–61, in reference to the widespread appeal of this idiom. It is especially held to characterize the later figure Ibn Qayyim al-Jawzīyah's writing in

ādāb treatises written by five successive generations of ulema living from the tenth through fourteenth centuries. I have selected seminal texts from each century of this span, written by authors from major urban centers of Islamic learning producing works on scholarly ethics. They include the South Persian scholar Abū Hilāl al-‘Askarī (d. 1005), the Iraqi Khaṭīb al-Baghdādī (d. 1071), the Central Persian Rāghib al-Iṣfahānī (d. 1108), the Khorasani Abū Ḥāmid al-Ghazālī (d. 1111), the Central Asian Burhān al-Dīn al-Zarnūjī (fl. 1200) and the Levantine-Egyptian Badr al-Dīn Ibn Jamā‘ah (d. 1333). Briefer reference will also be made to other consequential works of *ādāb* by Ibn ‘Abd al-Barr (d. 1071), Ibn ‘Umar al-Zamakhsharī (d. 1144) and Naṣīr al-Dīn Ṭūsī (d. 1274), ulema of respectively Andalusī, Central Asian and Khorasani extraction. My diachronic analysis of these texts will document the steady normalization of natural philosophical and medical language within *ādāb* as the prevailing idiom in which to discuss scholarly aptitude. I will show that the ulema’s understanding of the human body as a relatively stable system susceptible to some forms of change on a medical basis was central to their self-

Birgit Krawietz, “Ibn Qayyim Al-Jawziyah: His Life and Works,” *Mamluk Studies Review* 10, no. 2 (2006): 19–64, at 32: “The title [of the theological treatise *Shifā’ al-‘alīl*] is an example of Ibn al-Qayyim’s penchant for medical metaphors when discussing—to his mind—necessary normative orientations.” As this dissertation will show, this was less a penchant of his and more a broadly popular scholarly idiom. See also this introduction’s citations of Ignác Goldziher, *Muslim Studies* (Chicago: Aldine PubCo, 1968); Franz Rosenthal, *The Classical Heritage in Islam*, Arabic Thought and Culture (London; New York: Routledge, 1992); J. Christoph Bürgel, “Adab und i’tidāl in ar-Ruhāwīs Adab aṭ-Ṭabīb,” *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 117, no. 1 (1967): 90–102. See also Günther, “Islamic Education,” which does not deeply explore the connection, “Be Masters in That You Teach and Continue to Learn: Medieval Muslim Thinkers on Educational Theory,” *Comparative Education Review* 50, no. 3 (2006): 367–388, “Advice for Teachers: The 9th Century Muslim Scholars Ibn Sahnun and Al-Jahiz on Pedagogy and Didactics,” in *Ideas, Images, and Methods of Portrayal: Insights into Classical Arabic Literature and Islam*, ed. Wadad Kadi and Rotraud Wielandt, Islamic History and Civilization ; v. 58 (Boston ; Leiden: Brill, 2005), 89–128, Ibn Miskawayh, *The Refinement of Character*, trans. Constantine K. Zurayk (Beirut: American University of Beirut, Centennial Publications, 1968), and Rosenthal, *Knowledge Triumphant* 252–298. For the specific influence of Miskawayh over al-Ghazālī and other ethical thinkers, see M. Arkoun, “Miskawayh,” in *Encyclopaedia of Islam, Second Edition*, ed. P. Bearman et al. See also Bürgel, J. Christoph. “Adab und i’tidāl in ar-Ruhāwīs Adab aṭ-Ṭabīb.” *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 117, no. 1 (1967): 90–102. Sartell, Elizabeth, and Aasim I. Padela. “Adab and Its Significance for an Islamic Medical Ethics.” *Journal of Medical Ethics* 41, no. 9 (2015): 756–761.

formation as a professional group, and generated substantial subtlety and diversity of opinion within *ādāb* as to the determinative power of medicine and inborn natures.²³

Moreover, the medicine to be found in these texts is what I call for heuristic purposes an *enhancement medicine*. I argue that with this medicine the ulema aimed to promote certain capacities believed to be innate to their bodies but which remained dormant, underdeveloped, or largely untapped. In the case of *ādāb* the relevant capacities to be enhanced in this fashion were determined by the professional standards of the ulema and the anxieties they felt about failing to meet them. I refer here most specifically to their ubiquitous concern about the ability to memorize large quantities of knowledge (*ḥifẓ*) and recall (*tadhakkur*) that knowledge with enough precision to study (*ta'allum*), discuss (*mudhākarah*), debate (*munāẓarah*), and teach (*ta'līm*) it competently. To be unable to do so was to be unable to participate fully in medieval scholarly life, with all the professional and pietistic consequences attached thereto.

My use of the term *enhancement medicine* proceeds from an understanding of the medical arguments and ideas debated in works of medieval Islamic scholarly *ādāb*; namely, that the various capacities of individual human bodies are determined by their particular humoral constitutions, called a nature (*ṭabī'ah*) or complexion (*mizāj*); that these humoral constitutions were located on a spectrum of many possible constitutions which were more or less ideal for scholarly life; that one's own humoral constitution may be subject to a degree of positive change, at least insofar as certain desirable capacities minimally conferred by it could be maximized under proper conditions; and that drug therapies, regimens, and other salutary practices may produce these conditions and approximate an ideal scholarly constitution. Authors of *ādāb*

23 Their understanding of the body in this manner was widespread and penetrated the discourse of mystical circles whose participants similarly experienced bodily change over the course of their lives. See Bashir, Shahzad. *Sufi Bodies: Religion and Society in Medieval Islam*. Columbia University Press, 2011 at 14.

attributed this ideal both to physicians and early figures of Islamic scholarly history, whose medicalized habits and humoral traits enabled them to convey essential articles of knowledge to their intellectual descendants. These habits and traits called for pious emulation, and by imitating and transmitting the means by which these luminaries achieved their intellectual renown the ulema aimed to secure more than professional success. They also sought to participate in a pietistically resonant, transhistorical intellectual tradition that had come to define their class and set it apart from other Muslims.²⁴

- 24 The medical discourse of *ādāb* is to be set apart from culturally adjacent, intellectually contiguous discourses that addressed similar concerns. Despite their similarities to the enhancement medicine of *ādāb*, other such discourses evidently proceeded from differing conceptualizations of the ideal scholarly state that was to be achieved. For example, in the early-medieval Indian Subcontinent the Ayurvedic medical discourse of *rasāyana* (रसायन) advocated certain mineral treatments, drug therapies and other regimens to restore, inter alia, one's sexual potency, physical stamina, intellect, and memory. While medieval Islamic scholars such as Ibn Rabban al-Ṭabarī (d. 870), Abū Bakr al-Rāzī, and Abū Rayhān Bīrūnī (d. 1050) were interested in this literature to the point of addressing it in their respective works, its focus on *rejuvenation* as such in the place of *enhancement* sets it apart from the subject at hand. Authors in the Sanskrit *rasāyanah* tradition conceived of the ideal state to be achieved through this medicine as an individual, prior and youthful condition that has been eroded by time; authors in the Arabic *ādāb* tradition primarily located their own ideal state in a normative, definitively scholarly paradigm that was unbounded by age as such. While youth and senescence were usually held to blame for a majority of a scholar's memory problems, rather than propose regimens meant to restore the body to a formerly youthful and invigorated state, *ādāb* authors generally rooted their thoughts in an idiom that privileged the enhancement of capacities considered to be of use to Islamic scholars without principally conceiving of this process as a recovery of lost competencies. Such areas of shared interest and concern, however, belie an easy differentiation. For a revealing example to this end, in an eighteenth-century Arabic manuscript from Iraq entitled *Mi'rāj al-du'ā*, the author Muḥammad 'Alī al-Qazwīnī recommends the use of a drug long-associated with memory enhancement in Arabic literature, *balādhur* for the purposes of boosting longevity. He then mentions that its memory enhancing properties are well-known and detailed in other Arabic works. See Langermann, "The Chapter on 'Rasāyana' (Medications for Rejuvenation) in 'Mi'rāj Al-Du'ā', a Shi'ite Text from the 12th/18th Century." In *Intellectual History of the Islamicate World*, 6:144–83, 2018. Simioli, Carmen. "The King of Essences: Mercury in the Tibetan Medico-Alchemical Traditions." In *AION: Annali dell'Istituto universitario orientale di Napoli. Sezione filologico-letteraria: Sezione filologico-letteraria*, edited by Fabrizio Serra, Vol. XXXVII. Pisa: Istituto universitario orientale, 2015, and Kahl, Oliver. *The Sanskrit, Syriac and Persian Sources in the Comprehensive Book of Rhazes*. Leiden: Brill, 2015, especially at 71-159, Wujastyk, Dagmar. "Acts of Improvement." *History of Science in South Asia* 5, no. 2 (2017): 1–36, "On Perfecting the Body: Rasāyana in Medical Sanskrit Literature." In *AION: Annali dell'Istituto universitario orientale di Napoli. Sezione filologico-letteraria: Sezione filologico-letteraria*, edited by Fabrizio Serra, Vol. XXXVII. Pisa: Istituto universitario orientale, 2015, *The Roots of Ayurveda: Selections from Sanskrit Medical Writings*. Penguin, 2003, *Well-Mannered Medicine: Medical Ethics and Etiquette in Classical Ayurveda*. Oxford University Press, 2012, Wujastyk, Dagmar, Suzanne Newcombe, and Christèle Barois. "Transmutations: Rejuvenation, Longevity, and Immortality Practices in South and Inner Asia." *History of Science in South Asia* 5, no. 2 (2017): i–xvii. The medicine of *ādāb* is likewise to be distinguished from the pursuit of *siddhi*/*rddhi*/*iddhi* (सिद्धि) powers by Buddhist clerics in medieval India and China. Influenced by Taoism and the foundational traditions of *rasāyana*, these clerics conceived of their ideal bodily state as ageless and diseaseless, sometimes exhibiting certain extraordinary powers like the ability to shrink or expand their forms at will and read the thoughts of others.

1.4 Structure of the Study

The interest authors of *ādāb* exhibited in how rooted intellectual capacities truly were in the humoral natures of individual bodies was bolstered by the attention paid to this very subject by the leading medical theoreticians of the medieval period. In the first chapter of this study I will recount the theory and practical therapies these physicians advanced for improving weak memory and cognition problems. Authors to be studied include Ibn Sahl Rabbān al-Ṭabarī (d. c. 870), Abū Bakr al-Rāzī (d. 925), Ibn al-Jazzār al-Qayrawānī (d. 979), ‘Alī b. ‘Abbās al-Majūsī (d. 994), and Ibn Sīnā. From the earliest Islamic centuries medical authorities understood the faculties of intellection and recollection as physical processes occurring in ventricles of the brain responsible for the reception, comprehension, and deposit of images acquired through sense experience. These authors held that cold and damp humors caused by poor diet or hygiene were liable to occur in the brain and impede intellection by arresting the transit of images through the organ. Encouraging the production of warm and dry humors to offset these substances was thought to speed this transit. While many medical authors limited their comments on the topic to these observations, some went further to state that individuals possessed of consistently cold and damp natures could hardly expect to benefit from these treatments, let alone flourish in intellectually demanding careers.

Moreover, in this literature the bodies of highly erudite monastics are figured both as loci and conduits for the otherworldly medical knowledge they had collected, such that they were capable of healing and enhancing themselves as well as the bodies of those in their presence. However, their interiorization of ritual practices is specific to Buddhism, and their ancillary focus on physiological alchemy (*nèidān*; Chinese: 內丹術) are related to the attainment of an embodied perfection defined by immortality, invulnerability, and enhancement, rather than by this lattermost pursuit alone. See Salguero, C. Pierce. “‘A Flock of Ghosts Bursting Forth and Scattering’: Healing Narratives in a Sixth-Century Chinese Buddhist Hagiography.” *East Asian Science, Technology, and Medicine*, no. 32 (2010): 89–120, Davidson, Ronald M. *Indian Esoteric Buddhism: A Social History of the Tantric Movement*. New York: Columbia University Press, 2002 and Samuel, Geoffrey. *The Origins of Yoga and Tantra: Indic Religions to the Thirteenth Century*. New York: Cambridge University Press, 2008, especially pp. 271-90.

The career path of the ulema was considered especially intellectually demanding by the later medieval period, an era of mounting professionalization driven by the class's shared investment in emerging theological, philosophical, and legal norms. With more formally organized institutions of higher learning, more prestige attached to medical erudition, and more strident disciplinary specialization by this era, ulema increasingly understood themselves as a discrete professional class solemnly charged with receiving, legitimating, and transmitting all of human knowledge. This consolidation of their socioreligious identity, I argue, encouraged intellectual and pietistic competition among their ranks such that the possibility of intellectual enhancement was more readily entertained by *ādāb* authors in the later medieval era. In response to the demand for information on this topic, the physicians above began to include directions on how to successfully intervene in one's nature in their medical writings—even in the absence of a clinically diagnosed brain disease. In the second chapter of the dissertation I situate this change within the ulema's evolving understanding of the human body as being ruled by its inborn nature. The precise influence this nature had over one's intellectual capacities was always open to debate, but I will show that before the postclassical synthesis of Aristotelian and Asharite philosophy one's inborn nature was regarded as more or less fixed and the intellectual abilities it underlaid unalterable through medical treatment. With this synthesis, authors of *ādāb* were more willing to admit a degree of fluidity to inborn natures allowing for meaningful intervention along these lines.

Taking charge of one's own health in service of better career outcomes thus became pivotally important to the ulema's identity formation in this period, and matters of their mental fitness and bodily health attained a significant devotional dimension. In complement to the

foregoing, the third chapter of my dissertation explores how heavily the pietistic consequences of illnesses causing mental laxity weighed on the ulema's understanding of themselves as the arbiters of knowledge. Failing to produce the correct information when called upon or falling ill from strenuous mental effort were considered grave risks not only to the professional ambitions of the individual scholar but also the fate of their soul. This framing of piety as achievable through academic diligence and the sound health that enabled it led authors of *ādāb* to cite the advice of medical authorities often verbatim, and typically alongside the numerous medical recommendations made by the Prophet, Companions, and other figures of reverence. While this has occasioned secondary scholarship to remark upon the apparent need for the ulema to justify discourses extraneous to Islamic devotional tradition in pietistic terms, I argue that this ascriptive technique only constitutes evidence that the ulema believed medicine to be so useful for their professional goals as to have an undeniable and immediate pietistic resonance, regardless of the discourse's ultimate origin.

Matters of health were so consequential to the ulema that authors of *ādāb* also demonstrate a remarkable awareness of how the physically and mentally taxing nature of their careers might lead to illnesses of the intellect. In the fourth and final chapter I set the well-documented forms of self-disciplining that authors of *ādāb* prescribed for ulema in relation to the great sensitivity with which they treated psychological hardship. I show that the effects of continuous, rigorous courses of study on the body were heavily medicalized by *ādāb* treatises. Authors cautioned that overexertion produced morbid humors in such an amount as to blunt the intellects of even the ablest scholars. They cited anecdotes about fatigued ulema wandering off roads, suffering nervous breakdowns, or driven mad by drugs meant to enhance their minds.

Interspersed with these anecdotes are descriptions of the intrusive thoughts and disturbing ruminations said to befall scholars pursuing academic excellence at the cost of their emotional health. Recommending they take time out of their schedules to pursue such activities as idle conversation with friends, retreats to nature, and lighthearted sexual liaisons, authors of *ādāb* clearly understood the professional pressures of scholarly life as ruinous to their class in the total absence of this self-care. Taken together with the considerable medical material they marshaled on questions of intellectual capacity and the possibility of its enhancement, *ādāb*'s endorsement of emotional wellness paints an ever more human portrait of the ulema's experience of their self-fashioning as a scholarly class.

In addition to describing the fundamental role medicine played in the professional formation of the ulema, it is to be hoped that demonstrating *ādāb*'s commitment to the physical health and mental well-being of its readership will shed further light on the partially-understood natural scientific, devotional, and affective dimensions of medieval Islamic scholarly society. By investigating the fruitful intersection of these dimensions in *ādāb* I aspire to give further lie to the notion that regressive religious sentiments ruled Islamic intellectual life until the colonial period, and help document instead the vibrancy of its pursuits across the premodern era.

2. Medieval Medical Authorities on the Mind and Memory

The art of medicine comprises three regimens, of which ... the third is the regimen Galen calls vivification [in‘āsh], that is, the regimen of those who are neither in perfectly sound health, nor sick.

– Moses Maimonides (d. 1204), *Tadbīr al-ṣiḥḥah*²⁵

2.1 Introduction

Inheriting a vast theoretical and practical medical tradition from their Hippocratic and Galenic predecessors, Islamic physicians of the medieval period understood the human body to be composed of and governed by four humors: blood, phlegm, black, and yellow bile. Termed *ṭabā‘i‘*, *amzījah*, or *akhlāt*, these substances were believed to exist in permutations that varied between bodies yet underlaid each individual’s idiosyncratic humoral constitution. While Islamic medical authorities held that the permutation of a given body’s humors was generally stable across its lifespan, they believed even the most stable of constitutions was susceptible to some measure of change in specific circumstances. Physicians conceptualized diseases themselves as arising from specific and predictable kinds of humoral imbalances, usually caused by poor diet and environment, or even by physical overexertion, emotional distress, and excessive sexual activity. The precarious health of the extremely young and the extremely elderly was likewise associated with humoral instabilities occasioned by the processes of growth and senescence at those ages. According to this medical reasoning such disturbances could be resolved where possible or desirable through allopathic means; that is to say, a disease thought to arise from wet humors like phlegm accumulating in the body was best treated with medicines promoting dry humors like blood, and vice versa. Physicians would apply these remedies in order to return a patient’s body to the particular balance of humors that constituted its health, and would therefore

25 See Bar-Sela, Ariel, Hebbel E. Hoff, Elias Faris, and Moses Maimonides. “Moses Maimonides’ Two Treatises on the Regimen of Health: *Fī Tadbīr Al-Siḥḥah* and *Maqālah Fī Bayān Ba’d Al-A’rād Wa-Al-Jawāb ‘Anhā*.” *Transactions of the American Philosophical Society* 54, no. 4 (1964): 19.

require intimate knowledge of their patient's geographic origin, eating habits, chronic illnesses, and level of physical activity in order to select the safest and most effective therapy. Material factors and sociocultural prejudices often reserved the highest quality of this care for the elite city-dweller. Commoners and those living in the countryside were expected to visit public hospitals or other kinds of charitable institutions in order to receive care of dramatically less quality.²⁶

As scholarly elites living in the urban centers of the Middle East, the ulema set great intellectual store by their access to and understanding of high quality medical care. Their interest in exploring how rooted their intellectual capacities were in their humoral complexions and how medical interventions might alter them to improve those capacities was bolstered by attention paid to this very subject by contemporaneous physicians. Given the professional prestige the ulema attached to feats of memorization and the availability of precedent medical texts in Arabic translation by the Abbasid period, physicians writing from the ninth century onward discussed the therapeutic possibility of improving intellectual capacities at some length and with reference to centuries of medical erudition. Writing for predominantly scholarly audiences, these physicians discussed such possibilities in sections of their works dedicated to diseases and disorders of the brain. In particular, medical authorities like Ibn Sahl Rabbān al-Ṭabarī (d. c. 870), Abū Bakr al-Rāzī (d. 925), Ibn al-Jazzār al-Qayrawānī (d. 979), ‘Alī b. ‘Abbās al-Majūsī (d. 994), and Ibn Sīnā (d. 1037) each dedicated sections of their works to describing diseases of the memory. Often citing the same early sources or one another's own work, the level of evidence adduced by these authors indicate widespread, intertextual interest in memory deficits.

26 The two-tier model of medical care in this period has been amply studied; see Haskell D. Isaacs, "Arabic Medical Literature," in *Religion, Learning and Science in the Abbasid Period*, ed. Michael J. L. Young, John Derek Latham, and Robert Bertram Serjeant (Cambridge University Press, 2006), 342–63.

Authors discussed such diseases in terms of discrete symptoms and bodily characteristics brought about by specific humoral excesses, rooting a centuries-long tradition of clinical observation in a coherent theoretical understanding of the brain and its role in governing the human mind.

From the earliest centuries of their writing these medical authors understood the faculty of memory as a physical process occurring in regions of the brain responsible for the reception, comprehension, and deposit of images acquired through intellection or sense experience. The capacities of individual brains in each regard were thought to differ from person to person, ultimately depending on the congenital structure of these regions and the state of one's health at the time of clinical presentation. In light of what physicians argued about the significant variability of individual bodies in this regard—as well as the self-admitted limitations of medicine as a predictive discourse and the consensus among physicians that the *ṭabā'i'* were fixed at birth—interventions to aid the memory were often given with substantial caveats as to their efficacy.²⁷ While some medical authors were content to fill several leaves of their treatises with the reasons why a patient may present with faulty memory and how best to improve their condition, others were significantly wary of recommending extreme or unproven measures without their readers first securing the medical advice and supervision of their own physician. Others still, especially those of Abū Bakr al-Rāzī's time and intellectual circle, framed their medical treatises as a handbook for the scholar's own self-care, obviating their need to consult a physician and equipping them with the information needed to understand and preserve their own

27 See Ibid. 354 and Kamran I. Karimullah, "The Emergence of Verification (Taḥqīq) in Islamic Medicine: The Exegetical Legacy of Faḥr al-Dīn al-Rāzī's (d. 1210) Commentary on Avicenna's (d. 1037) Canon of Medicine," *Oriens* 1, no. aop (2019): 1–113 and Nanne Pieter George Joosse and Peter E. Pormann, "Decline and Decadence in Iraq and Syria after the Age of Avicenna: 'Abd al-Laṭīf al-Baghdādī (1162-1231) between Myth and History," *Bulletin of the History of Medicine* 84, no. 1 (2010): 1–29.

health. In this manner the informed care of the scholarly body became a prominent aspect of the ulema's self-fashioning amid their increasing professionalization in the medieval era.

Any difference in envisioned readerships notwithstanding, as we shall see below medical authors reliably attributed bouts of forgetfulness to cold and damp substances accumulating in the body due to excess phlegm or black bile. In the worst cases these humors could congeal in the brain itself and form a physical barrier slowing or even arresting the transit of thought through the organ. This relatively benign symptom could be accompanied by more serious signs including unconsciousness, corpse-like pallor, shivering, and even death. Encouraging the production of warm humors in the body through specific dietary interventions and other therapies was thought to improve symptoms, clearing the brain of the offending humors and thereby speeding the physical transit of thought. An individual whose nature tended toward the cold and damp—or whose brain's ventricles tended toward the stiff and narrow—would invariably have a faulty memory. Such persons would also be far more susceptible to cold and damp illnesses, perhaps developing disorders like dementia or impaired consciousness in old age. Medical authors additionally warned that these therapies could also work iatrogenically to impede the memory when administered by the inexpert, promoting a level of warmth and dryness that accelerated thoughts past the point of intelligibility.

We will also see that while most medical authors limited their entries on the topic of forgetfulness to the above observations, others went further to state that individuals of cold and damp constitutions could hardly be expected to thrive in situations requiring quick thinking and decisiveness. Such a phlegmatic or melancholic person's nature would be considered altogether unsuited to the scholarly life. Nevertheless, beyond the most extreme examples medical authors

held that an individual's memory would eventually benefit from regimens prescribed by a trustworthy physician. Those of al-Rāzī's school went as far as to suggest that one need not suffer from a clinical brain disease in order to benefit from such regimens. Physicians like him writing for a broadening scholarly audience argued that the generally forgetful and slow-witted could improve their repartee or recollection by the same means as those burdened with pathological forgetfulness. However fancifully or factually stated, at least one physician framed their treatise as a response to aging companions who had solicited information helpful for preserving and boosting their memories.

The popularity of this topic across medical texts and the literary conventions developed to articulate it evince a desire among the ulema to manipulate their memory, and not necessarily in aid of curing a clinical disease. Knowledge that cold and damp humors hindered the mind while warm and dry humors aided it became commonplace in medieval scholarly circles, both as an article of medical erudition valuable in its own right and as one that could help aspiring scholars resolve disadvantageous humoral constitutions. The anatomical observations and prescriptions offered in the medical texts to be studied below diffused throughout Islamic intellectual society, appearing in works of *ādāb* where they were reframed in terms of practical, pietistic measures the ulema could take to improve their scholarly outcomes. Understanding the coherent and consistent humoral reasoning underlying these measures promises to bring the importance that medieval *ādāb* laid on medicine and the embodied experience of the scholar into fuller focus.

2.2 Medieval Medical Compendia on the Question of Memory Enhancement

The encyclopedic compilation of medical erudition was a well-established intellectual exercise of the Mediterranean and Indian Ocean's scholarly elite since Antiquity. The form and content of works written by those in the tradition of Galen and Hippocrates were inherited by Islamic translators and medical authorities in the eighth and ninth centuries, who set about more fully elaborating an intellectual heritage spanning Europe and Asia for use in their own societies. However prodigious this translation movement was, writers working in its earliest centuries produced comparatively few medical texts that survive until the present day free of significant lacunae. As one of the oldest such compendia that did survive in full, Ibn Sahl Rabbān al-Ṭabarī's (d. c. 860) *Firdaws al-ḥikmah fī al-ṭibb* (*the Paradise of Medical Wisdom*; hereafter the *Firdaws*) is notable for both its encyclopedic style and commentary on the medical traditions its author sourced from Indo-Persian and Chinese texts. A product of the cosmopolitan courts of al-Mu'taṣim (d. 842) and al-Mutawakkil (d. 861), al-Ṭabarī presents the *Firdaws* as the assimilation of treatises by Hippocrates, Galen, and his own contemporary Ḥunayn b. Isḥāq (d. 873). As such an early and strongly synthetic work in this regard, the influence of the *Firdaws* over later medical authors is difficult to overstate.²⁸

Al-Ṭabarī begins the *Firdaws* by describing how the capacity for transformation rules the fate of all earthly creatures, referring to both humans and other animals. As composites of the

28 See Léon Gauthier, *Antécédents gréco-arabes de la psychophysique* (Beyrouth: Imprimerie Catholique, 1938) for the important work of early figures such as al-Kindī (d. 873) in translating and systematizing precedent models of pharmacology for use in Arab-Islamic societies. For a discussion of the relevant surviving manuscripts and a comprehensive break-down of the chapters comprising this monumental work, see Meyerhof, Max. "Alī At-Ṭabarī's "Paradise of Wisdom", One of the Oldest Arabic Compendiums of Medicine." *Isis* 16, no. 1 (1931): 6–54. Ibn al-Baṭrīq's (d. 815) earlier *Kitāb al-Sumūm* survives only in its fragmentary reference in other works, as in al-Rāzī's *Hāwī*. See Bos, Gerrit. "Jewish Traditions on Strengthening Memory and Leone Modena's Evaluation." *Jewish Studies Quarterly* 2, no. 1 (1995): 47. More on Ibn al-Baṭrīq below. Ṭabarī, 'Alī ibn Sahl Rabbān. *Firdaws al-ḥikmah fī al-ṭibb*. Edited by Muḥammad Zubair Siddiqi. Berlin: Maṭba' Āfītāb, 1928, 15-8; see also Meyerhof, "Alī At-Ṭabarī's "Paradise of Wisdom".

elements pervading the sublunar sphere, the humoral dispositions of individual bodies are liable to change either in the positive sense of growth or the negative sense of decay. Medicine is theorized and applied in order to promote the former and abate the latter. Health and growth are therefore the products of balancing the contrary humoral forces comprising all composite beings on earth, while illness and decay arise from their lapsing into imbalance.²⁹ Al-Ṭabarī offers an explanation of memory and intelligence based in this allopathic reasoning within a section entitled *On Mental Agility, Sluggishness, Memorization, and Forgetfulness (khiffah wa thiqa wa ḥifẓ wa nisyān)*:

When the brain's humors [*mizāj*] are in balance, the remembrance of things is imprinted on it as a stamp's seal is imprinted on sound clay. But if the clay's moisture or dryness is excessive the seal will not imprint on it. The brain is like this; when it is too moist or too dry it will not retain memories. As for mental acuity [*dhakā'*] and agility, these [are attributes] of the fiery and airy humoral type [*jins al-nāriyyah wa-l-hawā'īyyah*]. Sluggishness [*thiqal*] and stupidity [*balādah*] are of the earthy and watery type [*jins al-arḍiyyah wa-l-mā'īyyah*].³⁰

In al-Ṭabarī's reasoning memory and mental acuity are largely functions of the brain's humoral disposition in a given span of time, a position that enjoyed support in precedent texts of medical theory.³¹ Further, differing genera of inborn natures may influence their possessors' abilities: the more fiery or airy the nature is, the more energetic and resilient the mind is. This is true for all animals, since al-Ṭabarī states that only the influence of such natures can "explain the agility of creatures of the air and the sluggishness of creatures of the earth and water." Yet even these

29 See Isaacs, "Arabic Medical Literature," 342–63.

30 *Firdaws* 92.

31 See Bos, Gerrit. "Jewish Traditions on Strengthening Memory and Leone Modena's Evaluation" and Bos, Gerrit. "'Balādhur' (Marking-Nut): A Popular Medieval Drug for Strengthening Memory." *Bulletin of the School of Oriental and African Studies, University of London* 59, no. 2 (January 1, 1996): 229–36, and Jazzār, Ibn al-, and Gerrit Bos. *Ibn Al-Jazzār on Forgetfulness and Its Treatment: Critical Edition of the Arabic Text and the Hebrew Translations with Commentary and Translation Into English*. Psychology Press, 1995.

beings of fire and air must take care not to push their constitutions past the tipping point. The swallow and nightingale may well soar and sing when their humid humors are in harmony, but should “their bodies dry out and their moisture be exhausted...their voices will grow limpid and their movement will decrease.” Ducks, turtles, and crows are sluggish and hoarse of voice to begin with for this reason, already being creatures of water and earth by their very nature.³²

The dispositions of humans may likewise tend toward one or the other humoral pole. Yet al-Ṭabarī also allows for circumstantial explanations as to why an otherwise quick-witted individual might suddenly be struck by a sluggish and forgetful mind. Interruptions to the balance of the body’s moistures and the fluidity that nurtures the brain is primarily to blame when this occurs:

Forgetfulness arises from the accretion of a viscous, moist phlegm in the brain or an excessive dryness, such that the remembrance of things is not imprinted on it. It can also be due to a generally cold humoral disposition [*mizāj*] of the body. When it is from excessive moisture in the brain there is weak memory and cognition [*fikrah*] along with sluggishness and much sleep. If it is from a generally cold [humoral disposition] in the body, its urine, sweat, coloration, and palpation will show symptoms of coldness.

These imbalances may be brought about by diet, habit, or misadventure on the part of the patient, but regardless of ultimate cause it is the overbearing dampness or dryness of the brain that was believed to interfere with its functioning. This being the case, forgetfulness and degeneration of the mind (*fasād al-dhihin*) can be mitigated by specific drugs and gargles that counter the offending humor’s qualities. Al-Ṭabarī lists several such drugs by way of concluding his remarks in this entry, including marking-nut medicine (*dawā’ balādhurī*), theriac, *shīlthā*, *hiera fīqrā*,³³

³² *Firdaws* 92.

³³ See Ibid 151. For a description of the ingredients and mechanism of action for theriacs cleansing phlegm from the body, see Bar-Sela, Ariel, Hebbel E. Hoff, Elias Faris, and Moses Maimonides. “Moses Maimonides’ Two Treatises on the Regimen of Health: Fī Tadbīr Al-Sihhah and Maqālah Fī Bayān Ba’d Al-A’rād Wa-Al-Jawāb ‘Anhā.” *Transactions of the American Philosophical Society* 54, no. 4 (1964): 24. *Shīlthā* was an electuary of simple drugs combined with honey such as pepper, turmeric, amber, and sundry mineral elements, touted as a

pellitory (‘āqar qarḥā), origanum (sa‘tar), sweet marjoram (marzanjūs),³⁴ toasted pomegranate seed, black mustard seed crushed and mixed with honey, castoreum (jundbīdastar),³⁵ opopanax (jāwashīr), saffron (za‘farān) and wolf’s gallbladder (marārat al-dhi‘b) ground up with a quarter of a gram of chard (silq) extract for snuffing.³⁶ Though diffuse at first blush, these strategies rely on consistent humoral reasoning: languidness and forgetfulness are caused by damp and moist

panacea. For its specific preparation see Ibn Sīnā, *al-Qānūn* 3:318, Martin Levey, *Substitute drugs in early Arabic medicine*, Stuttgart, Wissenschaftliche Verlagsgesellschaft, 1971, p. 73, no. 292, *Das Buch der Gifte des Gabir ibn Hayyan*, Ed. A Siggel, Cairo: 1958 p.219 and Álvarez Millán, Cristina. “The Case History in Medieval Islamic Medical Literature: Tajārib and Mujarrabāt as Source.” *Medical History* 54, no. 2 (April 2010): 195–214. *Hiera fīqrā* is a bitter concoction of drugs complemented with aromatics; the word *īyārīj fīqrā* is from the Greek ἱερὰ πικρά, or “divine bitter”. See Sahl, Sābūr Ibn. *Sābūr Ibn Sahl’s Dispensatory in the Recension of the ‘Aḥūdī Hospital*. BRILL, 2009, 179 for its preparation. See also the second footnote in Levey, Martin. *Early Arabic Pharmacology*. Leiden: Brill, 1973, 72.

- 34 Pellitory is a hot and drying herb whose use is accompanied by a mild stimulant effect and which was used to treat disorders of the brain by al-Rāzī and Maimonides. Origanum and sweet marjoram were used as purgatives as well as to cure ailments of the head and stomach issues. See Lev, Efraim, and Amar *Practical Materia Medica of the Medieval Eastern Mediterranean According to the Cairo Genizah*. BRILL, 2007, 465, 317-8, 495.
- 35 Derivations of such seed were warming drugs with many uses, among them curing stomach and liver ailments. Ibid. 248-50. The Prophet is said to have called pomegranate seeds in particular “seeds from the Garden of Paradise.” On this see the discussion of al-Iṣfahānī’s *Muḥādarāt* below. A prized warming and drying substance derived from the Eurasian beaver, castoreum was especially used to treat diseases of the eye and brain. See *Practical Materia Medica of the Medieval Eastern Mediterranean*, 354-6, 516. See also King, Anya H. *Scent from the Garden of Paradise. Musk and the Medieval Islamic World*. BRILL, 2017, 303-6.
- 36 Also known as sweet myrrh, opopanax was a warming substance was used to ease the stomach and prevent bloating, as well as treat eye disease and erectile dysfunction. See *Practical Materia Medica*, 539, and Anawati, Georges C. “Le Traite d’Averroes Sur La Theriaque et Ses Antecedents Grecs et Arabes.” *Quaderni Di Studi Arabi* 5/6 (1987): 41. Hot and dry, saffron was used throughout the ancient and medieval periods to fortify the stomach and treat brain disorders. Ibn al-Bayṭār (d. 1248)’s medical encyclopedia later praised the spice’s ability to improve the memory, sharpen eyesight and hone the senses, among other uses. See Ibn al-Bayṭār. *Kitāb Al-Jāmi‘ Li-Mufradāt Al-Adwiyah Wa-l-Aghdhiyah*. 4 vols. Beirut: Dar al-kutub al-ilmiyyah, 2001, 1:467-9. See also *Practical Materia Medica*, 272. Wolf gall and other hard-to-obtain animal-based materials were consistently recommended by physicians due to their theoretical utility, and not necessarily due to practical experience with the substance in clinic. See *Materia Medica*, 65-6, 71. More on chard, a warming vegetable useful for congestive illnesses, below. The measurement given here is “wazn niṣf dāniq.” Though conversion of medieval weights and measures is a fraught task, a *dāniq* was said to weigh one-sixth of a *dirham*, which itself weighed one-and-three-sevenths of a *mithqāl*. When speaking of all materials apart from gold, a *mithqāl* corresponded to roughly four-and-one-quarter metric grams, making a *dāniq* half of that measure. An *istār* (pl. *asātīr*), used below, corresponded to roughly four-and-one-half *mithqāls*—approximately nineteen metric grams. See Holmyard, E. J. “Arabic Chemistry.” *Science Progress in the Twentieth Century (1919-1933)* 17, no. 66 (1922): 10. and Miles, G. C. “Dirham.” Edited by P. Bearman. *Encyclopaedia of Islam, Second Edition* and Hinz, Walther. *Islamische Masse Und Gewichte: Umgerechnet Ins Metrische System*. Vol. 1. Brill Archive, 1955.

humors in the body and brain, in which case intelligence and good memory are encouraged by evenly warm and dry medicines. This humoral reasoning and its accompanying remedies circulated widely in Islamic intellectual circles as early as the late-ninth century, disseminating the multiple sources of medicine al-Ṭabarī cites here.³⁷

The theory of mind and memory, as well as many of the curatives put forward by al-Ṭabarī in the *Firdaws*, were later recapitulated in Abū Bakr al-Rāzī's (d. 925) monumental work of practical medicine, *Kitāb al-ḥāwī fī al-ṭibb* (*The Comprehensive Book of Medicine*, hereafter the *Ḥāwī*), a text most likely assembled after his death. In the *Ḥāwī* these elements are included in a far lengthier entry, entitled *On the Powers (quwan) of the Brain and Impairing (ḍarar) its Imaginative, Cognitive, and Recollective Faculties, as well as the Fortification (muqawwim) of the Same*. From the first al-Rāzī's protocol for treating forgetfulness seems more daring than the one advanced by al-Ṭabarī; he explains that the Greek physician Archigenes (fl. c. 100) would treat deficits of memory (*dhahāb al-dhikr*) with aggressive warming strategies (*ghāyat al-taskhīn*), including cupping (*maḥājīm*) and using medicines derived from the mustard seed charlock (*khardal*). Al-Rāzī reasons that this is because cold and morbid humoral dispositions

37 *Firdaws* 151. Al-Ṭabarī specifies that each of these ingredients will benefit not only a cold brain, but also hemiplegia and facial paralysis, which is true of other medical authors below. In the same entry on the subsequent page, al-Ṭabarī gives yet another recipe for memory enhancement: "A medicine for forgetfulness, and for the prolonging of health and youthfulness: take about one hundred and fifteen grams of *balādhur*, crush them and rinse well in melted cow butter to be dried in the shade. Then take about one hundred and fifteen grams [*sittat asātīr*] of green terebinth berries [*ḥabbah khadrā*], twenty grams each of malabathrum [*sādhij hindī*] and harra [*halīlaj aswad*] and four-and-one-quarter grams each of clove [*qaranful*] and fennel [*basbāsaḥ*] to be ground and sieved. Then add honey skimmed of its foam to cow butter, and knead into [this] the [above] medicament and the *balādhur*. Then add about one hundred and nineteen grams of fine white sugar, and roll into pellets the size of a walnut [*ta'jal banādiqan mithl al-jawzah*]. Eat one such walnut each day for forty days on an empty stomach without admixture or with curdled milk. [You will] be availed against the cold and flatulence." On the use of terebinth berries, see Nasrallah, Nawal. *Annals of the Caliphs' Kitchens: Ibn Sayyār Al-Warrāq's Tenth-Century Baghdadi Cookbook*. BRILL, 2007, 629. Harra is the fruit of the black variety of the chebolic myrobalan tree, which has long been used in Ayurvedic medicine and was cited in prophetic hadith as a panacea. See Speziale, Fabrizio. *Culture persane et médecine ayurvédique en Asie du Sud*. BRILL, 2018, 108. Recall in the introduction to this study the similarities borne between *ādāb*'s enhancement medicine and the rejuvenatory medical guidance given in Ayurveda.

(*sū' mizāj bārid*) are universally to blame in cases of weakened recollection, and therapy must be aimed at warming the organ as well as ensuring it does not exceed or fall short of its requisite moisture.³⁸ Archigenes additionally held that drinking wine degraded the mind (*radī' lil-dhihin*), and along with his contemporary Rufus of Ephesus (fl. c. 100) and the later physician Paul of Aegina (d. 625) argued that limiting sleep and reducing one's food intake (*yaqazah wa talṭīf al-tadbīr*) improved the memory instead of sleeping and excessive eating (*lā nawm wa mal' al-baṭan*). On these points al-Rāzī expresses some caution, however, stating that restrictive diets tend to degrade the brain and bone marrow, as does the dryness brought on by overexertion (*ta'ab*), sexual intercourse (*bāh*), and sleeplessness (*sahar*). Yet it is a matter of medical consensus, al-Rāzī claims, that “a refined mind does not arise from a body plump with viscosities,” and that balance is best achieved through measured intervention. Just as one should strive toward moderation in maintaining the health of one's body, he counsels, so too must one apply moderation to matters affecting the mind.³⁹

Individual circumstances notwithstanding, according to al-Rāzī the swiftest and strongest of minds are found in those whose natural dispositions are dominated by the quality of dryness over all others. Citing medical authorities of the past, al-Rāzī explains that this is because moisture stupefies the mind (*raṭūbah tublid al-naḥs*) and dryness strengthens it (*yashḥadhuhā*). Moisture is especially unsuitable (*ghayr muwāfiq*) to the humoral makeup of males and young boys, who should be hot and dry by nature. Harmful moisture can typically be eliminated from young male bodies by their pursuing an arduous course of study (*im'ān fī al-dirāsah*). Adult men

38 Rāzī, Abū Bakr Muḥammad ibn Zakarīyā. *Kitāb al-ḥāwī fī al-ṭibb*. Edited by Muḥammad Muḥammad Ismā'īl. Beirut: Dār al-Kutub al-'Ilmīyah, 2001, 1:52-3.

39 Ibid. 52-7; at 53, “*qad ajma'a al-nās 'alā annahu la yatawallad 'an al-badan al-ghalīz dhihin laṭīf*.”

should avoid eating food that generates cold viscosities in their bodies, which will cloud their minds in the same way alcohol does. They should have a physician regularly monitor their blood as well, since its hot and dry properties might fluctuate to herald illnesses of the brain. This comment occasions an interesting aside; al-Rāzī suggest that a healthy man might work to sharpen his mind with similar attention paid to optimally balancing the moisture of his body. He may do so even in the absence of a brain pathology, though it would involve pursuing the same strategies. There are evidently physicians who believed this to be folly. After recording and dismissing their reservations, al-Rāzī reasserts his opinion that dryness “always enhances [the mind; *bal huwa zā'id fīhi abadan*],” while also allowing that an individual may have to seek medical treatment for achieving dryness that exceeds their body’s favored balance. Al-Rāzī concludes this aside by advising those who wish to pursue mental enhancement to do so only very carefully, preferably by inclining their humoral disposition toward dryness in stages (*yanbaghī an yumāl mizāj... ‘alā tadrīj*) so as to not overdo it and make themselves ill (*wa lā tufriṭ fa-yumarriḍuhu*).⁴⁰

Unlike al-Ṭabarī, al-Rāzī also lists substances in his entry that are known to harm the memory by injuring the organs associated with it. These harmful substances include dodder (*aftīmūn*), myrrh (*murr*), and sweetgum resin (*may‘ah sā‘ilah*).⁴¹ They and foods like them cause

40 Ibid 52-7; at 54: “*al-yabis abadan yaj‘al al-naḥs ashadd ḥarakāt wa asra‘ wa mā yajiduhu fīman yaghlib ‘alayhi al-yabis innamā ḥarakāt qad jāwazat miqdār sar‘ihā al-ḥāl al-ṭabī‘īyah lil-nās.*” And at 55: “*lākin af‘al al-naḥs ‘indinā bi-ḥadd la yazīd yujāwizuhu al-yabis al-ghālib yajūz bi-hā dhālik al-ḥadd ḍarban yaḥtāj ilā an yu‘ālīj minhu idhā afraṭa.*”

41 Dodder was considered a strongly hot medicine; see Meulenbeld, Jan. “Mahādevadeva’s Hikmatprakāśa—A Sanskrit Treatise on Yūnānī Medicine. Part II: Text and Commentary of Selected Verses from Section II with an Annotated English Translation.” *EJournal of Indian Medicine* 5, no. 2 (2013): 180. See especially footnote 258 for a comprehensive discussion of this plant. Likewise a strongly hot substance with sundry medical uses, myrrh known in particular for its stringent ability to heal wounds and congeal bodily fluids. See *Practical Materia Medica of the Medieval Eastern Mediterranean*, 221-3. Sweetgum resin was used in the medical traditions of the Middle East for centuries. In his thirteenth-century medical encyclopedia, Ibn al-Bayṭār cited precedent medical authorities who categorized sweetgum resin as strongly hot and drying. See Ibn al-Bayṭār *Kitāb Al-*

sluggishness (*thiqal*) and dazedness (*sadar*) in the mind due to their significant drying and heating effect. Moreover, their harsh intrinsic properties might damage the stomach's cardia, which, by virtue of an anatomical affinity with the brain (*musharikah*), could also harm the memory.⁴² Likewise al-Rāzī cautions that one should not eat fruit pith with sugar (*akl al-lubūb bil-sukkar*), honey cakes (*fālūdḥaj*), and other kinds of sweets (*aghdiyā' ladhīdhah*). One should also avoid hazelnuts (*bunduq*) and almonds (*lawz*) if they are prepared with sugar; radishes (*fujl*) and onions (*baṣal*) eaten to excess cause the intellect to degrade (*yufsid al-'aql*) as well. Lettuce (*khass*) and poppy (*khashkhāsh*) induce sleep and should therefore not be consumed. Broad beans (*bāqlan*), lentils (*'adas*), cabbage (*kurnub*), leeks (*kurrāth*), and green beans (*lūbiyā*) will produce nightmares in their consumers, and so too should be avoided.⁴³

To repair the memory and treat forgetfulness al-Rāzī reports that the Alexandrian physician Ahrūn b. A'yan al-Qass (fl. c. 600) would first and foremost employ the *balādhur* nut and secondarily spiced gargles meant to dissipate phlegm from the head. He would also cauterize the two occipital arteries below the ears (*akhda'ayn*) and those at the base of the skull (*qafan*) in

Jāmi' 2:467. See also Amar, Z. "Medicinal Substances in Eretz-Israel in the Times of the Bible, the Mishnah and the Talmud in Light of Written Sources." In *Illness and Healing in Ancient Times*, 52–61. Haifa: University of Haifa, 1996.

42 *Ḥāwī* 1:54: "wa-l-ashyā' al-ḡārrah li-fām al-ma'idah taḡurr al-dimāgh bil-musharikah."

43 The admonition regarding sleep is repeated here and throughout the literature to be explored below. Radishes were implicated alongside onions in bouts of epilepsy due to their tendency to produce noxious vapors in the stomach, swelling it with phlegm and eventually affecting the brain. Nightmares would occur in these situations due to flatus disturbing the abdomen and similarly affecting the brain with morbid vapors (*bukhār*). This interpretation is corroborated by al-Rāzī's subsequent citation of a certain Fūbūs's *Kitāb al-filāḥah*: "Broad beans enfeeble ratiocination [*yuwahhin al-fikr*] and impede authentic dreams because they bring about excessive flatulence." Also implicated is garlic (*thūm*), which along with onions and cabbage was said to produce such vapors. *Ḥāwī* 1:54-7. See *Practical Materia Medica of the Medieval Eastern Mediterranean* 231-3, 258, 437-8 and Gorji, A., and M. Khaleghi Ghadiri. "History of Epilepsy in Medieval Iranian Medicine." *Neuroscience & Biobehavioral Reviews* 25, no. 5 (2001): 455–461.

order to eliminate the offending humoral substance (*istafragha tilka al-mādah*).⁴⁴ Next al-Rāzī conveys the Nestorian physician Ibn Māsawayh's (d. 857) advice as reported in his *Kitāb al-adwiyā' al-munqīyah* (*Book of Cleansing Drugs*): to help the memory one should eat charlock, as well as coat the back of the head with the substance and castoreum.⁴⁵ He also urged those suffering from forgetfulness to consume about six grams of *balādhur*⁴⁶ with hot water on an empty stomach daily, to drink honey dissolved in water, and to eat the non-fatty meat of birds that are dry in nature, such as the sparrow (*‘aṣāfir*), bathing dove (*shafanīn*), lark (*qanābir*) and partridge (*ṭayhūj*).⁴⁷ Citing his early contemporary Ibn Sarābiyūn (fl. 850) al-Rāzī also recommends dissipating bodily moistures by sitting in sunlight, and to aid this process by using warming drugs like *hieras*, lavender (*uṣṭūkhuddūs*), *balādhur*, natron (*naṭrūn*), musk (*misk*), lily (*sūsan*), gillyflower (*khīrī*), frankincense (*kundur*), and other substances of the same class.⁴⁸ One

44 Ibid. 1:155-7; as for the gargles, "*al-garāgar al-jālīyah*" refers to a regimen elsewhere defined by al-Rāzī as consisting of substances like ginger (*zanjabīl*), charlock, borax (*būraq*) or pepper. See Ibid. 2:164 and Dietrich, A., and P. Bearman. "Ahrun." In *Encyclopaedia of Islam, Second Edition*, 2012.

45 Recall the use of both substances to restore the memory above, and in the recipe given by al-Ṭabarī. Also attributed to Ibn Māsawayh is a certain drug called *ayūr*, which al-Rāzī speculates is a Kirmani substance used to sharpen the mind (*tadhkiyat al-dhihin*). Its name might refer to the first element in the word for contemporaneous Indian humoral theory—*Āyurveda*, meaning "life" or "longevity."

46 Or one *dirham*, calculated as above. Here the text renders *balādhur* as *anaqarwiyā*, reflecting the original Greek word that resulted in the Latin term *anacardium*, which is descriptive of its shape: *anákardia*, or "upward heart". Ibid. See the corresponding section on *balādhur* in al-Rāzī's "*Kitāb al-manṣūrī fī al-ṭibb*" (c. 1400), World Digital Library, Library of Congress, Mansuri Collection, Ms. 4276, f. 110v.

47 *Hāwī* 1:155-7. The warming properties of the sparrow's brain and blood, along with those of other bird species like chicken and these listed here, were widely cited as being effective in enhancing sexual potency and curing paralysis. See *Practical Materia Medica of the Medieval Eastern Mediterranean* 358-9, Forrest, Richard D. "Early History of Wound Treatment." *Journal of the Royal Society of Medicine* 75, no. 3 (1982): 203. See below the use of such birds in the work of Ibn al-Jazzār.

48 Lavender was a hot and dry drug for fortifying the body and curing head ailments. Natron is a mineral salt similar to borax, mined extensively in Egypt and used to treat eye and head problems along with musk. See *Practical Materia Medica of the Medieval Eastern Mediterranean* 196-200, 217, 61, 119-20. Oils from lily and gillyflower were often included in medical recipes See Khafipour, Hani. "A Hospital in Ilkhānid Iran: Toward a Socio-Economic Reconstruction of the Rab'-i Rashīdī." *Iranian Studies* 45, no. 1 (January 1, 2012): 104. According to Ibn Māsawayh "frankincense enflames [*yuḥarriq*] the blood, which is excellent for the memory

may also take about four grams of frankincense alone with water daily to “enhance [*zāda fī*] the memory and the mind, dissipating excessive forgetfulness.” Too much, however, causes headache.⁴⁹ Coriander (*kuzbarah*) can be also employed, but like frankincense it should only be used in moderation. Too much of either in the diet will only scatter the thoughts of the user (*yukhalliṭ al-dhihin*). Nutsedge (*su‘d*), ivory powder (*nushārat al-‘āj*) and squirting cucumber (*qiththā’ ḥimār*) are also helpful in this regard.⁵⁰ As in al-Ṭabarī, harra fruit (*halīlaj aswad*) is here said to “enhance the mind and memory, strengthen the senses as well as eliminate sleeplessness and absentmindedness.” But as far as simple drugs go, *balādhur* is given primacy of place in this entry. It is described by numerous medical authorities as possessing a particular quality (*khāṣiyyah*) that is effective against forgetfulness. Yet these same authorities caution that consumption of the nut beyond three grams might cause intrusive thoughts (*waswās*) and skin disorders like leprosy (*baraṣ*) and elephantiasis (*judhām*). Al-Rāzī does report via the ninth-century physician Ibn al-Batrīq that if one consumes even eight grams of *balādhur* in one sitting, death will be inevitable.⁵¹

As the shorter and less practically-orientated handbook of medicine attributed to al-Rāzī, the *Kitāb al-manṣūrī fī al-ṭibb* (*Book of Medicine in Honor of al-Manṣūr*; hereafter the *Manṣūrī*)

[*jayyid lil-ḥifẓ*],” a property it shares with saffron and ginger. See *Hāwī* 1:56.. On this also see Dietrich, A. “Lubān.” In *Encyclopaedia of Islam, Second Edition*, edited by P. Bearman, 2012. More on the importance of this resin below, as well as its various invocation via the terms *kundur* and *lubān*. See also “*Kitāb al-manṣūrī fī al-ṭibb*” (c. 1400), *World Digital Library, Library of Congress, Mansuri Collection, Ms. 4276*, f. 35r.

49 *Hāwī* 1:56. In his *Muḥadārāt*, al-Iṣfahānī comments that some individuals from his hometown would often suffer from headaches, and treat the illness by binding their heads with Chinese cassia (*dār ṣīnī*) and pepper. They did so on the advice of physicians, who claimed it would warm the head as though it were placed in an oven (*hādhā ya ‘mal lil-rā’s yūda’ fī al-tannūr*). See *Muḥadārāt*, 520. As a warming drug this was widely used to cure such ailments; see *Practical Materia Medica of the Medieval Eastern Mediterranean* 143-6.

50 Ibid. 285, 67, 393-4.

51 *Hāwī* 1:56. Cf. *Manṣūrī* fs. 30r-35r.

was written in tribute to the eponymous governor of Rayy and shares much the same content as the *Ḥāwī*. The *Manṣūrī* is organized according to ten thematic chapters, the ninth of which is famed for its discussion of pathology.⁵² Despite its brevity, the *Manṣūrī* nevertheless contains passages evincing strong medical interest in how humoral imbalances can impede the faculty of memory. In a short chapter toward the beginning of the text entitled *Indications that a Man's Nature is Given to Mildness and Perceptivity (dalā'il al-rajul al-raqīq al-ṭab' al-fahm)*,⁵³ al-Rāzī states that a minimally damp constitution is usually the tell-tale sign of a perspicacious nature. Much later into the *Manṣūrī* this point is substantiated by a longer discussion under the subheading *On Treating Those Taken Ill with Languidness (jumūdah) from the Cold*, the Arabic term of which connotes congealed and corrupted humors in the body. Al-Rāzī concisely echoes the content of the *Ḥāwī* in his explanation of how to treat illnesses caused by these substances: one must employ strategies to “warm the body and set to blazing [its] natural heat [*ḥarārah gharīzah*] until it unfurls throughout the extremities.”⁵⁴ *Balādhur* is mentioned as one such strategy under its own subheading, but only after al-Rāzī warns his readers that the drug “is dangerous to take with hot illnesses, for it may kill” the patient by overheating the organs of the head. Milder substances like rosewater (*jullāb*) and pomegranate juice (*mā' rummān*) can be used to gentle these effects of *balādhur* and other potent warming drugs.⁵⁵

The topic of forgetfulness is nevertheless missing from the list of disorders al-Rāzī states specifically relate to the brain. References to the obliterating effects of cold and damp humors on

52 L. E. Goodman, “Al-Rāzī,” in *Encyclopaedia of Islam, Second Edition*, ed. P. Bearman et al., 2012.

53 Abū Bakr al-Rāzī, “*Kitāb al-manṣūrī fī al-ṭibb*” (c. 1400), World Digital Library, Library of Congress, Mansuri Collection, Ms. 4276, f. 13v.

54 Ibid. 72v-73v.

55 Ibid. 110v.

the organ are instead scattered throughout the *Manṣūrī* in sections dealing with phlegmatic fevers, eye ailments, and various forms of meningitis (*sirsām*).⁵⁶ Like most respected literary corpora written by scholars of the medieval period, such lapses in al-Rāzī's suite of medical texts were not immune from the criticism of his subsequent writers. 'Alī b. al-'Abbās al-Majūsī (d. c. 994) composed his seminal *Kitāb kāmīl al-ṣinā'ah al-ṭibbiyyah* (*Book of the Complete Medical Craft*; hereafter the *Kāmīl*) as a handbook assimilating and emending what he deemed to be the incomplete, erroneous, or long-winded works of Hippocrates, Galen, and other physicians referenced by al-Rāzī above, including al-Rāzī himself. Dedicated to the Būyid emir and prodigious patron of medicine, 'Aḍud al-Dawlah (d. 983), in its modern edition the *Kāmīl* fills several volumes with numerous subsections and chapters detailing the theory and practice of medicine. The treatise was exceedingly popular in the decades before the dissemination of Ibn Sīnā's (d. 1037) *Qānūn fī al-ṭibb* (*Canon of Medicine*, hereafter the *Qānūn*), which displaced it as the most highly-esteemed work of medical encyclopedism collected by the medieval ulema. Despite its short-lived preeminence, the *Kāmīl* nevertheless remains a usefully concise and direct statement of the tenth century's cumulative medical erudition.⁵⁷

The *Kāmīl*'s first book includes a wealth of information on illness of the mind, mirroring those of the *Ḥāwī* in terms of both structure and content.⁵⁸ The first book's ninth treatise is

56 Ibid. 155v-165r.

57 Other physicians mentioned by al-Majūsī in his forward include Ahrun, Yūḥannā b. Sarābiyūn and Masīḥ (fl. 786-809). See Françoise Micheau, "'Alī b. al-'Abbās al-Majūsī — Brill," in *Encyclopaedia of Islam, THREE*, ed. Kate Fleet et al. (Leiden: Brill), 2009. The text of the *Kāmīl* quoted here is drawn from the fifteenth-century manuscript currently held in Yale University Historical Medical Library, found under the title "Kitāb Kāmīl Al-Ṣinā'ah al-Ṭibbiyyah al-Ma'rūf Bi-al-Malaki" and the call number Cushing Arabic Ms. 4. See also Isaacs, "Arabic Medical Literature," 342–63 and Joosse and Pormann, "Decline and Decadence."

58 It also mirrors, perhaps unsurprisingly, the corresponding section of al-Rāzī's *For When No Doctor Can Be Found*, to be considered below.

entitled *Diagnosing Diseases of the Internal Organs* (*istidlāl ‘alā al-a‘dā’ al-bāṭinah*), and is crowned by initial subsections on general diagnostic protocol concerning disorders of the head. Following his general statements on conditions of this type, al-Majūsī includes a four-part entry on meningitis (*sirsām*), pleurisy (*birsām*), tumors (*awrām*), and scatterbrainedness (*ikhtilāṭ al-dhihin*). The first lines of the entry make clear to the reader that these maladies are included alongside one another because they are each caused by warm humoral morbidities (*su’ mizāj ḥār*) collecting in the brain or meninges. According to al-Majūsī the worst such cases are caused by excess blood or yellow bile accumulating in the vascular structures of the head. In cases where yellow bile is to blame, the inherent moisture of the humor could be exacerbated by phlegm entering these structures as well, causing a weak fever, faltering consciousness, and scattered thought. Complications arising from black bile mingling with yellow bile in the head would include hair loss (*qara’*), weeping (*bakā’*), restlessness (*wuthūb*), and other melancholic symptoms. Should a mixture of these two biles be further agitated by phlegm, coma (*subāt*) and prolonged confusion (*al-naḥs takūn mukhtalafan mutawātiran*) typically ensue.⁵⁹

With al-Majūsī’s conclusion of this entry a significantly longer one is given on the topic of *Diagnosing Forgetfulness, or the Illness Known as Lethargy, its Causes and its Symptoms* (*fī dalā’il al-nisyān wa hiya al-‘illah al-ma’rūfah bi-līfarghus* [sic]⁶⁰ *wa asbābihi wa ‘alāmātihi*).⁶¹ As a specific form of meningitis caused by dense tumors pressuring the brain, lethargy was universally thought to be caused by the same offending substances underlying forgetfulness.

59 *Kāmil* f. 181v-182r. The remainder of this section deals with the other three illnesses.

60 The partially pointed manuscript of the *Kāmil* housed at Yale University is riddled with similar errors and diacritical lapses. It is certain that this word is to be read as *līthārgūs*; the copyist’s later renderings of *subāt*, or coma, also vary, including *shubāt*, *shabāb* and *sabāb*. More on the disease known as *līthārgūs* below.

61 *Ibid.* 182r.

However, al-Majūsī's identification of forgetfulness as a mere symptom of lethargy no doubt reflects his own understanding of how phlegmatism of the brain affects the memory, since al-Ṭabarī and al-Rāzī did not seem to conflate the two illnesses.⁶² In this entry al-Majūsī soon states more specifically that physicians “say that signs of forgetfulness are due to a frigid meningitis [*sirsām bārid*] besetting the memory [*dhikr*], occurring either because of a morbidly cold and damp humoral constitution [*su' mizāj bārid raṭb*], some phlegmatic substance overtaking the brain [*māddah balghamīyah taghlib 'alā al-dimāgh*] or some waste product originating in the brain [*khur' maqdam min al-dimāgh*].” Al-Majūsī explains that just as standard meningitis is caused by yellow bile predominating in the vascular structures of the head, lethargic forgetfulness “arises from phlegm and moistures overtaking the brain, whose decomposition [in this organ] causes light fevers” and myriad other disturbances, including scattered thought, persistent yawning, slackened jaw, diarrheal cramping, tremors, bloating, darkened complexions, and urinary spray like that of a donkey.⁶³

Thus the excessive dryness of the substances causing meningitis may also trigger bouts of forgetfulness without or without the presence of phlegm. Meningitis caused by black or yellow bile accumulating in the brain is distinguished by sleeplessness, and will advance to the incoherence and coma typical of lethargic meningitis should any phlegm be present as well. Al-Majūsī allows that this presentation of symptoms may seem confusing, since “in aggregate the

62 The Arabic here is from the Greek λήθαργος (*lēthargós*), a disease catalogued by precedent physicians and whose name is cognate to the modern “lethargy.” See Cooper, Glen M. “Ḥunayn Ibn Ishāq's Galen Translations and Greco-Arabic Philology: Some Observations From the Crises (De Crisibus) and the Critical Days (De Diebus Decretoriis).” *Oriens* 44, no. 1–2 (2016): 14. These observations are also in line with those put forward in the previous generation by the students of al-Rāzī, who also stated that this condition of the brain can cause intrusive thoughts (*waswās*) and catalepsy (*qāṭūkhas*), and can be brought on by eating onions to excess; see *Hāwī* 1:54–7.

63 Ibid.

symptoms indicating [standard meningitis] are the same in composition as the symptoms indicating the disease known as [lethargic] forgetfulness.”⁶⁴ Standard meningitis can be ruled out, however, if the patient prefers to lie supine on flat surfaces, taking on the manner of an unresponsive, livid corpse awaiting burial. Women suffering from lethargic meningitis will also experience womb disturbances, and others may have difficulty seeing objects around them (*‘ashan shadīd*) and understanding what is said to them (*takhiff al-‘illah ‘anhā al-tafahhum mā yuqāl lahā*).⁶⁵ Deficits in ratiocination and recollection (*fīkr wa dhikr*) may additionally occur at this point, together or singly. If they occur together, this subset of the larger disorder is most properly called mental stagnation (*humq*) and indicates that the patient mostly likely possesses a frailty of some kind in the brain (*du‘f al-dimāgh*). Otherwise, single deficits in either faculty indicate a simply cold, phlegmatic disposition (*mizāj bārid sādhiḥ balghamī*) of the brain that may or may not be properly pathological. Unresponsiveness and excessive urination do indicate pathology, particularly if further phlegm is generated by the patient’s engaging in insalubrious activity.⁶⁶ These include drinking and bathing in frigid water, as well as eating chilled fruits (*akl al-fākihah al-mubarradah bil-thalj*). Furthermore, the brain’s anatomical affinity (*musharikah*) with other organs of the body, such as the stomach, makes it liable to slip out of humoral balance purely due to dietary irregularity.⁶⁷ Food to which the body is ill accustomed may cause solidities

64 Ibid. Al-Majūsī refers to the memory-degrading disease caused by yellow bile and resembling meningitis as the indeterminately voweled *qirmā* or *qirmā’* in this entry.

65 Ibid. 182v. Additionally, the disorder of languidness (*jumūd*) differs from coma in that the comatose present with rheumy eyes that hardly open, whereas the languid often open their eyes. In this section, and as below, al-Majūsī takes pains to distinguish the disorders from one another despite superficially identical symptoms.

66 Al-Majūsī specifies that such stagnation usually occurs in stages, until reaching parity with the demented minds of the extremely old. Ibid. On the large excretion of liquids, cf. *Manṣūrī* f. 9v.

67 Again, cf. *Manṣūrī* fs. 39r-41v.

to accumulate in the brain's anterior ventricle (*muqaddam*), slackening the organ's overall structure (*istirsāl*) and forming barriers (*sudad*) within it that cause delirium and confusion.⁶⁸

Thus ending his heavily etiological chapter on forgetfulness, al-Majūsī gives little indication of how one might successfully treat its associated symptoms. Nevertheless, the identification of sluggish thought with cold and damp humors, as well as its resolution via warming and drying remedies, was further supported by the polymath and medical theorist Ibn Sīnā in his *Qānūn* the following century. The *Qānūn* differs from the works preceding it in its natural philosophical inflection, a byproduct of Ibn Sīnā's expertise in both the disciplines of medicine and Peripatetic philosophy. The text's widespread popularity in the six hundred years following his death indicates growing scholarly interest in the fuller intellectual assimilation of these traditions by the eleventh century. Ibn Sīnā's response to this demand proved seminal; whereas al-Rāzī and those of his school became closely identified with excellence in the practice of medicine, among the medieval ulema Ibn Sīnā's *Qānūn* rated as a true summation of the natural philosophical principles underlying medical theory.⁶⁹

While the far more authoritative *Qānūn* indeed shows the influence of al-Majūsī's *Kāmil* and other precedent works of medicine throughout, the text offers far more detailed discussions of the topics it covers. These include entries on the mechanics of thought and the function of the memory. In a familiarly structured section explaining how derangement of the mind (*ikhṭilāṭ al-*

68 *Kāmil* 182r.

69 See Isaacs "Arabic Medical Literature," 356-8, as well as Dimitri Gutas, *Avicenna and the Aristotelian Tradition: Introduction to Reading Avicenna's Philosophical Works* (Leiden; Boston: Brill, 2014), "The Heritage of Avicenna: The Golden Age of Arabic Philosophy, 1000-ca. 1350," in *Avicenna and His Heritage*, 2002, 81-97, Jules L. Janssens, "«Experience» (Tajriba) in Classical Arabic Philosophy (al-Fārābī-Avicenna)," *Quaestio*, no. 4 (2004): 45-62; and Jon McGinnis, "Avicenna's Naturalized Epistemology and Scientific Method," in *The Unity of Science in the Arabic Tradition* (Springer, 2008), 129-152.

dhihin), lassitude of thought (*ra'ūnah*) and a stagnant intellect (*ḥumq*) come to pass in humans, Ibn Sīnā gives the following physical explanation:

Heat is the activating vehicle [*fa'ālah*] of thought, which is the movement of the rational pneuma [*rūḥ*], which [in thought] moves by means of [this heat] from the anterior ventricle [*muqaddam*] to the posterior ventricle [*mu'akhkhar*] of the brain, and vice versa. Heat produces and facilitates [this] movement, and cold solidity [*jumūdah*] obstructs it. For this reason the humoral complexion of this part of the brain tends toward the hot.

The brain is furthermore balanced in this hot disposition so as to facilitate the movement of the rational pneuma between areas responsible for imagination (*takhayyul*) and recollection (*tadhakkur*), the latter of which is seated in the posterior of the organ. Ibn Sīnā goes on to state that this is the reason why such disorders are generally treated by subtly warming the brain while also ensuring its requisite moisture is kept in balance. Beyond serious intervention on the order of drug therapy, this can be accomplished by adhering to a diet free of foods that are cold in nature as well as those of extreme heat, so as to prevent the organ from accumulating viscous moistures or drying out, respectively. Ibn Sīnā explains that just as a stagnant or lax mind is caused by phlegmatic moisture accumulating in the brain and preventing the physical movement of thoughts, the derangement of these thoughts in a scatterbrained person can be brought about by a deficit of rational pneuma occasioned by the organ's excessive heat and dryness.⁷⁰

Ibn Sīnā subsequently includes a more comprehensive entry on the degeneration of the recollective faculty (*fasād al-dhikr*), which he views as a disorder akin to lassitude of thought (*naẓīr al-ra'ūnah*). Paraphrasing Galen, he clarifies that such a degeneration generally comes about through cold accumulating in the posterior of the brain, the seat of memory. "Be [this cold] dry or moist," Ibn Sīnā explains, "likenesses [*mithl*] will not be imprinted upon [the brain] and will not be remembered" so long as it is present. The qualities of the humors responsible for this

⁷⁰ *Qānūn* 2:98-99.

cold also come to bear on the pathology of the mind. A simply cold (*sādhij*) humor accumulating in the brain will cause a dazed stupor (*khadar wa sadar*) in a person. But should the humor be both cold and dry, as in the case of black bile, memory of past events may remain intact but newer memories cannot be formed (*lā taqdar ‘alā ḥifẓ al-umūr al-ḥāliyah wa-l-waqtiyah*). Moreover, the patient will be unable to sleep (*sahar*). Should the humor be cold and moist, the patient will experience unconsciousness (*subāt*) and fail to remember events of the past, though they might retain their short-term memory. As above, too much heat can affect the faculty of memory to a disastrous degree as well, due to its tendency to physically slacken (*irkhā’*) the brain. When the posterior of the organ is affected to the point of causing humoral morbidity (*sū’ mizāj*) to occur there, the subject will experience a severe derangement of the mind (*ikhtilāl al-dhihin*). But while Ibn Sīnā claims this form of illness was fairly well known (*wa huwa mim mā jurriba wa shūhida*), he comments that the majority of forgetful and degenerate minds are due to the effects brought on by cold moisture in the brain. In all cases, the medical presentation of forgetfulness should be evaluated by a physician, for even in otherwise healthy people it could indicate impending disease on the order of epilepsy (*ṣar’*), stroke (*saktah*), and lethargic meningitis (*lithārghūs*).⁷¹

For this reason the strategies that Ibn Sīnā recommends to improve the memory center on balancing moisture in the brain and removing cold humors from the body. He first recommends massaging the temples with rough cloth, gently exercising the limbs, and applying warming wraps to the body, as well as aggressively applying cupping glasses to the head (*al-muḥājīm ‘alā al-ra’s bi-lā sharṭ*) and cauteries to the base of the skull on both sides (*yakwī al-kayyatayn khalf al-qafan*). Activities that cool the body are to be strictly avoided, like standing amid gusting

71 Ibid.

winds (*mahabb al-riyāh*), excessive eating and drinking (*imtilā'*), and bathing in cold water. He goes on to state that adhering to a diet balanced in its moisture is of primary benefit, as is consuming or gargling fragrant drugs encouraging a warm, sanguine temperament (*sā'ir al-musakhkhināt min al-muḥammirāt wa-l-gharā'iz wa-l-shamūmāt*). Among these are treatments recommended by al-Ṭabarī and al-Rāzī in the foregoing,⁷² including *balādhur* paste, which is here described as “the most potent thing for strengthening the mind and improving the memory [*taqwīyat al-dhihin wa ifādat al-ḥifẓ*].” Also helpful in this regard is preserve of calamus and long pepper (*al-wajj al-murabban wa-l-dārfilfil al-murabban*), which “both indubitably and substantially enhance the memory [*yazīdān fī al-ḥifẓ ziyādatan bayyanan*]” and have been clinically employed by Ibn Sīnā himself.⁷³ Three recipes for compound medications with which he has also experienced efficacy are next given: one consists of equal parts frankincense, nutsedge, white pepper, saffron, and myrrh mixed with honey, six grams of which is to be taken daily; another, two parts cumin (*filfil kammūn*) and three parts granulated sugar (*sukkar ṭabarzad*), three-fourths of which is to be taken daily on an empty stomach (*'alā al-rīq*) with about four grams of frankincense, and the other third with pepper; another, five parts cumin, one part pepper, two parts calamus, one part nutsedge, two parts harra fruit and one part *balādhur* extract (*'asal balādhur*). One must take care, Ibn Sīnā further states, not to overdose on such drugs: “In the drying of your [brain] beware of desiccating the fundamental moisture [of the

72 He also includes chamomile (*bābūnaj*), yellow melilot (*iklīl al-malik*), goat trotter (*kir'ān al-mā'iz*), lily of the valley (*sūsan*), narcissus (*narjis*), gillyflower (*kīrī*) and others. See *Qānūn* 2:99; recall also the use of some of these substances in al-Rāzī above.

73 Ibid. A similar regimen is proposed by Maimonides which promises to slow “aging, dissolve the phlegm, prevent the vapors from ascending to the brain, strengthen all the senses and remove their lassitude, aid coitus, and dilate the soul.” See Bar-Sela, Ariel, Hebbel E. Hoff, Elias Faris, and Moses Maimonides. “Moses Maimonides’ Two Treatises on the Regimen of Health: Fī Tadbīr Al-Sihhah and Maqālah Fī Bayān Ba’d Al-A’rād Wa-Al-Jawāb ’Anhā.” *Transactions of the American Philosophical Society* 54, no. 4 (1964): 24. See also *Manṣūrī* f. 30r-30v.

organ; *ruṭūbāt aṣlīyah*]. A cold temperament will ensue, and this is among the things that increase forgetfulness...by benumbing and harming the sensuous pneuma [*yukhaddir wa yaḍurr bil-rūḥ al-ḥāss*].”⁷⁴ It would appear from Ibn Sīnā’s echo of al-Rāzī’s *Ḥāwī* on this subject that interest in memory enhancing drugs among the ulema necessitated authors to state both the reported efficacy of these treatments as well as the inherent danger involved with adjusting the moisture of one’s brain.

2.3 Coda: Popular and Monographic Interest in Medicine of the Mind and Memory

Beyond the realm of the more rarified theoretical and practical medical works like the *Qānūn* and others considered above, methods for staving off forgetfulness became a popular subject for other medical genres in demand among urban litterateurs at the approach of the tenth century. Therapeutic and diagnostic texts meant to reach a non-specialist yet highly literate audience were already popular by the tenth century; al-Rāzī’s own *Man lā yaḥḍuruhu al-ṭabīb* (*For When No Doctor Can Be Found*; hereafter the *Ṭabīb*) is explicitly directed toward the lay scholar who nevertheless wished to possess a medical resource for personal use or edification. As was the case in his *Ḥāwī* and al-Majūsī’s *Kāmil*, the topic of forgetfulness and mental decline is explored toward the beginning of the work alongside other disorders of the head like meningitis, pleurisy, and hemiplegia. The entry itself is restricted to but a few lines of text recommending familiar warming remedies like honey with calamus preserve, ginger, pepper, frankincense, granulated sugar, nutsedge, *balādhur* extract, and harra fruit,⁷⁵ to which al-Rāzī here adds another

⁷⁴ *Qānūn* 2:99.

⁷⁵ Listed here twice, under the terms *amlaj* and *halīlaj aswad*. See *Practical Materia Medica* 218-21.

such ingredient in spikenard (*sunbul*).⁷⁶ The humoral reasoning behind these medicinal recipes remains largely the same, and despite the *Ṭabīb*'s broader scholarly audience and concise style the humors responsible for forgetfulness are named and explained for the reader. With its technical detail and brevity in this regard, the *Ṭabīb* clearly anticipates a readership seeking summary though comprehensive knowledge of diseases affecting the mind and memory.⁷⁷

The demand among the ulema for texts on this subject hardly abated in the literary generation subsequent to al-Rāzī's writing. Published in 1995, Bos's edition and translation of the physician Ibn al-Jazzār al-Qayrawānī's (d. 979) *Risālah fī al-nisyan wa-ʿilājihi* (*Treatise on Forgetfulness and its Treatment*, hereafter the *Risālah*) remains the most recent extended study on the clinical and theoretical understanding of forgetfulness in the Islamic medieval period. A prolific author, Ibn al-Jazzār composed a number of monographic works whose titles and topical focus indicate an increasingly common desire among the ulema to have medical knowledge on hand in their professional lives. These were translated into Latin and Hebrew across the later medieval period and distributed widely across the Mediterranean and Indian Ocean. The same is also true of Ibn al-Jazzār's *Risālah*, whose survival either partially or fully across multiple manuscripts in these languages indicates the abiding popularity of the subject in scholarly circles.⁷⁸

76 See Abū Bakr Rāzī, *Kitāb man lā yaḥḍuruhu al-ṭabīb*, ed. Jamāl al-Dīn Maʿārif Parvar (Tehran, 1955), 25. Spikenard was used since antiquity in the resolution of seizure, headache, eye ailments, heart weakness, stomach pains, and urinary complaints. Given the observed vasodilation effect of its warming and drying properties physicians would often use spikenard in place of the more costly cinnamon in the treatment of cold and damp diseases. See *Practical Materia Medica* 289-93. Cf. *Manṣūrī* f. 22v-23r.

77 This reasoning is echoed in the *Ṭabīb*'s entry on headaches, where illnesses of the head producing the symptoms of stupefaction or coma are generally attributed to cold and damp humors like phlegm. Many of the same medicines are useful for the stomach as well, known by physicians for its sympathetic bond with the brain. See *Ṭabīb* 18 and 53-58..

78 The title of Ibn al-Jazzār's treatises is sometimes given as *Mudāwāt al-nisyan wa ṭuruq taqwīyat al-dhākirah*, or *Treating Forgetfulness and Methods for Strengthening the Memory*. See Gerrit Bos. *Ibn Al-Jazzār on*

Perhaps indicative of the manner in which this scholarly interest was broached in conversation with medical practitioners, Ibn al-Jazzār frames his *Risālah* as a response to an older scholar complaining of forgetfulness and poor memorization despite applying himself to his study (*mā ta'arraḍa laka min kathrat al-nisyān wa qillat al-ḥifẓ ma'a dawām al-dirāsah*).⁷⁹ Acknowledging his sources in precedent medical authorities like Galen, Proclus (d. 485), and Paul of Aegina, Ibn al-Jazzār recites the anatomical structures of the brain, the mechanics of thought, the relevance of the posterior ventricle and the quality of its pneuma (*rūḥ nafsānī*) to the faculty of memory, as well as its susceptibility to falling out of humoral balance due to either excessive moisture or dryness in the body. He further comments that there are purely physiological reasons why some individuals will make for poor scholars and incapable socialites:

as regards the opening of this passage [which allows for the transport of the rational pneuma between the ventricles of the brain] there are differences between people, for instance, in speed and slowness; with some it goes fast and because of that these people are sharp-witted and quick at repartee. However, in other people it goes slowly, and therefore they remember and respond slowly, and need to think for a long time.

Citing Galen, Ibn al-Jazzār goes on to explain that sharp-wittedness is further related to the underlying substance of the brain itself (*jawhar al-dimāgh*), which if fine (*laṭīf*) and firm (*thabāt*) and not coarse (*ghalīṭ*) and fluid (*sayyāl*) will lend itself to rapid learning (*sur' al-ta'allum*).⁸⁰

Forgetfulness and Its Treatment: Critical Edition of the Arabic Text and the Hebrew Translations with Commentary and Translation Into English. Psychology Press, 1995. His other works include the *Kitāb al-adwiyah al-mufridah* (*Book of Simple Drugs*), *Ṭibb al-mashāyikh wa-ḥifẓ ṣiḥḥatihim* (*Medicine and Maintenance of Geriatric Health*) and *Zād al-mufāsir wa qūt al-ḥādir* (*Provisions for the Traveller and Nutriment for the Settled*). For a description of the manuscripts constituting Bos's edition of the *Risālah*, their provenance and contents, see Ibid. 5-10. For the widespread popularity of the forgetfulness theme, see also 11-15, a survey which Bos admits is summary and requires further attention. Following Goldziher, however, he cites the presence of the forgetfulness theme in parts of al-Zarnūjī's *Ta'lim* to be explored below, and like his predecessor he unfortunately attributes it to the realm of "magical" thinking or "popular superstition." See also 25-8, and Isaacs "Arabic Medical Literature," 361.

79 Ibid. 28. This a framing device is also employed by authors of *ādāb* to broach the topic in their works, a matter to be considered in the following chapter.

80 Ibid. 28-31.

This extended physiological explanation offered ahead of discussing the means available for enhancing the memory is perhaps due to the fact that Ibn al-Jazzār's imagined reader is of advanced age. The author explains that he will likely not benefit from drugs that are used to enhance the memory and eliminate forgetfulness (*al-adwiyah allatī tazīd fī al-ḥifẓ wa tuzīl al-nisyān*), since the respectively developing and decaying bodies of the very young and very old are in states of humoral flux precluding a straightforward course of therapy. Ibn al-Jazzār characterizes the elderly as particularly marked by the “dominance of phlegm [*istiḥkām al-balgham*] over the temperament of [their] body and brain.” Younger, mature men (*shabbān wa dhūw al-akhāl*) possess bodies with humoral constitutions most apt for lasting retention and recollection of memories (*abqā ḥifẓan wa dhikran*). This is primarily due to their comparatively serene minds, as well as their bodies' optimal balance of moistures (*li-iṭmi'nān ru'ūsihim wa i'tidāl al-ruṭūbah fīhim*).⁸¹

Having expressed these caveats, Ibn al-Jazzār reiterates that forgetfulness occurs in individuals due to dampness sometimes but not always accompanied by cold, which accumulates in the brain and impedes the transit of the rational pneuma. In his view it is therefore “necessary to find a cure and remedy in the drugs which heat the temperament of the brain and remove the phlegm [*tusakhkhin mizāj al-dimāgh wa tunfī al-balgham*],” or the chyme (*kaymūs*) of poorly digested food, from the organ.⁸² He goes on to give a comprehensive list of such drugs, many of which were also given by Ibn Sīnā, al-Rāzī, and al-Ṭabarī above. Apart from taking compound

81 Ibid. 32 and 39. Recall that this is the same gendered point al-Rāzī made in the *Manṣūrī* above, though without reference to age.

82 Ibid. 33-4 and 39-40.

drugs like a *balādhur* electuary,⁸³ Ibn al-Jazzār recommends pepper, charlock, frankincense, pellitory, mountain raisins (*zabīb al-jabal*),⁸⁴ and other warming foodstuffs for consumption in times of forgetfulness. His reader should avoid consuming fruits or their juices, and should instead drink spiced honey. Likewise he should pursue mechanical activities like chewing and sneezing to encourage the expulsion of phlegm from the head, along with rubbing aromatic oils⁸⁵ on it and cupping the base of the skull without proceeding to bloodletting. Ibn al-Jazzār completes the *Risālah* by briefly citing al-Ṭabarī claim that hanging a hoopoe bird (*hudhud*) around the neck will restore forgotten memories, as will consuming the brain of a demoiselle crane (*kurkī*).⁸⁶

83 Including theriacs, hieras, and other aforementioned electuaries. See Ibid 34-5 and 41-2, as well as 25-6, where Ibn al-Jazzār remarks that *balādhur*'s potency is such that it will restore memory even if taken at as little as three grams—*niṣf dirham*, the same amount prescribed by al-Rāzī above.

84 Also known as stavesacre, throughout medieval Islamic medicine and as early as the lifetime of the physician-philosopher al-Kindī (d. 873) this foodstuff was used to dissipate phlegm and cure ailments of the brain such as epilepsy. In Ibn al-Bayṭār's (d. 1248) *Jamī'* the physician classifies stavesacre as a very hot and drying drug: "when chewed [alone] it greatly evacuates phlegm ... when chewed with mastic and frankincense it greatly evacuates phlegm from the head and benefits frailty of speech caused by phlegm [*iḥtibās al-kalām al-kā'in min al-balgham*]. If you have none at hand, it can be substituted with the same amount of pellitory." See Ibn al-Bayṭār: *Kitāb Al-Jāmi'*, 2:489.

85 Primarily derived from plants such as camomile and gillyflower, as above.

86 Bos, *Ibn al-Jazzār* 33-4 and 39-40. On Ibid. 25-6 Bos comments that these two interventions against forgetfulness, as well as one featuring hyena teeth and claws cited from an anonymous physician (*ba'd al-aṭibbā'*) in Ibn al-Jazzār's *Zād al-mufāsīr*, are the result of magical thinking. This is despite their also being attributed to medical authorities like al-Rāzī above, and others Ibn al-Jazzār apparently esteemed as such in his own work—even if a desire to be as comprehensive as possible informed his choice to include them. Whatever the case, such a cursory dismissal overlooks the strong symbolic and medical resonance such birds had throughout the culturally-adjacent societies informing medieval Islamic thought. Within the realm of contemporaneous Chinese medicine, for example, eating cranes of several species was regarded as useful for maintaining or enhancing the vital energy, or *chi/qi* (氣), of the consumer due to the birds' distinct physiology and plumage: "big, powerful, strange-looking birds like cranes and vultures were considered to be very high in *qi*, and thus effective at supplementing the *qi* of the eater." These migratory birds were also used for various medical purposes throughout the Islamic medieval period. For another example, a manuscript of Ibn Bakhtīshū's (fl. 750) *Kitāb manāfi' al-ḥayawān* dating to the mid-fourteenth century (Escorial Ar. 989, fl. 80r) lists the animal's constituent parts as being hot (*ḥār*) and dry (*yābis*) by nature, justifying Ibn al-Jazzār's inclusion of it here on consistent, humoral terms. One should on this point recall Ibn Māṣawayh's counsel to consume the flesh of birds that are dry in nature to combat forgetfulness, as reported by al-Rāzī in *Hāwī* 1:55. See also Anderson, Eugene N. "Birds of the Mongol Empire." *Ethnobiology Letters* 7, no. 1 (2016): 70 and Provencal, Philippe, and Uffe Gjøl Sørensen. "Medieval Record of the Siberian White Crane *Grus*

2.4 Conclusions

As early as the ninth century medical theorists correlated high levels of intelligence and recollective ability with bodies that favored warm and dry humors. Men in the prime of their lives were generally considered to possess such an ideal balance of humors, equipped by their very natures with quicker wits and better memories than other members of society. Yet even within these gendered ranks illnesses primarily brought about by cold and damp humors could threaten the integrity of any individual's mind. Responding to a desire among ulema to anticipate and resolve issues relating to this perceived vulnerability, physicians proposed consistently-reasoned solutions to restore the brain to its proper functioning. These almost always involved warming and drying strategies aimed at readjusting the organ's level of moisture, though deficits in cognition and memory could also be caused by excesses in the humors underlying such therapies in the first place. For this reason, physicians writing for a scholarly audience anxious about these questions recommended that the dangerous task of maximizing one's humoral constitution be best left to experienced medical practitioners. Nonetheless, by the ninth century some medical authors responded to the ulema's evident demand for personal handbooks of medicine by authoring treatises perhaps hyperbolically promising to eliminate the need for medical consultation altogether. Such texts likewise evince scholars' interest in understanding the pathologies and mechanics of the mind so as to maximize their own professional outcomes.

Leucogeranus in Egypt." *Ibis* 140, no. 2 (1998): 333–35, Contadini, Anna. "The Kitab Manafi' Al-Hayawan in the Escorial Library." *Islamic Art* 3 (1989): 33–57 and Contadini, Anna. "The Zoological-Medicinal Material in the Arcadian Library Manuscript." In *Ibn Baklarish's Book of Simples: Medical Remedies between Three Faiths in Twelfth-Century Spain*, edited by Charles Burnett, 133–52, 2008. Similarly featuring distinct plumage and thereby associated with rulership, wisdom and filial piety, the hoopoe was widely viewed as a symbol for encompassing knowledge and perspicacity, as well as an animal of particular medical use in medieval Islamic society. For the important symbolic, medical and cultural associations of the hoopoe in medieval Islamic societies, see Timothy Schum. "From Egypt to Mount Qāf: The Symbolism of the Hoopoe in Muslim Literature and Folklore." *Journal of Islamic and Muslim Studies* 3, no. 1 (2018): 37–57.

Along with other treatises on like subjects, the medical texts considered in the foregoing comprised a repository of medical erudition from which the ulema felt entitled to draw information for resolving their health issues. In the ninth century authors engaged in the translation, systematization, and assimilation of precedent medical cultures transmitted and refined an Antique model of the mind based in clear humoral reasoning. After intersecting with works of clinical experience and practical medicine in the tenth century, the repository of medical erudition available to the ulema broadened to include a vast pharmacological repertoire of medicines and therapies whose observed effect was the resolution of forgetfulness and the strengthening of the human mind. This in turn received additional theoretical, natural philosophical elaboration by the end of the eleventh century with the wide dissemination of Avicennian thought, though more popularized handbooks of medicine document persistent interest in the bare practicalities of managing one's mind with simpler medicines and diets. Yet neither the prestige of theoretical medical knowledge nor that of its practical counterpart waned as the medieval period wore on, but instead inspired a rich commentary tradition that more fully elaborated the place of both within Islamic societies.⁸⁷

Yet despite this fact the ulema evidently harbored ethical and professional reservations about pursuing medical strategies to enhance their mental faculties, citing their known danger,

87 Medicine was only one such arena in which this commentary tradition flourished. See Nahyan Fancy, "Post-Avicennan Physics in the Medical Commentaries of the Mamluk Period," *Intellectual History of the Islamicate World* 6, no. 1–2 (2018): 55–81, Nahyan A. G. Fancy, *Science and Religion in Mamluk Egypt: Ibn al-Nafis, Pulmonary Transit and Bodily Resurrection*, Culture and Civilisation in the Middle East; 37 (London: Routledge, 2013); Nahyan A. G. Fancy, "The Virtuous Son of the Rational: A Traditionalist's Response to the *Falāsifa*," *Avicenna and His Legacy: A Golden Age of Science and Philosophy*, n.d., 217–47; Nahyan A. G. Fancy, "Medical Commentaries: A Preliminary Examination of Ibn al-Nafis's *Shurūḥ*, the *Mūjaz* and Subsequent Commentaries on the *Mūjaz*," *Oriens* 41, no. 3–4 (2013): 525–545, Kamran I. Karimullah, "The Emergence of Verification (*Tahqīq*) in Islamic Medicine: The Exegetical Legacy of Faḥr al-Dīn al-Rāzī's (d. 1210) Commentary on Avicenna's (d. 1037) Canon of Medicine," *Oriens* 1, no. aop (2019): 1–113; Glen M. Cooper, "Medical Crises and Critical Days in Avicenna and After: Insights from the Commentary Tradition," *Intellectual History of the Islamicate World* 6, no. 1–2 (2018): 27–54.

perceived impropriety, or apparent lack of efficacy. Perhaps of all such strategies invoked by medical authorities in the foregoing, *balādhur* is given the most space of all. Invocation of the nut is usually accompanied by an explanation that its main property as a drug is to dispel forgetfulness, though it may be harmful or fatal at improper dosages given its strong warming and drying effect. Indeed, as Kristina Richardson⁸⁸ and Bos has shown elsewhere,⁸⁹ by the fifteenth century the use of the nut as a memory enhancer had become the most common if highly contentious aspect of memory manipulation among ulema of Islamic intellectual societies. Taking the drug was considered imprudent by most of the ulema, who had occasion in their works of *ādāb* to censure its use. In critiquing *balādhur*, however, the ulema nevertheless embraced the remainder of the pharmacopoeia promising enhanced memory and mental acuity. Studying the manner in which authors of *ādāb* explained and justified these other interventions within their treatises will shed further light on the scholarly and pietistic dimensions of the medieval ulema's investment in medical erudition.

88 See Richardson (2012) "Drug Overdose, Disability and Male Friendship in Fifteenth-Century Mamluk Cairo," (2016) "The Evolving Biographical Legacy of Two Late Mamluk Ḥanbalī Judges," and (2012) *Difference and Disability in the Medieval Islamic World: Blighted Bodies*.

89 See Bos (1996) "'Balādhur' (Marking-Nut): A Popular Medieval Drug for Strengthening Memory," (1995) *Ibn Al-Jazzār on Forgetfulness and Its Treatment* and (1995) "Jewish Traditions on Strengthening Memory and Leone Modena's Evaluation," wherein the concerns of Arabic literature are again given their origins in Jewish literature. More on Bos's monograph below.

3. Nature, Embodiment, and Medicine in Scholarly *Ādāb*

I reckon the intellect to be twofold: half-endowed by nature, and half-learned through education. The latter is of no help without the former, just as the sun is of no help to an eye that cannot see.

–Saying attributed to ‘Alī b. Abī Ṭālib (d. 661)⁹⁰

3.1 Introduction

As a broad discourse of ethical and professional self-formation, medieval scholarly *ādāb* universally extols the benefits of pursuing the learned life while elaborating the proper bearing, devotional practice, socialization, and education of the scholar. From its earlier iterations in the tenth century, *ādāb* directed toward the ulema depicted this lifestyle as so demanding on an individual’s personal resources that it was incompatible with any other pursuit. The idealized intellectual society the genre envisioned was starkly hierarchical and inegalitarian in its outlook, closed off to those who were thought to possess poor learning abilities. If the scholar was to succeed at all they would have to be resilient, patient, and perspicacious by their very nature, such that they could thrive even in the most strenuous stages of their education. The scholar was likewise to seek health in both body and mind so that their rational faculties could function without the encumbrance of illness, fatigue, or foul moods. Authors of *ādāb* repeatedly tell us that those who could not meet these high standards were simply unfit for scholarly life. In the early period, educating individuals who by their very nature could neither understand nor benefit from instruction, such as dullards and idiots,⁹¹ was therefore thought of as a waste of time.

90 Notably so in Abū Ḥāmid al-Ghazālī’s (d. 1111) *Iḥyā’* at 101, to be studied below; *Iḥyā’ ‘ulūm al-dīn fī al-qarn al-wāḥid wa-al-‘ishrīn: kitābah mu‘āṣirah li-mawsū‘at al-Ghazzālī: Iḥyā’ ‘ulūm al-dīn*, al-Ṭab‘ah 1. (al-Qāhirah: Dār al-Shurūq, 2004). The rhyming couplet is widely cited and has various attributions beyond ‘Alī, as will be seen below and as is recounted in Franz Rosenthal, *Knowledge Triumphant* at 184. The original Arabic reads: *ra’aytu al-‘aql ‘aqlayn fa-maṭbū‘ wa masmū‘ wa lā yanfa‘ masmū‘ idhā lam yaku maṭbū‘ ka-mā la tanfa‘ al-shams wa daw’ al-‘ayn mamnū‘*.

91 These are actors’ categories translated from ubiquitously used terms like *balīd* and *aḥmaq*, translated respectively above and to be discussed in further detail below.

Persistent declarations made by authors of *ādāb* to this effect led Franz Rosenthal to remark upon the medieval ulema's evident belief in a "very elementary need for 'nature,' [*ṭab'* or *ṭabī'ah*] that is, an inherited physical endowment...essential for their intellectual pursuits."⁹² The ulema argued that it was this suitable inborn nature that inclined the constitutions of a minority of human beings toward their scholarly ranks. Yet in his comments Rosenthal did not mention the deeply philosophical and medical resonance of this belief across Islamic scholarly society. As early as the late-tenth century the Majrīfī and Pseudo-Majrīfī tradition described the *ṭabī'ah* as a corporeal form (*ṣūrah jismiyyah*) inhering within and wielding a determinative role over all physical bodies, including those of human beings.⁹³ Further, in the eleventh century Ibn Sīnā prioritized *ṭabī'ah*'s medical connotations when speaking of how it pertained to these human bodies: "They [i.e., physicians] apply the term [*ṭabī'ah*] to humour, natural heat [*al-ḥarārah al-gharīziyyah*], aspects of the bodily organs (*hay'āt al-a'dā'*), movements, and the vegetative soul."⁹⁴ His identification of the *ṭabī'ah* with the vegetative soul here is important; purely intellectual functions such as memory (*ḥifẓ*), ratiocination (*fikr*), and imagination (*wahm*) were instruments of the rational pneuma, seated in the heart or brain and held apart from other

92 Ibid. 281; see also 298-333.

93 The degree to which natures were fully or partially determinative over the characteristics of beings was a controversial topic of broad relevance debated across multiple disciplines. For those beyond the genre of *ādāb*, see Nomanul, S., D. E. Pingree, and S. Nomanul Haq. "Ṭabī'a." Edited by P. Bearman. *Encyclopaedia of Islam, Second Edition*, and J. van Ess, "Ḍirār b. 'Amr," in the same. Hence the pejorative usage *aṣḥāb al-ṭabā'i'* among theologians criticizing interlocutors who argue for direct causal relationships between natural phenomena based in such natures rather than subsume the efficacy of these under the wont of God's creative prerogative (*'ādah*). For more on the role of this debate in the realm of *kalām*, see Richard M. Frank, "Notes and remarks on the *ṭabā'i'* in the teaching of al-Māturīdī," in *Mélanges d'islamologie: volume dédié à la mémoire de Armand Abel par ses collègues, ses élèves et ses amis*, ed. Armand Abel and Pierre Salmon (Leiden: EJBrill, 1974), 137-49.

94 Nomanul, S., D. E. Pingree, and S. Nomanul Haq. "Ṭabī'a." Cf. Savage-Smith, Emilie. "Were the Four Humours Fundamental to Medieval Islamic Medical Practice?" In *The Body in Balance: Humoral Theory in Practice*, edited by Elisabeth Hsu and Peregrine Horden, 89-106. Oxford: Berghahn Books, 2013.

functions. Seated in the liver, the vegetative pneuma privileged certain appetites according to the humoral constitution conferred by its given *ṭabī‘ah*, and thereby sought to provide optimal nutrition for the body as a whole. Its good functioning implied the good functioning of the rational pneuma, which directed its vegetative counterpart to pursue its appetites in a manner conducive to human flourishing. Less clear, however, was the degree to which a generally good *ṭabī‘ah* could itself directly impact one’s rational faculties.⁹⁵

The ulema’s anxieties about possessing the right kind of *ṭabī‘ah* was discussed in a natural philosophical and, moreover, medical idiom by treatises of *ādāb* from the tenth century through the fourteenth. Seeking this knowledge was laudable in its own right, but the ulema were also curious about the ambiguity of the relationship between the quality of one’s underlying *ṭabī‘ah* and the quality of one’s *‘aql*, or intellect capacities writ large.⁹⁶ It was more or less conceded by natural philosophers that the constitution of one’s *ṭabī‘ah* was fixed at birth, though individual natures varied from person to person and illness might cause abnormal fluctuations every so often. Natural philosophers believed the intellect was more generally susceptible to improvement, having been, as Rosenthal put it, “pushed into the foreground of all epistemology” by an increasingly philosophical ulema “as the presumed instrument of rational human knowledge.”⁹⁷ Since levels of intelligence seemed to vary among individuals much in the way the

95 Ivry, Alfred. “Arabic and Islamic Psychology and Philosophy of Mind.” Edited by Edward N. Zalta. *The Stanford Encyclopedia of Philosophy*. Stanford University, 2012; cf. Cf. Razi’s *Al-Tibb al-Ruhānī*, ed. Paul Kraus, Razi: Opera Philosophica, 27. Arthur J. Arberry, trans., *The Spiritual Physick of Rhazes* (London, 1950), p. 29, as cited there. See also P. Adamson, “Platonic Pleasures in Epicurus and Al-Rāzī,” in *In the Age of Al-Fārābī*, ed. Peter Adamson (London: Warburg Institute, 2008), 87.

96 See Miquel Forcada, “Ibn Bājjā and the Classification of the Sciences in Al-Andalus,” *Arabic Sciences and Philosophy* 16, no. 2 (2006): 287–307.

97 Rosenthal, *Knowledge Triumphant*, 95. It does not seem that the Ashari discourse of a nature’s inviolability with respect to God’s peerless authority to transform entities at will (*iḥālat al-ṭabā‘ah*) came to bear on this

ṭabī‘ah was thought to, authors of *ādāb* were willing to entertain the possibility that the quality of one’s intellect was indeed determined by one’s nature. If a subpar *ṭabī‘ah* did cause a subpar intellect in this way, the question that seemed to follow naturally was whether or not something could be done about it. Informed by increasing familiarity with humoral theory and natural philosophy, authors of *ādāb* treatises developed a medically and ethically charged idiom for debating this fixity of inborn natures and the elasticity of their effect on intellectual function.⁹⁸

In other words, as a genre concerned with articulating the proper behavior, course of study, and devotional practice of the ulema, works of *ādāb* enthusiastically took up what Richard M. Frank termed “the vocabulary of the *ṭabā‘i*”⁹⁹ for their own ends. Authors of *ādāb* broached the topic of inborn natures as it related to the ulema’s stated mission, which involved the ongoing memorization, elaboration, and transmission of knowledge. Treatises from the tenth to eleventh century contended that the *ṭabī‘ah* was central to scholarly life, and that an individual burdened with a poor inborn nature could hardly hope to effect any meaningful change in it. In the following two centuries authors of *ādāb* began to reconsider this position, tempering the permanency of one’s inborn nature with the possibility of acquiring scholarly characteristics like diligence and patience through strenuous effort. No doubt influenced by the synthesis wrought by Abū Ḥāmid al-Ghazālī in his (d. 1111) *Iḥyā’ ‘ulūm al-dīn* (*Revival of the Religious Sciences*; hereafter the *Iḥyā’*), these authors still affirmed the determinative influence of inborn natures

conversation. See Brown, Jonathan AC. “Faithful Dissenters: Sunni Skepticism about the Miracles of Saints.” *Journal of Sufi Studies* 1, no. 2 (2012) at 144-6.

98 See again Timothy Winter’s introduction to Ghazzālī, *On Disciplining the Soul* at I-XCII, where he cites the earlier text by Jaeger, “Aristotle’s Use of Medicine as Model of Method in His Ethics.” *The Journal of Hellenic Studies* 77, no. 1 (1957): 54–61, in reference to the widespread appeal of this idiom.

99 See Richard M. Frank, “Notes and remarks on the *ṭabā‘i* in the teaching of al-Māturīdī,” in *Mélanges d’islamologie: volume dédié à la mémoire de Armand Abel par ses collègues, ses élèves et ses amis*, ed. Armand Abel and Pierre Salmon (Leiden: EJBrill, 1974), 140.

over scholarly aptitudes. They nevertheless proposed practical measures one could take to conjure great intellectual feats from middling endowments. In so doing they developed an idiom that relied on metaphors of healing and diagnostics to explain these measures; just as the best doctor was one continually concerned with the care of his own body and those of his patients, so too did *ādāb* from the twelfth century onward envision the ideal scholar as anticipating and resolving the intellectual diseases threatening to blunt the power of his and his students' inborn natures. It was in this framing that such endowments seemed to play a more pliant role over whether a scholar were able to flourish in their walk of life.¹⁰⁰

3.2 The Changeability of Inborn Natures in Scholarly *Ādāb*

i. Abū Hilāl al-‘Askarī (d. 1005)

Born at the beginning of the tenth century in the region of Khuzestan near the head of the modern-day Persian Gulf, the litterateur Abū Hilāl al-‘Askarī wrote one of the earliest tracts in the maturing genre of scholarly *ādāb*, *al-Ḥathth ‘alā ṭalab al-‘ilm wa-l-ijtihād fī jam‘ihī* (*Enjoining the Search for Knowledge and Diligence in Compiling It*; hereafter the *Ḥathth*). Having seemingly spent the entirety of his career in the Khuzestan region, al-‘Askarī nevertheless had ample access to precedent generations of scholarship through his well-traveled uncle and educator, Abū Aḥmad al-‘Askarī (d. 993).¹⁰¹ Though primarily known to his biographers for his original works of prose and poetry, Abū Hilāl's entry in the *ādāb* genre was

100 See again the introduction to Winter's edition of *On Disciplining the Soul*, particularly its 289th note. On the imbrication of philosophy and science at the discursive level, see Miquel Forcada, *Ética e Ideologia de La Ciencia: El Médico-Filósofo En El Al-Andalus (Siglos X-XII)* (Fundación Ibn Tufayl de Estudios Árabes, 2011) and again Forcada, "Ibn Bājja and the Classification of the Sciences in Al-Andalus."

101 Abū Aḥmad was a noted lexicographer and muḥaddith in his own right. See Fatehi-nezhad, Enayatollah, and Farzin Negahban. "Abū Aḥmad Al-‘Askarī." *Encyclopaedia Islamica* and Azartash Azarnoosh and Farzin Negahban, "Abū Hilāl Al-‘Askarī," *Encyclopaedia Islamica*.

noted for its highly synthetic style and familiarity with the region's past literary traditions. While the record indicates he was often confused for his far more illustrious uncle Abū Aḥmad, his biographer Yāqūt al-Hamawī (d. 1229) set Abū Hilāl apart for having written the *Ḥathth*: “Whenever we mention...al-‘Askarī [the] *adīb*, we mean Abū Hilāl.”¹⁰²

As a whole the *Ḥathth* focuses on the worldly hardships involved with the pursuit of knowledge as counterbalanced by the immense spiritual and intellectual rewards it conveys the seeker.¹⁰³ Its study in modern scholarship has tended to focus on this theme as the most significant of those characterizing the text. For al-‘Askarī the labor of personal edification is beset by constant distraction and temptation, and its rewards are often only won after total physical and mental exhaustion. The difficulty of the scholarly life is such that the aspiring student must be assiduous and resilient by his very nature, even if he only seeks the least bit of knowledge. Acquiring a large degree of it has destroyed even the best-constituted of human beings. “How many a diligent desirer has acquired nothing of knowledge,” al-‘Askarī wonders in the opening of the *Ḥathth*, “despite the extent of his toiling, perseverance and effort, suffering only his wits and mind to be degraded, and his natural giftedness disordered?”¹⁰⁴ Similar pitfalls await those who live lives steeped in knowledge but attempt to educate the hopelessly ignorant, a futile task al-‘Askarī likens to “explaining what sunlight is to a person who cannot see.”¹⁰⁵

102 See again Azartash Azarnoosh and Farzin Negahban, “Abū Hilāl Al-‘Askarī,” *Encyclopaedia Islamica*.

103 On the endurance of this theme see Mottahedeh, Roy. “The Transmission of Learning,” 63–72, Rosenthal, *Knowledge Triumphant*, 280 and Azarnoosh, Azartash, and Farzin Negahban. “Abū Hilāl Al-‘Askarī.” *Encyclopaedia Islamica*.

104 *Ḥathth*, 43. The operative phrase here is *nabbat qarīḥatuhu*, the latter word glossed by the modern editor as a synonym for *ṭabī‘ah*. However, it connotes less the underlying condition or nature of a body enabling giftedness, and more the giftedness so enabled itself.

105 Ibid. 87.

With these warnings al-‘Askarī enumerates a combination of advantages that one must possess in order to succeed amid the harshness of scholarly life. He states that one of his predecessors described the knowledge and piety of the proper scholar as something “impossible to achieve but through six elements: a keen mind [*dhihin thāqib*], lengthy time [at study], ample skill, considerable practice, a proficient teacher, and motivating desire. Should even one of these six be lacking, the scope of one’s knowledge recedes.”¹⁰⁶ At first blush this list seems an uncontroversial and comprehensive set of prerequisites one must possess in order to secure scholarly success. However, an interesting wrinkle is introduced by commentary immediately following this passage, suggesting that in al-‘Askarī’s view there is something more to excelling as a scholar than complementing diligence, skill, and ambition with sound instruction:

The sheikh Abū Aḥmad said, “[This predecessor] did not mention natural disposition [*ṭabī‘ah*], which is not the same as keen intelligence. Have you not considered the perspicacious man [*shā‘ir*] who may be possessed of capacious intelligence [*qad yakūn dhahinan*] but not by natural disposition [*lā yakūn maṭbū‘an*]? He is more intelligent [*a‘qal*] than his colleague and just as meticulous, but his colleague is more perspicacious [*ash‘ar*] than he is, because [the colleague’s] natural disposition helps and broadens his intellect [*‘aql*].”¹⁰⁷

To al-‘Askarī there are clearly those who are more adept than others in their scholarly pursuits due to their possessing this essential, inborn advantage. Some students of knowledge would, in fact, be unable to find success as scholars in its absence. Abū Aḥmad illustrates the need for this nature by relating the following humorous anecdote from al-Nazzām (d. 845), who once bragged, “‘Were I to study the metrics of prosody, I would master them in two days.’ Al-Akhfas [d. 830]

106 *Hathth*, 47-8. Cf. Rosenthal, *Knowledge Triumphant*, 281.

107 *Hathth*, 48-9. This Abū Aḥmad is almost certainly the author’s uncle, mentioned in the foregoing. More so than ‘*āqil*’ the word *shā‘ir* connotes a person who possesses intuitive and minute understanding. Given that Abū Aḥmad was inclined toward literary criticism much like his nephew, however, the poetic valence implied by the word *shā‘ir* should not be overlooked, especially in light of what follows. Cf. Bonebakker, Seeger A. “Adab and the Concept of Belles-Lettres.” *Abbasid Belles-Lettres*, 1990, 16–30.

said, ‘I looked into him, and he would not have known a vowel from a consonant were he given two months.’”¹⁰⁸ Abū Aḥmad concludes that in this way the requisite “natural disposition eases the path, and brings close what is remote,”¹⁰⁹ just as the lack of such an inborn advantage makes learning all the more difficult.

As Abū Aḥmad’s commentary above makes clear, such a natural disposition is not to be confused with having a keen mind (*al-ṭabī‘ah...hiya ḡhayr al-dhihin al-thāqib*). Such a mind is here explained as “the means for the reception of knowledge and occasion for comprehension [*‘illat al-qabūl wa sabab al-fahm*].” As instruments for the acquisition of knowledge and the means of understanding it, the mind and intellect are to be held distinct from the student’s inborn nature, which can facilitate these capacities or impede them. Though “dullness of mind [*balādah*] confounds understanding” and “the dullard will not benefit from lengthy instruction as a stone will not grow from continuous rain,”¹¹⁰ al-‘Askarī clearly believes the functions of the intellect are related to but not identical with the underlying *ṭabī‘ah*. Indeed al-‘Askarī opposes the terms *balādah* and *thuqūb* as inverse intellectual qualities shortly after having told us that the amount of one’s *thuqūb* is not to be confused for the quality of one’s *ṭabī‘ah*. Students who lack strong intellectual qualities still stand to learn well if their *ṭabī‘ah* allows. To make his point explicit al-‘Askarī declares that while “books cannot raise the dead, make the idiot rational, or sharpen the mind of the dullard, if there is something in the natural disposition facilitating the reception

¹⁰⁸ Ibid. 48.

¹⁰⁹ Ibid. As for these two figures, Abū Ishāq Ibrāhīm al-Nazzām al-Baṣrī was a Mutazili theologian, philosopher and metrist who taught Jāḥiẓ (d. 868). Al-Akhfash al-Awsaṭ al-Baṣrī was a student of the grammarian-linguist Sibawayh (d. 796). See J. van Ess, “Al-Nazzām,” *Encyclopaedia of Islam, Second Edition*, 2012 and Reinhard Weipert, “Al-Akhfash,” *Encyclopaedia of Islam, THREE*, 2009.

¹¹⁰ *Hathth* 49. The importance of balance to these faculties will be further discussed in the final chapter of this study.

of knowledge [*adnā qabūl*] then books will whet, clarify, and hone the intellect.”¹¹¹ Here the *ṭabī‘ah* notably operates independently, albeit to the great advantage of an individual’s intellectual qualities.

This tension in the *Ḥathth* between the *ṭabī‘ah* and the workings of the intellect has been noted by modern secondary scholarship. As noted in the foregoing, in his study of al-‘Askarī’s treatise Franz Rosenthal obliquely referenced Abū Aḥmad’s addition of *ṭabī‘ah* to the six prerequisites of knowledge, simply glossing its inclusion as being due to a “very elementary need for ‘nature,’ that is, an inherited physical endowment, such as Muslim philologists of al-‘Askarī’s type always claimed as essential for their intellectual pursuits.”¹¹² Though elliptically phrased, the purported physicality and elementarity of this endowment in relation to the intellect is significant. In other sections of the *Ḥathth*, al-‘Askarī speaks ambivalently about the prospect of acquiring positive intellectual traits in the absence of a suitable nature. For example, we are also told that aspects of the intellect like “mental acuity [*dhakā’*], giftedness [*jawdat al-qarīḥah*] and keenness of mind [*thuqūb al-dhihin*] are substances of great value [*jawāhir nafīṣah*]. If the one possessing them seeks knowledge he will indeed reach his goal, for their good character [*jamāluhā*] will be preserved in his spirit [*naḥsihi*] and its benefits there guarded.”¹¹³ Al-‘Askarī’s phrasing would seem to suggest that since one must strive to preserve good character through

111 Ibid. 69.

112 Rosenthal, *Knowledge Triumphant*, 281. In his usage, by “philologist” Rosenthal evidently means a scholar concerned with the preservation of a wide variety of texts and the knowledge they contain, especially concerning the ability to memorize them. See his uses of the word in Ibid. 241, 279 and 282.

113 Ibid. 73. In characterizing the *naḥs* as somewhat apart from the physicality of *ṭabī‘ah* I do not mean to suggest that in medieval Islamic thought such a spirit was deemed nonmaterial, or that Cartesian mind-body dualism obtained in the period. Throughout the medieval era the Islamic conceptualization of the *naḥs* has been variously associated with the intellectual, appetitive or ensouled natures of human bodies. For an overview of these views, see Calverley, E. E., and I. R. Netton. “Nafs.” *Encyclopaedia of Islam, Second Edition*. The topic of the *naḥs* qua passionate spirit of the individual will be taken up in the last chapter of this study.

scholarly activity such traits may be subject to change in relation to the scholar's own diligence. Nevertheless, the strength of their foundation in any given individual appears to remain more or less determined by their natural disposition, since al-‘Askarī states that one must first possess the traits in question before seeking out knowledge.

Al-‘Askarī's *ādāb* treatise evinces brief though undeniable interest as to whether the inborn natures of individual bodies could be more positively disposed toward scholarly life. From the perspective of his writing it would seem that in the discourse of tenth-century *ādāb* such natures were thought of as generally immutable, possessing a fixity precluding meaningful intervention.¹¹⁴ Only the functions of the intellect, held conceptually apart from the *ṭabī‘ah* of the body in which it resided, seem susceptible to strengthening through study. Yet even this is described as a largely futile endeavor without a complementary inborn nature. Al-‘Askarī's ambivalence on this score was such that authors of *ādāb* writing in subsequent centuries demonstrated a similar level of interest and irresolution about the mutability of the *ṭabī‘ah*. Their statements on the matter show that while the scholar's inborn nature was viewed as more or less fixed in this period, there was increasing room to be made for the possibility of changing it for the better.

ii. Khaṭīb al-Baghdādī (d. 1071)

A prolific scholar with works spanning many genres, in the early eleventh century Khaṭīb al-Baghdādī penned several treatises of *ādāb* using literary materials gathered during his travel throughout the intellectual centers of Iraq, Syria, and Persia. His interests lay primarily in the

¹¹⁴ See again Frank, "Notes and remarks on the *ṭabā‘ī*", 140, and cf. the brief discussion of the mutability of the *khulq* with reference to the *ṭab‘* of a body qua humoral constitution (*mā yakūn ṭabī‘īan min aṣl al-mizāj*), given by Ibn Miskawayh in his *Tahdhīb Al-Akhlāq*. Cairo: Al-Taraqqi Press, 1899, at 25 and on to 28.

collection and criticism of hadith, and he received caliphal permission to produce a series of highly contentious lectures on the topic. While al-Baghdādī is perhaps best known for this controversy and his seminal history of the city for which he is named, he is also noted for writing an *ādāb* treatise on the conduct of students and teachers of hadith, entitled *al-Jāmi‘ li-akhlāq al-rāwī wa-ādāb al-sāmi‘* (*Compendium of Transmitters’ Traits and the Conduct of Listeners*, hereafter the *Jāmi‘*). Often presented as a critique of vetting prophetic traditions through written sources alone, the *Jāmi‘* deals more broadly with describing the proper scholarly lifestyle and code of conduct regulating hadith transmission in the era.¹¹⁵

It is within a larger section of the *Jāmi‘* stressing the importance of improving one’s acquisition and recollection of hadith that al-Baghdādī addresses the possibility of effecting positive change in one’s inborn nature. The two reports forming this section’s coda are of primary interest, as they explicitly medicalize debates about the *ṭabī‘ah* in a more explicit manner than al-‘Askarī’s *Ḥathth*. Here Ṣāliḥ b. Muḥammad al-Baghdādī (d. 905), a renowned hadith master, is questioned about the feasibility of medically manipulating one’s nature in pursuit of an improved memory (‘*ilāj al-ḥifẓ*). Ṣāliḥ b. Muḥammad counsels his interlocutor that in his view “there is nothing [of help] but natural disposition [*ṭab‘*], persistence [*ḥirṣ*], perseverance in contemplation [*mudāwamat al-naẓar*], and copious study [*kathrat al-dars*], and all of these have their origin in one’s natural disposition.”¹¹⁶ From the placement of this report, it is evident that such study is to be pursued by emulating the content of the hadith itself in the presence of a community of scholars similarly so dedicated—emulation that is only possible when

115 See Sellheim, R., “al-Khaṭīb al-Baghdādī”, EOI 2.

116 Recall that the term *ṭab‘* is semantically linked to the term *ṭabī‘ah* so as to be synonymous. al-Khaṭīb al-Baghdādī, *Al-Jāmi‘ Li-Akhlāq Al-Rāwī Wa-Ādāb Al-Sāmi‘*, ed. Muhammad al-Hadad, 1st ed. (Maktabat ibn Taymiyyah, 1991), 414.

equipped with the correct nature. These sentiments mirror those given by al-‘Askarī in their hesitation to countenance any means of improving the scholar’s intellect independent of such an inborn advantage. Ṣāliḥ b. Muḥammad even suggests that the desire or ability to pursue careful and adequate study must have a basis in this nature in the first place.

Nonetheless, al-Baghdādī provides further detail as to what exactly constitutes such a desirable *ṭab‘*, expanding upon the rather elliptical information given on the matter by al-‘Askarī a century prior. According to Ṣāliḥ b. Muḥammad an essential aspect of a properly scholarly nature is the body’s balance of black and yellow biles (*sawdā’ wa ṣafrā’*). A tendency toward too much of the former, which causes heightened introspection, and not enough of the latter, which results in excitability, would leave a person ill-suited to learning on a purely physical basis. While measures can be taken to manage certain temporary imbalances caused by environmental or dietary circumstances, in the view of Ṣāliḥ b. Muḥammad this deeper nature is fixed. The proof for this, he argues, is in the general rarity of properly scholarly constitutions among human beings and the lack of evidence that one can artificially approximate it: “Were memory attainable by means of medical manipulation and drugs [*mu‘ālajah wa dawā’*] then kings would have achieved supremacy over us by seizing it. Rather it is a matter of innate character [*khilqah*] and natural disposition [*ṭab‘*].” Being wholly unlike those who are “naturally disposed toward memorization [*man ṭubi‘a ‘alā al-ḥifẓ*],” those who are disposed toward other walks of life will find no help in medical strategies aimed at changing their inborn nature (*man ṭubi‘a ‘alā ghayrihi fa-lā tanfa‘uhu al-mu‘ālajah wa lā al-dawā’*).¹¹⁷

Al-Baghdādī’s privileging this definition of the *ṭab‘* and *ṭabī‘ah* reflects a fuller embrace in *ādāb* of a medically inflected, embodied discourse to describe aspects of the ulema’s socially

117 Ibid.

formative experience by the eleventh century. While al-‘Askarī commented on the indispensability of a scholarly nature in the *Ḥathth*, he did not go into much detail as to what comprised it. In his *Jāmi‘* al-Baghdādī offered to clarify the matter by further and explicitly identifying the *ṭab‘/ṭabī‘ah* with the humors: peevish choleric are quick to forget what they have learned, and pensive melancholics learn what they do only very slowly. The scholar’s body is indeed so central to the processes of learning that constitute the ulema’s emerging professional and pietistic identity that al-Baghdādī here records a petition that the Prophet recommended “for whosoever wishes that God allow them to retain the Quran and [various kinds of] knowledge in their memory.” The manner in which God is implored to accomplish this is fundamentally rooted in the body; the petitioner is instructed to request that God “firmly establish [the knowledge] in my heart, in my hair and in my skin. Mix them into my flesh, my blood and marrow. Busy my body day and night with them, for there is no power or might save that of God!”¹¹⁸ The petition is to be literally incorporated following this recitation: al-Baghdādī tells his readers they should have it “written on a pan cleansed with honey and washed with rainwater gathered before touching the ground, to be drunk for three days on an empty stomach. This will allow [the scholar] to retain memorized material with God’s leave.”¹¹⁹

This devotional interlude, placed within a portion of the *Jāmi‘* meditating on the humoral basis for the ulema’s proper inborn nature, serves to underline the progressively medicalized and embodied discourse through which *ādāb* of the eleventh century sought to describe the

118 Ibid. 402-3.

119 The use of honey, as well as the direction to consume the concoction on an empty stomach over a number of days constituting a multiple of three, closely mirrors medical prescriptions said to be of aid to the memory. Such prescriptions will be discussed in a further chapter below. On the use of such bowls in this medicinal manner, see the relevant chapter by Savage-Smith in Julian Raby, ed., *Science, Tools and Magic* (New York: Oxford University Press, 1997), at 72-100.

professional and pietistic strictures of scholarly life. The body's elemental composition was of clear interest and relevance to the genre's readership, whose familiarity with the medical discourses of the era can be plainly detected in al-Baghdādī's invocation of the humors and drug treatment. Following his writing authors of *ādāb* thus began to invoke the subject of the scholar's *ṭabī'ah* with greater medical specificity. In the century subsequent to the composition of the *Jāmi'* yet another text of *ādāb* included even more specific humoral information on the proper scholarly disposition, presenting it as one among many articles of knowledge that the ulema should possess.

iii. Rāghib al-Iṣfahānī (d. 1108)

The text in question, authored in the late eleventh century by the philologist Rāghib al-Iṣfahānī, is entitled *Disquisitions of the Adīb, with Discourses of the Insightful and Eloquent* (*Muḥāḍarāt al-udabā' wa muḥāwarāt al-shu'arā' wa-l-bulaghā'*, hereafter the *Muḥāḍarāt*). Noted for his profound influence over writers of subsequent centuries, al-Iṣfahānī produced numerous treatises across the disciplines of philosophy, theology, ethics, and exegesis. Many details of his life remain unknown, yet the information that has reached us illustrates an accomplished and prolific literary career. The substance of that career helped constitute what modern historians have described as the Sunni consensus of the era, a moment of heightened self-awareness and professionalization among the ulema driven by investment in shared theological, philosophical, and legal norms.¹²⁰ Ulema of al-Iṣfahānī's generation increasingly understood themselves as discrete class of scholars, solemnly charged with receiving,

¹²⁰ See again Key "Al-Rāghib Al-Iṣfahānī" and E. K. Rowson, "Al-Rāghib Al-Iṣfahānī," ed. C.E. Bosworth (Leiden: Brill, 2012), especially for the bibliographies of these two entries on secondary works containing information that survives about al-Iṣfahānī's life and tremendous literary production.

legitimizing, and transmitting essential articles of knowledge for the sake of humankind. Scant years after his death this mission was taken up by al-Iṣfahānī's intellectual descendants in more formally organized *madrasahs* that further consolidated the ulema's social and professional identity as the arbiters of knowledge.¹²¹

Among the many treatises al-Iṣfahānī authored, the voluminous *Muḥāḍarāt* stands apart as his most celebrated work. It constitutes an essential entry in the developing genre of *ādāb*, serving as a digest of information which the ulema of the late-eleventh century felt was not only relevant but indispensable to their scholarly formation. The text is vast in its scope. Its twenty-five chapters range in topic from feats of oratory to good table manners, while poems, insults, humorous anecdotes, and examples of witty repartee are presented throughout the work for the reader's use either in conversation, correspondence, or composition. This strongly performative aspect of the emerging scholarly identity reached full bloom in this era, and al-Iṣfahānī therefore frames the *Muḥāḍarāt* as a collection of adages, practices, and guiding principles that can serve the scholar at any point in their career. For these reasons the text has been cited as a significant milestone in the transformation of the discourse of *ādāb* from a passive vehicle of personal edification to an actively pursued discipline of ethics, erudition, and professional development.¹²²

121 Key, Alexander, "Al-Raghib Al-Isfahani," in *Essays in Arabic Literary Biography, 1350-1850*, ed. Mary St. Germain and Terry de Young, vol. 1 (Wiesbaden: Harrassowitz Verlag, 2009), 298–306, Yasien Mohamed, "The Ethical Philosophy of Al-Raghib al-Isfahani," *Journal of Islamic Studies* 6, no. 1 (1995): 51–75, Muhammad Qasim Zaman, "Consensus and Religious Authority in Modern Islam: The Discourses of the Ulama," in *Speaking for Islam: Religious Authorities in Muslim Societies*, ed. Gudrun Krämer and Sabine Schmidtke (Leiden: BRILL, 2006), 153–80, Jonathan P. Berkey, "Tradition, Innovation and the Social Construction of Knowledge in the Medieval Islamic Near East," *Past & Present*, no. 146 (1995): 38–65 and Michael Chamberlain, *Knowledge and Social Practice in Medieval Damascus, 1190-1350* (Cambridge: Cambridge University Press, 2002) 69-90. Though essential to forms of political and social legitimacy, learning certainly took place both within and without the madrasah, as attested by Berkey, "'There Are 'Ulamā', and Then There Are 'Ulamā'."

122 For a more in-depth treatment of the structure and import of this work along the lines articulated above, see the unpublished dissertation by Stephanie Bowie Thomas, "The Concept of Muhadara in the Adab Anthology with Special Reference to Al-Raghib Al-Isfahani's 'Muhadarat Al-Udaba'" (Ph.D., Harvard University, 2000).

In this light it is all the more noteworthy that in the incipit of the *Muḥādarāt* al-Iṣfahānī invokes the relevance of inborn natures to scholarly pursuits. This preamble concludes with a rhyming couplet al-Iṣfahānī uses to contextualize his treatise: “The intellect is of two species, one imparted by nature and another by education [*maṭbū‘ wa masmū‘*]. One cannot be cultivated without the other, so I have adduced [here] what I could from each category succinctly and without prolixity.”¹²³ The anecdotes and admonitions that follow revolve around the scholar’s need to acquire and hone both aspects of their intellect, with cautionary tales describing naturally-endowed yet unlearned scholars comparing favorably with well-educated stammerers in debate. In this manner of introduction al-Iṣfahānī underlines the purpose of the *Muḥādarāt* itself: to serve as a diagnostic tool to determine if one is more or less unsuitable for scholarly life, and as a reference guide for the truly scholarly to gracefully deploy such information among their peers.

Al-Iṣfahānī includes more specific information about the relevance of the *ṭabī‘ah* to scholarly success in a subsection of the *Muḥādarāt* entitled *What Has Been Said about Learnedness, Teaching, and Related Matters*, itself located within a larger chapter entitled *On the Intellect, Knowledge, Ignorance, and Related Matters*.¹²⁴ In an echo of al-‘Askarī, he counsels his readers that five conditions are to be met in order for an individual to be considered learned: “a natural disposition conducive to knowledge [*gharīzah muḥtamalah lil-‘ilm*], utter meticulousness, adequate support, subtle inventiveness, and a skillful instructor.”¹²⁵ Given its particular medical resonance, al-Iṣfahānī’s use of the alternative though relatively synonymous

¹²³ *Muḥādarāt* 15. A similar observation is made by Bowie Thomas above, at 159-68.

¹²⁴ Or *fī al-‘aql wa-l-‘ilm wa-l-jahl wa mā yata‘allaq bi-hā* and *mimmā jā’a fī al-ta‘allum wa-l-ta‘līm wa mā yata‘allaq bi-himā*, at *Muḥādarāt* 25 and 65, respectively.

¹²⁵ Ibid. 68.

term *gharīzah* in place of *ṭabī‘ah* in his own rendering of this list indicates no less a physical understanding of the individual’s need for a cooperative nature in order to thrive as a scholar.¹²⁶ It is clear from his other work of scholarly ethics, *al-Dharī‘ah ilā makārim al-sharī‘ah* (*The Expedient Path toward the Noble Qualities of the Revealed Law*; hereafter the *Dharī‘ah*), that al-Iṣfahānī considered these two terms to be quite close in meaning. In this text he offers a brief gloss of the word *ṭab‘*, whose etymology references the quality of steel and wood to be sculpted and bear imprinted images. Al-Iṣfahānī claims that among the several synonymous terms for *ṭab‘* and *ṭabī‘ah*, the word *gharīzah* may be especially used in their place given its connotation of implanting an aspect deeply within a thing (*gharaza* or *gharraza*) such that it is resistant to alternation. Thus he states quite plainly that *gharīzah*, *ṭab‘*, etc. are “names for the capacity [within an individual] that is impossible to alter [*al-quwwah lā sabīl ilā taghyīrihā*].” Other terms such, as *khalq* and *‘ādah*, allow for greater transmutability through instruction and the repetition of desirable acts.¹²⁷

In subsequent remarks in the *Muḥāḍarāt* on individuals who may find it easier or more difficult to learn (*man saḥula ‘alayhi al-ta‘allum wa man ‘asura ‘alayhi al-ta‘allum*) al-Iṣfahānī

126 Recall above the usage of the term *ḥarārah gharīziyyah* in glossing the term *ṭabī‘ah* in a medical context. On the term *gharīzah* in philosophy see D.L. Black, “Avicenna on Self-Awareness and Knowing That One Knows,” in *The Unity of Science in the Arabic Tradition: Science, Logic, Epistemology and Their Interactions*, ed. Shahid Rahman (Dordrecht: Springer Netherlands, 2008), 63–87, Abdelhamid I. Sabra, “The Simple Ontology of Kalām Atomism: An Outline,” in *Evidence and Interpretation in Studies on Early Science and Medicine* (Brill, 2010), 68–78. The term is used by al-Ghazālī in the sense of *ṭabī‘ah*, as will be discussed below; on this see Taneli Kukkonen, “Al-Ghazālī on Error,” in *Islam and Rationality*, ed. Frank Griffel, vol. 2 (Leiden: Brill, 2016), 3–31 and Taneli Kukkonen, “Al-Ghazālī on the Emotions,” in *Islam and Rationality*, ed. Frank Griffel, vol. 1 (Leiden: Brill, 2016), 138–164. This usage of *gharīzah* as well as the influence of al-Iṣfahānī on the work of al-Ghazālī has been noted by Taneli Kukkonen in both “Al-Ghazālī on Error,” in *Islam and Rationality*, ed. Frank Griffel, vol. 2 (Leiden: Brill, 2016), 3–31 and “Al-Ghazālī on the Emotions,” in the same, at 138–164.

127 Notably, al-Iṣfahānī states that his sources do not agree on the final transmutability of character traits. As we shall see below, by the death of al-Ghazālī in the second decade of the twelfth century the scholarly class was prepared to admit the *akhlāq*’s significant degree of changeability. Abū al-Qāsim al-Husayn ibn Muḥammad Rāghib al-Iṣfahānī, *Kitāb al-dharī‘ah ilā makārim al-sharī‘ah*, ed. Abu al-Yazid Abu Zayd al-‘Ajami, al-Ṭab‘ah 1. (al-Qāhirah]: Dar al-Salam lil-taba‘ah wa-l-nashr, 2007), 96-7.

lends additional support to this reading. On quick learners he relates two rhyming couplets: “If one’s natural disposition [*ṭabī‘ah*] is clear of corrupting material [*naqīyah*]” at the time of study, “mental recollection [*adhkār*] suffices with no need for oral repetition [*takrār*].” Such a healthy individual would be one for “whom a quick glimpse [*lahẓ*] suffices with no need for articulation [*lafẓ*],” referencing how such naturally-endowed students might memorize material without relying on the didactic exercise of speaking it aloud. Likening those who cannot efficiently memorize to the ignorant Gog and Magog,¹²⁸ al-Iṣfahānī quotes anonymous physicians (*ḥukamā’*) as having said that “burnishing an untempered sword is a mistake, overexerting an obstinate, wizened beast is distressing, and sowing seeds on salted earth expecting them to flower is ignorant,”¹²⁹ suggesting that those of unsuitable disposition cannot be helped regardless of effort. Al-Iṣfahānī compares these individuals more directly to the elderly, who in his view are notorious for forgetting what they have learned shortly after learning it.¹³⁰

Al-Iṣfahānī also enumerates the various subjects that comprise a proper scholarly curriculum. Among these he lists theoretical medicine as especially important, and subsequently gives it its own detailed entry. Recounting the several virtues of the medical craft, al-Iṣfahānī defines its practice as strictly allopathic and constitutive of the scholar’s *adab*.¹³¹ He relates a

128 Via the invocation of a section of the verse from Quran 18:93: “a people who could hardly understand speech.”

129 Ibid. 69. Recall al-Iṣfahānī’s etymology of the word *ṭab‘* as relating to the tempering of steel.

130 The comparison is no doubt due to the Antique medical notion that the minds of the very old and the very young are in constant flux, such that learning is most difficult. The elderly are also discouraged from sexual intercourse on what seem to be similar grounds at *Muḥāḍarāt* 505. The text also includes humorous anecdotes about young students variously impressing their teachers with their wit or substantially underperforming in their studies because of their stupidity (*balāḍah*); see 79-81. More on these themes below.

131 In his words: “The definition of medicine is posing opposites against opposites [*daf‘ al-ḍidd bil-ḍidd*]” in order to “prolong health and rectify illness.” Ibid. It is defined earlier in the *Muḥāḍarāt* as one of the Greek sciences constitutive of *adab*—namely, the one concerned with “rectifying [*yuqīm*] the body,” much in the same manner that “grammar rectifies the tongue” and “setting one’s affairs aright rectifies one’s lifestyle [*ḥusn al-tadbīr yatawaṣṣil bihi ilā ma‘āshihi*].” See Ibid. 192-3. Ibid. 501-11. The specific diseases and their cures mentioned

report from Ja‘far al-Šādiq (d. 765) stating more specifically the kind of humoral reasoning that the ulema should apply to their bodies. Ja‘far makes explicit reference to the humors of the body in the language of *ṭabī‘ah*, describing it as an entity comprised of elemental friends and foes that the scholar must manage through their medical erudition:

The humors [*ṭabā‘i*] are four. There is blood, which is a servant that might kill its master. There is phlegm, which is an archenemy [*khaṣm aladd*] that must be parried from all sides. There is yellow bile, which is to be treated with medicine at times like a youth would and at times like a king would. And there is black bile, which is like a quaking earth that causes all things above it to tremble.

Of all the humors the most dangerous in his view are phlegm and black bile, which have little to offer the student of knowledge beyond elemental opposition to their intellectual pursuits. Phlegm is an adversarial force that must be guarded against at all times, and black bile serves a purely disruptive purpose. The more neutral humors of blood and yellow bile can be successfully managed through medical intervention, rendered *tadāwī* here as in al-‘Askārī’s *Ḥaṭḥḥ*. From these comments we may surmise that al-Iṣfahānī wishes to encourage ulema to seek a careful balance of each humor in order to maximize their intellectual ability. At the conclusion of this passage al-Iṣfahānī states that if an excess of one of these substances causes an intelligent person

here are fevers (*ḥummā*), conjunctivitis (*ramad*), gout (*niqris*), dropsy (*ḥubūn*), scabies (*jarab*) and catarrh (*zūkām*). Other comments on medicine that al-Iṣfahānī includes here concern the standing of physicians in Islamic society, the consequences of incompetent medical care, the propriety of complaining about falling ill and the duty of all Muslims to visit the sick, at 501-19. In an anecdote mentioned here God informs Moses that he has deputized physicians to deploy the cures he has himself created, though the ultimate fate of their patients is still left to his will. Other poems and anecdotes presented in this section of the *Muḥāḍarāt* revolve around the inevitability and religious import of becoming sick, as well as the means and preferability of being cured. The pietistic worth of enduring illness without desiring a cure was indeed of special importance to the ways in which medieval Muslims understood the ethics of seeking medical care in the period, and the various poems and anecdotes mentioned by al-Iṣfahānī here at times portray illness in a positive light on the plea that becoming sick constitutes a reprieve from punishment in the afterlife. On this see Ragab, Ahmed. *Piety and Patienthood in Medieval Islam*. Routledge Studies in Religion. New York, NY: Routledge, 2018, 95-131 and Gil‘adi, Avner. “‘Šabr’ (Steadfastness) of Bereaved Parents: A Motif in Medieval Muslim Consolation Treatises and Some Parallels in Jewish Writings.” *The Jewish Quarterly Review*, 1989, 35–48.

who understands their body (*‘āqil*) to fall ill, then they will know that seeking a skilled physician (*ṭabīb ḥādhiq*) and discerning caretaker (*qayyim fahim*) will be enough to find a cure.¹³²

Apart from the practical consideration of such illnesses interfering with the daily activities of the ulema, al-Iṣfahānī clearly believed that becoming sick could potentially threaten the soundness of the *ṭabī‘ah* underlying scholarly success. Recall that earlier in the *Muḥāḍarāt* al-Iṣfahānī underlined the importance of ensuring that corrupting material (*naqīyah*) was removed from one’s *ṭabī‘ah* in order to promote the faculty of memory. In like manner al-Iṣfahānī recommends that his readership aspire toward a maximally salutary lifestyle, taking special pains to eliminate indulgences that could introduce *naqīyah* into their nature. Al-Iṣfahānī anecdotally sources this advice from a late-Antique royal court:

One day Anūshiruwān [d. 579] asked his viziers...“What food is most delicious?” They answered, “One which neither disturbs the inborn nature [*ṭabī‘ah*] to the point of irregularity, nor which gravely strangles the neck of its consumer.” Then he asked... “And what drink is most delicious?” and they answered, “One which neither vanishes the intellect from its proper place, nor which disturbs the inborn nature to the point of irregularities.” And he told them this was well said.¹³³

The relevance of the diet to matters of the *ṭabī‘ah* will be addressed more directly in the next chapter of this study; at this point it is important to note al-Iṣfahānī’s endorsement of the idea that one can intervene in the *ṭabī‘ah* by removing sickening, circumstantial detritus in the body. Anūshiruwān’s councilors do not here suggest that one can effect an essential change in one’s nature, but rather state that a bad diet can disturb (*yuhayyij*) such natures. As was the case with al-‘Askarī’s *Ḥathth*, such tension is evident in the contrasting language al-Iṣfahānī’s report uses to describe inborn natures versus the faculties constituting rational thought—the *ṭabī‘ah* and the

¹³² *Muḥāḍarāt* 519.

¹³³ Ibid. 520: “*fā-mā aladhdh al-ṭa‘ām qāla mā lā yuhij ‘alā ṭabī‘ah ‘illatan wa lā yu‘aqqid fī ‘unuq ākilihi munnatan ... fā-mā aladhdh al-sharāb fa-qāla mā lā yuzil ‘aqlan ‘an maḥallihi wa lā yuhij ‘alā ṭabī‘ah shay‘an min ‘ilalihi qāla aḥsanta.*” Anūshiruwān was ruler of the Sassanian Empire from 531 until his death in 579.

‘*aql*, respectively. These rational faculties are far more changeable than the *ṭabī‘ah* itself, to the extent that one’s ‘*aql* may vanish from its seat of influence within the body (*yuzīl ‘an maḥallihi*) amid adverse humoral circumstances.

A similarly medicalized sentiment is expressed at another point in the *Muḥāḍarāt*. In this instance al-Iṣfahānī directly compares the importance of maintaining what one has learned to maintaining the health of the *ṭabī‘ah* by way of the famed translator Ibn al-Muqaffa‘ (d. 760): “Were your heart to stop memorizing knowledge it would grow barren [*aqīman*], just as your nature [*ṭab‘*] would grow sickly [*saqīman*] were you to stop debating it with one another.”¹³⁴ While one must take care to maintain the health of one’s scholarly nature through such rational praxis, its underlying qualities can only be temporarily interrupted or blunted, as though suffering a systemic though transient illness. Yet the tension between this purported lack of changeability in the *ṭabī‘ah* and its liability to some measure of external influence arcs across the *Muḥāḍarāt*. In yet another section of the work the famed poet al-Mutanabbī (d. 965) characterizes those who recite poetry hour after hour seeking to bend their natures to the art as hopelessly foolish: “Successful individuals only delve as deeply as their natural disposition [*ṭab‘*]; those who delve deeper still find only error.”¹³⁵ Here the advantages conferred by an inborn nature clearly cannot be taught, and attempting to reproduce them in one’s study habits might have the opposite intended effect.

¹³⁴ Ibid. 97.

¹³⁵ In the original, “*ablagh mā yuṭlab al-najāḥ bihi al-tab‘ wa ‘ind al-ta‘ammuq al-zalal*,” at Ibid. 112. Of course, al-Mutanabbī is here also making use of the poetical and rhetorical connotations of the words *balāghah*, *ta‘ammuq* and *zalal*—respectively meaning eloquence, exacting language and slippage of the tongue. Recall how in al-‘Askarī’s *‘Hathth* it was the perspicacious and/or best-spoken man [*shā‘ir*] man who benefitted from a natural endowment that cannot be acquired through study.

In this manner *ādāb* of the eleventh century records irresolution on the question of inborn natures' potential transmutability. This tension remained a productive site for articulating the extent to which the scholar could effect lasting changes in his disposition through their own effort. Immensely influenced by al-Iṣfahānī's ethical and pedagogical thought, Abū Ḥāmid al-Ghazālī dedicated substantial attention to this topic in his seminal, mystically-inflected work of *ādāb*, the *Iḥyā'*.¹³⁶ Begun toward the end of his life and completed just before the turn of the twelfth century, al-Ghazālī's *Iḥyā'* contains a far more thorough, concentrated, and philosophically nuanced treatment of the *ṭabī'ah*'s alterability. His discussion goes well beyond the comparatively brief commentary offered by al-ʿAskārī, al-Baghdādī, and al-Iṣfahānī above.

iv. Abū Ḥāmid al-Ghazālī (d. 1111)

Though perhaps best known to western scholarship for his pivotal refinement of Ashʿarī theology in light of Ibn Sīnā's radically persuasive philosophical system, al-Ghazālī has also been studied for his influence over centuries of Islamic scholarly ethics, pedagogy, and mystical devotion.¹³⁷ A locus classicus for his thought in these latter areas, the monumental *Iḥyā'* was written during a period of spiritual crisis and reflection following an abrupt departure from the professional scholarly milieu of Baghdad. Al-Ghazālī's motivating principle in the work was to decry the false pietism of his fellow ulema and provide a comprehensive guide to living a moral

136 See Mohamed, "The Duties of the Teacher Al-Iṣfahānī's *Dharī'a* as a Source of Inspiration for Al-Ghazālī's *Mīzān Al-ʿAmal*." Per Brockelmann, al-Ghazālī was said to carry al-Iṣfahānī's *Dharī'ah* with him at all times. It is likely that the *Dharī'ah* preceded and informed the ethical thought underlying the *Muḥāḍarāt*. See Yasien Mohamed, "The Ethical Philosophy of Al-Raghib al-Isfahani," *Journal of Islamic Studies* 6, no. 1 (1995): 51–75 and Brockelmann, C. (2008). *Brockelmann Online*, 1:3: Philology.

137 For an overview of his profound influence—and rehabilitation following decades of his characterization as the archenemy of rationalism in medieval Islam—see Frank Griffel, *Al-Ghazali's Philosophical Theology* (Oxford University Press, 2009) and several of the chapters in the more recent collection of essays *Islam and Rationality*, ed. Frank Griffel, vols. 1 and 2 (Leiden: Brill, 2016).

and edified life. As such, and much like the works of *ādāb* that preceded it, the *Ihyā'* covers a variety of topics relevant to the professional and devotional formation of the ulema. With his own spiritual transformation in mind, the question of whether an individual could condition themselves to a virtuous, scholarly lifestyle if not already naturally inclined to it is a prominent theme explored throughout the *Ihyā'*.¹³⁸

Al-Ghazālī broaches this topic in the seventh section and final chapter of the *Book of Knowledge*, entitled *On the Intellect, its Nobility, its Reality, and its Divisions*. Here he states that individuals possess differing intellectual capacities due to possessing divergent inborn natures.¹³⁹ In this regard one's nature relates to one's intellect in its endowment of four distinct rational aptitudes in human beings, known collectively by the metonym *gharīzah*.¹⁴⁰ As for the first endowment, some individuals are better than others in acquiring knowledge through the interrelated faculties of reasoned consideration (*'ulūm nazarīyah*) and ideational skill (*ṣinā'āt khaṭīyah fikrīyah*). It is rare to find someone endowed with “the natural ability to comprehend fields of knowledge in full [*gharīzah yatahayya' bi-hā idrāk al-'ulūm*],” a capacity so fundamentally rooted in the essential being of individuals that al-Ghazālī compares it to “a light buried deeply in their heart.”¹⁴¹ Much as with the authors of *ādāb* considered above, for al-Ghazālī the intellect is to be understood in this context as an instrument of an inborn advantage with which it is related but not synonymous:

138 W. Montgomery Watt, “Al-Ghazālī,” in *Encyclopaedia of Islam, Second Edition*, ed. P. Bearman et al.

139 *Ihyā'* 100-1. The processes of intellection are described in great detail slightly earlier in the text, at 87-8. Cf. Taneli Kukkonen, “Al-Ghazālī on the Emotions,” in *Islam and Rationality*, ed. Frank Griffel, vol. 1 (Leiden: Brill, 2016), at 145.

140 *Ihyā'* 101: “*al-ism yuṭliq 'alā jamī'ihā*.” Recall that *gharīzah* was used by al-Iṣfahānī in the prior century to describe natural dispositions.

141 This organ's role in cognition and memory will be explored in the final chapter of this study.

The bestial division of humankind concerning the full comprehension of acquired knowledge is to be understood with regard to an inborn nature, which is given expression by the intellect. [For the intellect] is like a looking glass that sets itself apart from other objects by relaying images and colors through a quality that is peculiar to it—its polish. Likewise is the eye set apart from [other organs of] the face by the qualities and properties that condition it for seeing. Thus the affinity of this inborn nature for knowledge is like the affinity of the eye for seeing.

More like the polish of a mirror than the mirror itself, and more like the sight of an eye than the eye itself, one's inborn nature predicates the functioning of the intellect yet cannot be conflated with it. A higher quality nature positively influences the ability of certain individuals to acquire and retain knowledge not by serving as the instrument of apperception and cognition themselves, but by properly conditioning this instrument for these processes.¹⁴²

According to al-Ghazālī the second, third, and fourth intellectual endowments that vary in individuals concern their respectively intuitive, inferential, and judicious capabilities. An example of the first endowment is the ability to intuit the difference between inherently possible and impossible things, such as knowing that a person cannot be in two places at once. This is an ability al-Ghazālī describes as rooted in the very essence of a properly discriminating student's nature (*fī dhāt al-ṭifl al-mumayyiz*). Deficits in this intuition indicate that the intellect is compromised, or else vanished completely from an individual due to an inborn nature that trends toward ignorance.¹⁴³ The third endowment that varies in individuals is related to the ability to infer knowledge about current circumstances using their past experiences; al-Ghazālī adds that a person who cannot do so is more precisely called foolish (*ghabī*) than ignorant (*jāhil*). The fourth and final endowment concerns foreseeing the consequences of their actions, ranging from the

¹⁴² Ibid.

¹⁴³ Or, "*innamā al-fāsid an tankar tilka al-gharīzah wa yuqāl la mawjūd illā hādhahi al-'ulūm.*" Ibid. Al-Ghazālī claims that this is what theologians mean when they refer to necessary knowledge (*ḍurūrī*). The explicit humoral qualities of such an ignorant nature are left to the reader to infer.

utterly foolhardy to those who habitually delay gratification to maximize future benefit.¹⁴⁴ For al-Ghazālī it is possible for an individual to approximate the latter two endowments—inference and judiciousness—through learning (*bil-iktisāb*). But the first two—reasoned ideation and intuition—are simply matters of inborn nature (*bil-ṭabʿ*) which cannot be taught. Al-Ghazālī allows that all four of these endowments may be present in a single person’s nature, and that such a person would rate among the best human beings (*khawāṣṣ al-insān*). Yet while such a person acquires knowledge via intellectual faculties enabled by an endowed nature without the aid of some external factor (*muḍammanah fī tilka al-gharīzah bil-fiṭrah...laysat bi-shayʾ wārid ʿalayhā min khārij*), a student can still take measures to increase the influence of an advantageous nature over his intellect. This is accomplished by submitting to rigorous instruction, in the manner that one extracts water from the earth by digging a well and oil from an almond or rose petal by pressing.¹⁴⁵

Yet even among these individuals some can comprehend knowledge more quickly and fully than others (*kathrat al-iṣābah wa surʿat al-idrāk*). In a section entitled *The Explanation for the Intellect’s Differing Inclinations* (*tafāwut al-nufūs fī al-ʿaql*), al-Ghazālī explains that this is due both to the level of their natural endowment (*tafāwutan fī al-gharīzah*) and of their personal diligence in study (*tafāwutan fī al-mumārasah*). He likewise asks his readers to bear in mind that some of the most excellent natural endowments are not in evidence until a certain point in an

144 Ibid. Al-Ghazālī later comments in a section entitled that this level of reasoning is much like a doctor who avoids harming his body by considering the effect of insalubrious activities on his health; see below.

145 Ibid. to 104. As a matter of humility and piety the scholar must affirm that it is God who gifts him his inclinations (*nufūs*) toward scholarly life. For scholars do not ultimately acquire knowledge by memorizing the texts placed before them, but rather by recalling through prescribed acts of study the images and forms God already vouchsafed in their physical constitutions. On this see also Kukkonen, “Al-Ghazālī on the Emotions,” 141-2. To help make this point al-Ghazālī quotes the saying attributed to ʿAlī appearing at the beginning of this chapter.

individual's intellectual maturation. This process lasts well past the onset of adulthood, much "like a light shining upon the spirit [*nafs*] whose dawn breaks and sun rises at the age of discernment [*sinn al-tamyīz*], and only stops increasing and compounding in stages at the age of forty, when it reaches completion."¹⁴⁶ Al-Ghazālī stresses that this maturation is a highly incremental process, as would pertain to any capacity (*quwan*) or attribute (*ṣiffāt*) of an individual's body. He concludes the section expressing wonder at those who deny that disparities of endowment exist when evidence abounds indicating that "people differ in their understanding...such that there are dullards who can receive instruction only long after the teacher's toiling, clever ones who can understand with just a wink and nod, and perfect ones in whom the hidden realities of things arise without instruction."¹⁴⁷

It is, however, in the *Book of Spiritual Exercise* (*Kitāb riyaḍat al-nafs*), a tract of clear Platonic inflection stressing the importance of acquiring good character traits through self-discipline, that al-Ghazālī includes his most noted meditation on the inborn nature of the scholar. The terminology al-Ghazālī marshals to describe his vision of that nature—such as *khuluq*, *akhlāq* and *khalq*—hang in clear tension with the vocabulary of the *ṭab' / ṭabī'ah*, *gharīzah*, and *fiṭrah* considered in the foregoing. The connotations of the former terms convey a strongly extrinsic quality absent from the latter, even as the term *khalq* was commonly used to refer to a God-given physical constitution. In the era before al-Ghazālī the language of *akhlāq* more

146 *Ihyā'*, 103-4. *Sinn al-tamyīz* is the age at which one is able to distinguish what is good from what is harmful—i.e., intellectual maturity, especially as invoked in matters of law and tradition to determine levels of personal culpability and reliability. It was typically thought to begin around the age of seven. See Lane's *Lexicon* 2747, and the anecdote in Florian Sobieroj, *Variance in Arabic Manuscripts: Arabic Didactic Poems from the Eleventh to the Seventeenth Centuries*, (Berlin/Boston: De Gruyter, Inc, 2016), at 56.

147 Ibid. Al-Ghazālī explains that the latter group can boast of having prophets in their ranks. These individuals need no rational or devotional instruction in light of their *ilhām* and *waḥy*, divinely-vouchsafed knowledge of which there are also several different levels. Medical metaphors are notably used here to explain these levels.

properly belonged to ancillary philosophical treatises closely engaged with the Platonic and Aristotelian ethics developed by early Arabic litterateurs. Influential synthesist that he was, al-Ghazālī makes productive use of the tension that exists between these two sets of terms to articulate his own position on the extent to which one might effect changes in one’s inborn nature.¹⁴⁸

In the first chapter of the *Book* al-Ghazālī cites prophetic traditions and other such reports that highlight the praiseworthiness of struggling against the desires of the baser soul (*naḥs*) in order to secure good character (*ḥusn al-khulq*). He ventures to remark that in his experience most commentators on good character tend to focus on the fruits of its achievement rather than how it can be gained in the first place. By way of elucidating what actually comprises the essence of good character al-Ghazālī stresses that humans are dual faceted—they possess an outer, created physical form, or *khalq*, and an inner, characteristic form, or *khuluq*. Thus drawing on a commonplace ethical model of the soul, al-Ghazālī goes on to argue that such characteristic forms are the product of an aspect entrenched deeply in the soul (*ḥay’ah fī al-naḥs*) whence effortlessly flow certain acts regardless of external circumstances—i.e., a truly generous person remains generous whether or not they currently have goods to give away. Synonymous neither with the act of giving itself, the ability to give, nor the ability to conceptualize giving, generosity is instead the very inclination of the soul toward all such senses of giving in aggregate. The original endowment (*fiṭrah*) of every person’s soul enables them to incline one way or the other

¹⁴⁸ Here the clear influence of the discussion of these terms in al-Ḥafānī’s *Dharī’ah* may be felt in earnest; recall the discussion of the differences in transmutability suggested by these terms above, at *Dharī’ah* 96-7. In the Arabic edition of the *Ihyā’* used for this study, this section occurs at 930. Much of the titular content of this text will be treated in a subsequent chapter, on the importance of scholarly regimen. On this see Winter’s introduction, *On Disciplining the Soul*, especially at xxiv-xxv.

on the question; which way one's soul actually inclines is a matter of how one trains this endowment.¹⁴⁹

Al-Ghazālī proceeds from this description to discuss a familiar tripartite division of the soul into the rational, irascible, and vegetative faculties, as well as their role in the Aristotelian ethics of the golden mean (*al-waṣaṭ huwwa al-faḍīlah*).¹⁵⁰ While the practical question of how these faculties might be harnessed to this end will be taken up in a subsequent chapter, it is important to note here how the medically-resonant language of achieving a desirable equilibrium in the soul (*‘adl*) corresponds to an individual's intellectual traits. In the main, a properly ordered and balanced rational faculty disciplines the others by means of its wisdom (*ḥikmah*). Over-application of this instrument in one's daily life results in manipulative behavior like malice and swindling (*khubth wa jarbazah*), whereas its under-application results in simple-mindedness (*balah*) detrimental to spiritual and rational flourishing.¹⁵¹ Yet most interestingly, disciplining the other two faculties in this fashion produces each and every good trait of character available to the human being, including intellectual capacities described in similar terms by precedent authors of *ādāb*. Among the traits that a balanced intellect produces are included mental prowess (*jawdat*

149 *Iḥyā'* 930-5. Note the echo of al-‘Askārī here, particularly his use of the mirror metaphor to identify the precise function of one's inborn nature. As Winter points out in a note on page 17 of his translation regarding this section of the *Iḥyā'*, this Middle Platonic principle is evident in Islamic ethics as early as Miskawayh and is of ultimately Galenic origin, though al-Ghazālī's own formulation of it here was highly influential among ethicists of the following centuries. See Kukkonen, "Al-Ghazālī on the Emotions," 147 and again Erez Naaman, "Nurture over Nature." On the phrase *hay'ah fī al-naḥs* and others related to it, see Naaman at 4.

150 That is to say, the classic identification of a balanced irascible faculty with courage over cowardice and recklessness, and the balanced vegetative faculty with temperance over avarice and indifference. Ibid. 935. For further context on how this inheritance was mediated by the likes of Miskawayh, Ibn Sīnā and al-Iṣfahānī, see also Kukkonen, "Al-Ghazālī on the Emotions," 148-9 and Yasien Mohamed, "The Ethical Philosophy of Al-Raghib al-Iṣfahānī," *Journal of Islamic Studies* 6, no. 1 (1995): 51-75.

151 Ibid. 935-6.

al-dhihin),¹⁵² keenness of mind (*thaqābat al-ra'y*)¹⁵³ and discretion in one's affairs (*ḥusn al-tadbīr*),¹⁵⁴ as well as an ability to make informed assumptions (*iṣābat al-ẓann*) and astutely parse the implications of actions and secret interior afflictions (*tafaṭṭun li-daqa'iq al-a'māl wa khafāyā āfāt al-nufūs*).¹⁵⁵ Lack of such balance causes a variety of malicious behaviors to dominate the soul, including heedlessness (*ghimārah*), idiocy (*ḥamq*), and insanity (*junūn*).¹⁵⁶

Al-Ghazālī is sure to specify that none have personally achieved the assemblage of *all* positive character traits within themselves except the Prophet. Yet in his view each and every human is capable of altering parts of their overlying character through measures of self-discipline.¹⁵⁷ The ability to change one's underlying nature is clearly a related question for him. In the commentary that immediately follows al-Ghazālī states that a man in whom laziness predominates will find it difficult to rectify his character not only because of past shortcomings (*quṣūr*) and failings (*naqṣ*) in the effort to cultivate industriousness, but also because of a foundational malignancy in his nature (*dikhlah*). Such a man will indeed find the process so difficult that he is liable to “claim that effecting change in one's character traits is inconceivable.

152 Phrased as *jawdat al-qarīḥah* by al-‘Askarī at 73 in the *Ḥathth*.

153 See again the consequential nature of a mind which is *thāqib*, or otherwise characterized by *thuqūb* at 69-73 in the *Ḥathth*.

154 Recall the use of such terminology in the *Muḥāḍarāt*, at 192-3, to describe the benefits of medicine.

155 Following the spirit of Winter's translations of these terms in *On Disciplining the Soul*, at 21.

156 Such terms are used in the works of *ādāb* cited above, with the exception of *ghimārah* and *junūn*; see *Ihyā'* 936. Imbalances in the other faculties cause a variety of unsavory character traits not immediately relevant to the topic at hand.

157 Ibid. 936-7. Such a statement is indeed reflective of the inheritances al-Ghazālī enjoyed dating back to al-Fārābī's *Madīnah*; see Naaman, “Nurture over Nature”, 8.

After all, one's naturally-imparted qualities [*ṭibā'*] cannot be changed."¹⁵⁸ The lazy man will contend that he cannot change his inner *khuluq* just as a short man cannot grow taller. He will further argue that his long history of unsuccessfully combating his laziness demonstrates that "such matters are among the exigencies of humoral dispositions and inborn natures, which cannot be dissociated from individual human beings [*muqtaḍan al-mizāj wa-l-ṭab' fa-innahu qaṭṭ lā yanqaṭa' 'an al-ādamī*]."¹⁵⁹

Al-Ghazālī is quick to dismiss the lazy man's belief in the immutability of inborn natures. In the first instance, if his argument were valid then the various means by which Muslims have been legitimately enjoined to transform their characters (*waṣāyā wa muwā'iz wa ta'dībāt*) by God and the prophets would have been for naught. This is notwithstanding the clear ability non-human animals possess to be tamed and trained. Al-Ghazālī does allow that individual temperaments (*jibillāt*) may differ to the extent that some can be less immediately liable to change than others. To his mind there are two factors at play here. The first relates to how deeply one's endowments are rooted in the inborn nature (*quwwat al-gharīzah fī aṣl al-jibillah*), as well as how long an individual has been fostering the endowment in question.¹⁶⁰ The second factor affecting its liability to change relates to the frequency with which a given person has indulged in negative behaviors. If an individual has historically abstained from them and

158 Or "*fā-za'ama anna al-akhlāq lā yutuṣuwwar taghyīruhā fa-inna al-ṭibā' lā yataghayyar*." Ibid. 937. This is in contradistinction to the thought of al-Fārābī, whose thought is clearly evident here, where all such traits are acquired; see Naaman, "Nurture over Nature", 6.

159 Ibid.

160 Ibid. 937-8. According to al-Ghazālī sensuous desire (*shahwah*) is the hardest endowment to transform due to its primal place in the formative nature of all human beings (*fī mabda' al-ṭīrah*). Its development is followed by the that of indignation (*ghaḍab*), acquired after attaining the age of discernment, in turn followed by haughtiness (*takabbur*). Elsewhere in the *Ihyā'*, especially at 892-3, al-Ghazālī directly states that it is impossible for an individual to overcome their inborn disposition if it limits their intellection; they must be satisfied with the compensation of much acquired knowledge. Cf. Kukkonen, "Al-Ghazālī on the Emotions," 148-50.

instead remained close to the state of his primal disposition (*baqiya kamā fuṭira ‘alayhi*), programs meant to bend his nature toward more positive behaviors will more likely succeed. These programs are notably inflected along medical lines, with al-Ghazālī describing their effect in terms of a physician’s method of treatment (*‘ilāj*). Individuals who have let negative indulgences dominate their behavior are less responsive to this form of therapy.¹⁶¹

At this point al-Ghazālī reminds his readers that he is not calling for the total eradication of such negative endowments from an individual’s nature, something he views as an impossible task. Rather, these are to be brought into equilibrium with positive endowments through devotional exercises and rational reflection. God might choose to favor an individual with a truly perfect disposition from birth (*kamāl fīṭrī*), complete with intellectual faculties capable of easily avoiding vice in favor of study and worship. But only prophets like Jesus and Zachariah can boast of such dispositions. Still, in al-Ghazālī’s view a lesser kind of perfection is within the reach of his scholarly audience. “It is not impossible,” he explains, “to acquire a trait that is [usually endowed only by] nature and disposition. Some children are created honest, generous, and brave, and others the opposite. These [traits] can be acquired through habituation, association with those already possessing them and, perhaps, instruction.”¹⁶² The best means of achieving equilibrium is the repetition of actions associated with the desired trait, “until it becomes a part of your nature and a matter of reflex.” For just as “equilibrium of the body’s

161 *Iḥyā’* 938-9. The medical connotations of the terminology of *‘ilāj* will be further explored below. Here al-Ghazālī implies that the older one is the harder it is to effect meaningful change in one’s disposition, a position we have seen precedent works of *ādāb* treat in a medical sense as well.

162 Ibid. 940.

humoral composition [*mizāj*] constitutes its health, and lack of such equilibrium illness,”¹⁶³ the equilibrium of the intellect is subject to both salubrious and insalubrious fluctuations.

In the subsequent chapters of this section al-Ghazālī continues to invoke applying curatives to a sickened body as a metaphor to advocate measures he believed preserved one’s intellectual and spiritual health. His repeated use of medical terms like ‘*ilāj*, *mu‘ālahjah*, and *dawā*’ to explain these interventions betrays an association of properly scholarly dispositions with a medically well-regulated body by the twelfth century. This is made all the more explicit in al-Ghazālī’s claim that the master teacher (*shaykh*) should act as a “physician, who treats [*yuṭabbib*] the souls of his aspirants and applies remedies [*yu‘ālij*] to the hearts of those under his guidance.”¹⁶⁴ This medically-charged idiom remained a persuasive means of articulating the feasibility and desirability of achieving a scholarly disposition in the wake of the *Iḥyā*’s pivotal synthesis.

v. Burhān al-Dīn al-Zarnūjī (fl. 1200)

The Central Asian scholar Burhān al-Dīn al-Zarnūjī made good use of this idiom in his own treatise of *ādāb*, *Ta‘līm al-muta‘allim ṭarīq at-ta‘allum* (*Teaching the Student the Means of Learning*; hereafter the *Ta‘līm*). Little is known about the circumstances of al-Zarnūjī’s life beyond scant details that survive about his theological orientation, juridical school, and the

163 Ibid. The earlier quoted phrase is “*ḥattā yaṣīr dhālik ṭab‘an lahu wa yatasayyar ‘alayhi*.” It is repeated in summary at 941 and 942; see also 943.

164 Ibid. 943, through 951. The idiom echoes throughout the *Iḥyā*’. In a section describing the effects that various registers of speech and qualities of voices have on learning, al-Ghazālī relates that there are some who never feel their souls moved by the sight of verdancy in spring, nor by the sound of soft music. These individuals, we are told, suffer from “a corruption of humoral disposition for which there is no cure.” See Ibid. 746.

members of his scholarly lineage.¹⁶⁵ The *Ta'lim*, a renowned *ādāb* treatise on what constitutes the proper conduct and moral outlook of the scholar as he pursues his education, remains his only extant work. It nevertheless serves as a font of information about medieval Islamic scholarly society in Central Asia. Active in Transoxiana at the turn of the thirteenth century, al-Zarnūjī was clearly aware of precedent works of *ādāb* authored west of his homeland. At the outset of the *Ta'lim* he praises an apparently lost work by al-Iṣfahānī, entitled *Rāghib's Character Traits* (*Akhlāq al-Rāghib*).¹⁶⁶ Moreover, the structure and wording of some portions of the *Ta'lim* bear a striking resemblance to the Persian polymath Naṣīr al-Dīn Ṭūsī's (d. 1274) later *Risālah fī faḍl al-'ilm wa ādāb al-muta'allim* (*Treatise on the Merit of Knowledge and the Ethics of the Student*; hereafter *Ādāb al-muta'allim*). This would strongly suggest that the two authors held sources in common, and that al-Iṣfahānī's influence over al-Ghazālī was felt further east as well.¹⁶⁷

Exceedingly brief, al-Zarnūjī's *Ta'lim* is a tightly-organized treatise framed as an epitome of precedent works on the subject of proper education. As one moves through the text's few dozen leaves al-Zarnūjī dispenses general advice for the scholar's use that progressively takes on

165 In particular, he was a member of the Ḥanafī school of jurisprudence and likewise sympathetic to the Māturīdī school of theology. His teachers included Burhān al-Dīn al-Farghānī al-Marghīnānī (d. 1195), Fakhr al Dīn al-Kashanī (d. 1191 CE) and Ibn Mansūr al-Farghānī (d. 1196). See Huda, Miftachul, Jibrail Bin Yusuf, Kamarul Azmi Jasmi, and Gamal Nasir Zakaria. "Al-Zarnūjī's Concept of Knowledge ('Ilm)." *SAGE Open* 6, no. 3 (2016): 1-12

166 The calls to memorize this text and apply its teachings occur on *Ta'lim* 62 and 69. This text is reported by Brockelmann to survive only in a single manuscript, housed in Berlin under the number 5392 and the title *Kitāb al-akhlāq*. See Brockelmann, C. (2008). *Brockelmann Online*, 1:3: Philology. However, per Yasien Mohamed, "The Ethical Philosophy of Al-Raghib al-Isfahani," *Journal of Islamic Studies* 6, no. 1 (1995): 51–75, the work is now considered lost.

167 Ṭūsī's work is included in a collection of manuscripts (19113b Dār al-kutub al-miṣrīyah, Cairo, fs. 15v-24v), also published as *Ādāb Al-Muta'allim*. Edited by Muhammad Reza al-Husayni al-Jalali. Shiraz, Iran: Islamic Seminary Library of Imam Asr, 1997. The resemblances al-Zarnūjī's work shares with that of Ṭūsī will be pointed out below. Al-Zarnūjī and Ibn Jamā'ah's treatises, the latter to be examined below, remained influential well into the sixteenth century. See El-Rouayheb, Khaled. *Islamic Intellectual History in the Seventeenth Century: Scholarly Currents in the Ottoman Empire and the Maghreb*. Cambridge University Press, 105.

the language of inborn natures. We are told that the Prophet often declared that he sought “refuge in God from worldly ambition [*tamaʿ*], and asked to be led toward a proper nature [*ṭabʿ*].”¹⁶⁸ So too should budding scholars learn to exhibit patience and deliberation in their studies, lest undue ambition cause them to delve into advanced texts before they are ready. Venturing to engage seriously with discourses they scarcely understand at the early stages of education could adversely affect their intellectual prowess, “bringing about a blunting of the nature [*kalālat al-ṭabʿ*] and dissipating perspicacity [*yudhhib al-ḥiṭṭah*].” Ambitious scholars just starting out should instead cleave to the more modest study materials suggested by their teachers, since any delusions of grandeur experienced while studying such elementary texts would simply cause momentary confusion until the student came to their senses.¹⁶⁹

Echoing the advice given by al-Iṣḥānī a century prior, novices and poorly-endowed scholars alike should focus on the repetition of basic texts and their discussion with fellow students before proceeding to more advanced courses of study. The scholar should choose their companions in this task wisely, for “an hour of discussion is better than a month of repetition, provided that one’s partner is a just man possessing an unimpaired nature [*munṣif salīm al-ṭabīʿah*].”¹⁷⁰ Al-Zarnūjī goes on to caution his reader to “beware communal study with irksome men possessed of unsound natures. For one’s nature is a formative condition [*al-ṭabīʿah mutasarrīyah*], one’s character traits are an acquired condition [*al-akhlāq mutaʿaddiyah*], and one’s association with others is an impressionistic condition [*al-mujāwīrah muʾaththirah*].”

168 Burhān al-Dīn Zarnūjī, *Taʿlīm Al-Mutaʿallim Ṭarīq Al-Taʿallum: Al-Murshid Al-Amīn Fī Tarbiyat Al-Banāt Wa-Al-Banīn*, ed. Muṣṭafā. Āshūr, Min Rawāʿiʿ Al-Makhtūṭāt Al-ʿUthmānīyah (al-Qāhirah: Maktabat al-Qurʾān, 1986), 110.

169 Ibid. 101.

170 Ibid. 103-4. The other communal technologies of learning in this vein will be considered in a subsequent chapter of this study.

These comments strongly imply that in al-Zarnūjī's view inborn natures are liable to a measure of influence, and that an unduly rigorous course of study as well as poor company could impair an otherwise sound scholarly disposition. A positive form of influence over one's nature is, however, equally possible. Al-Zarnūjī reports that before his formal education began Abū Ḥanīfah (d. 767) "grew erudite through copious conversation and debate at his shop" as a cloth merchant, where he was fortunate enough to have contact with good-natured scholarly clientele. Al-Zarnūjī is careful to point out that maintaining the health of the intellect and body is an ongoing practice requiring constant discipline, self-application, and gratitude toward the divine. Even if a scholar is fortunate enough to possess a sound nature from birth they still cannot afford to shirk the lifelong responsibility to seek greater knowledge on God's behalf. One indeed risks slipping into disbelief, ignorance, and ill health if they mistake the good functioning of their mind and body for independence from the salutary blessings given only by God.¹⁷¹

The importance of maintaining the health of the scholarly body with reference to inborn natures remains a concern for al-Zarnūjī until the very end of the *Ta'lim*. As he brings the work to a close by commenting on how the ulema can prolong their lives to secure maximal spiritual benefit, al-Zarnūjī's final piece of advice is that the scholar "be careful [to] maintain his health. He must inevitably learn something of medicine; let him find beneficial knowledge in the reports of *Ṭibb al-nabī* [*Prophetic Medicine*] written by the master Abū al-'Abbās al-Mustaghfirī [d. 1041]."¹⁷² This injunction to study a text of prophetic medicine will be taken up in a subsequent chapter of this study. Nevertheless, its mention here serves to underline the importance of

¹⁷¹ Ibid. 104-7.

¹⁷² Ibid. 140. Al-Mustaghfirī was a muhaddith, historian and author of several books related to these disciplines, who is mentioned by al-Dhahabī (d. 1348) in his *Siyar a'lām al-nubalā'*, 17:565. Further evincing the shared sources of this work with Ṭūsī's *Ādāb al-muta'allim*, this work of prophetic medicine is also cited in a similar light and wording at 149 in the latter text. Similar concerns as above are voiced by Ṭūsī from 120-33.

medical erudition to the audience of this genre. The question of a scholar's suitability to the ulema's lifestyle increasingly involved questions of their inborn nature and an understanding of how this nature helped to dictate desirable traits like patience and perspicacity. The mounting intertextual nature of *ādāb* by the lifetime of al-Zarnūjī, as well as the flowering of multiple ancillary literary fields of knowledge like that of prophetic medicine, led authors after the thirteenth century to reference helpful texts in to be read in addition their own volumes of *ādāb*. This trend continued in the fourteenth century, where the importance of this medicalized understanding of the scholarly body and the nature it housed is still strongly evident, albeit in the progressively abbreviated style of the later medieval era.

vi. Badr al-Dīn Ibn Jamā'ah (d. 1333)

Much like al-Zarnūjī had in the previous century, the Shāfi'ī jurist Badr al-Dīn Ibn Jamā'ah framed his fourteenth-century *ādāb* treatise, *Tadhkirat al-sāmi' wa-l-mutakallim fī adab al- 'ālim wa-l-muta'allim* (*Memorandum for Listeners and Speakers on the Ethics of the Scholar and Student*; hereafter the *Tadhkirah*), as a summary of indispensable knowledge for the scholarly class. Ibn Jamā'ah worked in the urban centers of Syria and Egypt, regions that served as a focal points for the Mamluk elite's charitable endeavors in law and education. More so in Cairo than Damascus, young ulema congregated here to train and compete with one another in madrasas, mosques, and other institutions of learning where reputable teachers gathered.¹⁷³ As one of the more important late-medieval manuals on the topic of scholarly and pedagogical

¹⁷³ On this see the work of Jonathan Berkey, "Mamluks and the World of Higher Islamic Education in Medieval Cairo, 1250-1517," *H. Elboudrari (Sous La Direction de), Modes de Transmission de La Culture Religieuse En Islam, Le Caire*, 1993, 93–116, "'Silver Threads among the Coal': A Well-Educated Mamluk of the Ninth/Fifteenth Century," *Studia Islamica*, no. 73 (1991): 109–125 and "Tradition, Innovation and the Social Construction of Knowledge in the Medieval Islamic Near East," *Past & Present*, no. 146 (1995): 38–65.

ethics in this regard, the *Tadhkirah* is indebted to the vast *ādāb* corpus that proceeded it—especially the works of al-Ghazālī and al-Baghdādī.¹⁷⁴ Ibn Jamā‘ah himself admits to the *Tadhkirah*’s purpose as an essentially epitomizing project at the beginning of the text: “What I have perceived as a need among the scholarly population has obliged me...to compose this digest...in which I have compiled sundry aspects of *ādāb* in chapter format—aspects I have not seen gathered together in a single book before—to serve as examples to be emulated.”¹⁷⁵

Ibn Jamā‘ah treats these aspects of *ādāb* in five relatively brief chapters respectively treating the worth of knowledge, the decorous conduct of teachers and students, the correct care of books in their possession, and the proper way to live among fellow students. The relevance of one’s natural disposition to these aspects of the scholarly lifestyle is broached in the second chapter, in a subsection on the conduct the scholar should bear toward themselves and toward pupils while at study (*ādāb al-‘ālim fī nafsihi wa murā‘āt ṭālibihi wa darsihi*). In this regard the scholar should avoid activities that distress them, and be wary of personally aggrandizing pursuits that are as detestable to scholarly natures (*ṭab‘*) as they are to the strictures of custom and law (*‘ādah wa shar‘*). These include cupping, tannery, money changing, and goldsmithing.¹⁷⁶ Association with such pursuits carries the risk of acquiring poor character traits, which necessitates intervention that Ibn Jamā‘ah characterizes through a familiar metaphor: “the medicaments for this tribulation [*adwiyat hādhahi al-baliyah*] are presented in great detail in

174 For further context, see Sebastian Günther, “Education, General,” in *Encyclopaedia of Islam, THREE*, ed. Kate Fleet (Brill) and again El-Rouayheb, *Islamic Intellectual History in the Seventeenth Century*, 105, and Rosenthal, *Knowledge Triumphant* 296–298.

175 *Tadhkirah* 32-3. The word here translated as digest is *mukhtaṣar*.

176 Or “*ḥijāmah wa dabāghah wa ṣarf wa ṣiyāghah*.” Ibid. 51. These trades are listed here because of their proximity to commercial pursuits and relegation to non-Muslim classes due to their poor cultural status. As above, *‘ādah* may here equally refer to a humoral constitution and not necessarily as customary law complementing *shar‘*.

books meant for the softening of the heart [*kutub al-raqā'iq*], so whoever wishes to purify their soul should read these books.”¹⁷⁷ By eliminating polluting traits like deceit (*ghishsh*), foul conduct (*danas*), rancor (*ghill*), envy (*hasad*), or any evil belief and disposition (*sū' 'aqīdatin wa khuluqin*) from the heart, scholars permit the organ to memorize large quantities of knowledge in their stead. Echoing al-Ghazālī and Ibn Sīnā before him, Ibn Jamā‘ah’s phrases the memorization of knowledge in this fashion as “the inner salat—the worship of the heart and the interior devotional act. Just as one can only make salat sound through outer purification of the limbs from filth and adulteration, so too can one only make knowledge—the worship of the heart—sound through purifying [the organ] from adulterating characteristics and contaminating, arrant faults of disposition.” This cleansing can also be accomplished by performing scholarly tasks like compiling, composing, and perusing written sources. Directly invoking al-Baghdādī’s *Jāmi‘*, Ibn Jamā‘ah states these intellectual tasks “make the memory firm, kindle the heart, fortify the disposition [*ṭab‘*], improve eloquence, and secure both good recollection as well as ample, everlasting reward.”¹⁷⁸

In Ibn Jamā‘ah’s estimation the inborn natures of scholars will consistently change for the better if they adhere to intellectual pursuits that minimize exposure to traits of bad character. In addition to characterizing such traits as decaying (*radī*) and sickening (*marīḍ*), Ibn Jamā‘ah employs further medicalized language to explain how one should conceptualize and rectify

177 Ibid. 55. These texts were often compilations of *akhbār* and *aḥādīth* on devotionally soothing or otherwise assuasive themes, thought to encourage pious behavior. Their relevance to *ādāb* has been largely unstudied, though centuries earlier the traditionalist Ibn ‘Abd al-Barr (d. 1071) professed in his *Jāmi‘ bayān al-‘ilm wa faḍlihi* that “whosoever studies grammar will gentle his inborn disposition [*raqqa ṭab‘uhu*].” See Yūsuf ibn ‘Abd Allāh Ibn ‘Abd al-Barr, *Jāmi‘ bayān al-‘ilm wa-faḍlihi wa-mā yanbaghī fī riwayatihī wa-ḥamlīhī* (Riyadh: Dar Ibn al-Jawzi, 1994): 511.

178 *Tadhkirah* 60 and 86. A similar sentiment is expressed by al-Zamakhsharī’s *Rabī‘* at 4:16: “By means of knowledge one comes to know God and affirm his unity as well as obey and worship him. Knowledge is precedent to intellect, which is its result [*al-‘ilm imāma al-‘aql wa huwa fā'iduhu*], which God provisions for the happy and withholds from the miserable.”

intellectual blights that arise from them. This includes his encouraging scholars to redress any ulterior motives they might possess for pursuing scholarly life, the difficulty of which the jurist Sufyān al-Thawrī (d. 778) likened to a harsh course of medical therapy: “I have not treated [*‘ālajtu*] any more severe a thing in me than my intentionality.” Ibn Jamā‘ah stresses that every possibly contaminating distraction should be extirpated from one’s life in this way. Like al-Zarnūjī before him, he counsels that the student of knowledge should “turn away from all intimate relations [*‘ishrah*], especially with those from different walks of life [*ghayr jins*].”¹⁷⁹ His reasoning is clearly based in the susceptibility of inborn natures to the influence of such malefactors: avoiding relations with them “is especially consequential for the student who romps often and rarely thinks, for the natures [of these malefactors] are like thieves”¹⁸⁰ who will rob them of good character. The damage done by these inadvisable friendships are figured as deadly afflictions (*āfah*), among which number “the squandering of one’s life...as well as the loss of one’s wealth, reputation, and religion.”¹⁸¹

While association with malefactors causes such intellectual blights to arise in the budding scholar, sustained contact with worthy teachers and students has the opposite effect. Scholars can hope to acquire good character traits by closely socializing with these positive influences, provided that they are well balanced in their virtue and piety.¹⁸² Again demonstrating his

179 Ibid. 54-7, 87, and 94.

180 Or, “*fa-inna al-ṭibā‘ sarrāqah*.” Ibid.

181 Ibid. See also 49 and 52. Failing these measures, Ibn Jamā‘ah states the scholar will do well to heed the of the law and prophetic tradition, enjoining good works and proper devotion for “the commonweal of all Muslims, in the manner dictated by law and one’s natural disposition [*‘alā ṭarīq mashrū‘ wa-l-maslak al-maṭbū‘*].”

182 The positive effect of proper social association on inborn natures is again reflected in Ibn ‘Abd al-Barr’s earlier work: “The people most deserving of veneration are three: scholars, ordained brothers and rulers. Those who scorn scholars ruin their religion, those who scorn ordained brothers ruin their virtue and those who scorn rulers ruin their worldly possessions. The intelligent man scorns none of them, [and thus] adherence to the law is his

indebtedness to al-Ghazālī, Ibn Jamā‘ah gives this relationship an explicitly medical inflection. The student should “be guided by the instruction of his teacher and not stray from his proposals and direction. He should hew to him as a sickly man hews to a seasoned physician [*ṭabīb māhir*], enacting his counsel, seeking to satisfy his expectations, and deferring to him entirely.”¹⁸³ Even if the teacher acts harshly toward his student, the latter should bear the treatment patiently and not abandon his mentor. In such cases Ibn Jamā‘ah urges the student to recall that “as one perseveres through an illness when their physician shuns them, so too should you persevere through ignorance when your teacher shuns you.”¹⁸⁴ Poor character and a lack of erudition are like deadly diseases that only one’s teacher can cure, speaking again to the persuasive power of the medical idiom characterizing *ādāb* as late as the fourteenth century.

3.3 Conclusions

Since the earliest iterations of *ādāb*, an individual’s inborn nature was understood to exert a determinative influence over their ability to excel in scholarly pursuits, such that only a scant few would pass the ulema’s intellectual muster. Two authors of the tenth and eleventh centuries

religion, mildness his inborn disposition and excellent personal judgement his natural character [*al-ḥilm ṭabī‘atuhu wa al-ra’y al-ḥusn sajiyatuhu*].” He likewise quotes Jesus as having said that one should only dispense knowledge to those who are ready for it, as the inexpert will grow confused. This is just as “a kind doctor dispenses his medicaments only where he knows they will be of help.” See 581 and 447, respectively.

183 *Tadhkirah* 97. See again al-Zamakhsharī at 4:18: “The scholar is the physician of our community [*al-‘ālim ṭabīb ḥādhahī al-ummah*] and the world is its ailment [*dā’uhu*]. Who else could cure an ailment after having sought out its [source]?” This sense is reiterated at 4:20, wherein al-A‘mash (d. 765) asks Abū Ḥanīfah about the authority on which he bases his legal responsa (*masā’il*). His answer seems evasive (*mimmā ḥuddithatnā bihi*), so a frustrated al-A‘mash exclaims, “Oh! You jurists are indeed like doctors, and we are the pharmacists!” Al-A‘mash likely means to compare the expertise of the ulema with the rarefied foundations of medicine. He may also be commenting on the social role of pharmacists as the translators of this discourse for ordinary individuals.

184 As above *ṣabr* is an important pietistic trait not simply in terms of one’s faith in adversity and educational disposition, but also in the manner one should endure illness and other medical hardships. On this see Avner Gil’adi, “‘Ṣabr’”, 35–48 and Ahmed Ragab, *Piety and Patienthood in Medieval Islam*, Routledge Studies in Religion (New York, NY: Routledge, 2018), 95–131.

considered here contended that this *ṭab‘* or *ṭabī‘ah* was somewhat immutable, and that good instruction could not totally overcome the impairments caused by a deficient nature. This is true of al-‘Askarī’s *Ḥaṭṭh*, where an excellent *ṭabī‘ah* is listed as a necessary prerequisite for the pursuit of knowledge, and not as a consequence of that pursuit. The same can be said of al-Baghdādī’s *Jāmi‘*, in which early Islamic scholars are quoted as questioning the feasibility of improving one’s underlying *ṭabī‘ah* in any fundamental way. In the voluminous *Muḥāḍarāt*, however, al-Iṣfahānī directed substantial attention toward the humors underling these natures themselves, warning against allowing excesses of them within the body to interfere with the pursuit of knowledge. He argued that the best means of favorably intervening in one’s *ṭabī‘ah* would be to minimize the occurrence of these deleterious humors corrupting the body. Immensely influenced by al-Iṣfahānī himself, al-Ghazālī’s *Iḥyā’* likewise discussed the *ṭabī‘ah* in humoral terms and described how the array of endowments constituting this nature by and large determined one’s intellectual abilities. Paying close attention to one’s spiritual and physical health can bring about meaningful transformations in this nature, but this would occur mainly in the sense of acquiring good character traits to offset its weaknesses.

The distinctly medical inflection of this content was further accentuated by authors of *ādāb* in thirteenth and fourteenth centuries. Al-Zarnūjī’s *Ta’līm* both admits some degree of mutability for inborn natures and instructs the scholar to investigate medicine as a means of further understanding themselves on this account. For him an appropriate *ṭab‘* was necessary to thrive as a scholar, and while this was largely a formative rather than acquired condition, one’s nature could be improved by entertaining virtuous company and pursuing quality instruction. Al-Zarnūjī also stressed to his readership that pursuing medical erudition so as to better care for

one's body was a matter of prophetic precedent and professional advantage. With knowledge of medicine having attained such a pious and professional profile by the thirteenth century, Ibn Jamā'ah's *Tadhkirah* likewise offered readers epitomized wisdom in this vein, explicitly describing poor character in terms of diseases that require the curing hand of a skilled physician.

Despite a notable lack of consensus over the precise influence of scholarly natures across this extended debate, each author of *ādāb* considered in the foregoing demonstrates similar esteem for the place of medical knowledge in scholarly life. With each passing century authors of *ādāb* expressed a growing willingness to entertain the possibility that one's inborn nature could be positively directed toward scholarly life if not already so disposed. While this nature was perhaps not liable to transformation in and of itself, *ādāb* treatises authored after the tenth century began to suggest that one could improve ancillary intellectual faculties by clearing corrupting humoral materials from the body and practicing the cultivation of desirable intellectual traits. Be they based in one's physical constitution or a matter of acquired character, these obstructions of the intellect were framed by a medical idiom and treated with aggressive if largely figurative medicines. As we have seen in the first chapter of this study, formal medical texts written across this same span of time put forward the possibility that one could literally intervene in one's humoral state by medical means to improve one's intellectual capacities. The chapter that follows will explore how these more literal interventions were brought into *ādāb* as a form of knowledge authors clearly believed were relevant to the embodied experience of the ulema.

4. Diet, Medicine, and Scholarly Memory

The body is a physical substance comprised of the four humors, which are blood, phlegm, black, and yellow bile. It is thereby susceptible to change and transformation.

— *Risālat Ikhwān al-Ṣafā*¹⁸⁵

4.1 Introduction

In the previous chapter we have seen that in the natural philosophical content of medieval *ādāb* the mutability of a human being's humoral nature, variously referred to as *ṭibā'* and *ṭabī'ah*, was subject to considerable debate. From the ninth century onward, medical authorities like al-Ṭabarī, al-Rāzī, Ibn al-Jazzār, and Ibn Sīnā provided a diagnostic and therapeutic framework through which intellectual faculties like memorization, recall, and cognition were understood as liable to change and manipulation on a humoral basis. In their works the symptoms of forgetfulness, poor comprehension, and feeble-mindedness were brought on by specific illnesses that could be resolved with food and drug therapies. These invariably involved the use of drug regimens, minor surgeries, and other medical interventions thought to warm the brain and other organs associated with cognitive processes, as well as limit the incidence of phlegmatic humors in the body as a whole. Al-Rāzī even suggested that individuals pursue these therapeutic measures in the absence of illness as a means of quickening the mechanical phenomena underlying thought and providing a greater capacity for recall. This involved the cultivating of an optimally warm and dry humoral constitution that must be carefully controlled—lest the subject lose their mind.

Such medical writing on questions of the intellect comprised a theoretical and pharmacological repository of knowledge that was as persuasive as it was pervasive in the intellectual societies of the medieval Middle East. Authors beyond the discipline of medicine

¹⁸⁵ *Rasā'il Ikhwān al-Ṣafā' wa-khullān al-wafā'*. Vol. 1. Hindawi CIC, 2018, 98.

itself drew on this repository of knowledge for purposes not directly related to the theory and clinical practice pursued by physicians. The pietistic exercise of compiling medical advice the Prophet gave his Companions (*ṭibb al-nabī*) is one such example of this phenomenon. But by the tenth century authors of *ādāb* had also begun including material in their own treatises related to the treatment and maintenance of scholarly bodies along similarly medical lines, suggesting the possibility of influencing a body's organs and instruments of knowledge—if not the natures of individual bodies themselves—to better suit them to the rigors of scholarly life. This content chiefly related to a desire on their part to intervene in the humoral constitution of otherwise healthy scholars to promote the faculty of memory in the fashion described by earlier medical authorities. Most revealingly, authors of *ādāb* from the tenth through fifteenth centuries recommended advice, simple drugs, and procedures drawn from precedent sources of medicine, uniformly and consistently focusing on methods that warmed the brain and limited the incidence of cold, damp humors in the body.

Much like authors interested in recounting the medicine of the Prophet, authors of *ādāb* made such medical advice pertinent to the interests of their scholarly readership by attributing strategies promoting the intellectual capacities and health of the ulema to past luminaries of unquestionable piety and capacious memory. By the eleventh century this material was in substantial evidence across works of *ādāb*, indicating that the issue was a popular if highly controversial subject among the ulema. As one approaches the twelfth, thirteenth and fourteenth centuries, however, it would appear that while the question of maximizing intellectual potential through medical means remained an area of scholarly interest, the issue had largely become a matter of intertextual knowledge authors of *ādāb* were content to reference in passing without

much explanation. This is perhaps illustrative of the growing predominance of medicine as a secondary career of the increasingly juridical ulema in Egypt and the Levant,¹⁸⁶ and more generally of the progressively standardized literary forms of the later medieval period.¹⁸⁷

Yet in whatever detail they were presented, the proposed means of enhancing the faculty of memory through medical intervention were consistent in their humoral reasoning across centuries and multiple works of *ādāb*. Far from suggesting that the authors of these works were merely recapitulating material from well-known treatises of the past, I would argue that the remarkably coherent transmission of this content instead points to practical concerns on the part of the ulema about performing well in their professional pursuits. Since possessing a capacious memory directly served them throughout their careers and helped them acquire piety associated with learning and teaching, the ulema had ample cause to remain interested in the topic across the medieval period. That medicine played so prominent and constant a role in this interest strongly evinces the ulema's understanding of their embodied experience as essential to their identity as a class of learned believers.

4.2 Modern Reception of Medieval Islamic Concerns regarding Memory and Medicine

The importance of memorization among ulema, both as a skill to be honed and an anxiety to be managed, is not an unstudied aspect of medieval Islamic intellectual society. Ignác Goldziher was the first scholar writing in the twentieth century to catalogue and compile an authoritative collection of the ulema's widespread concerns about the faculty of memory in the

186 See Ridwan, Ali b, Michael W. Dols, and Adil S. Gamal. *Medieval Islamic Medicine: Ibn Ridwan's Treatise "On the Prevention of Bodily Ills in Egypt"*. University of California Press, 1984, 1-41, for a discussion of the profession's changing status among scholars in medieval Egypt.

187 A process Rosenthal referred to as "a steady refinement and completion of the relevant material," *Knowledge Triumphant* 8.

period. In this 1903 festschrift chapter, *Muhammedanischer Aberglaube über Gedächtnisskraft und Vergesslichkeit* (*Muhammadan Superstitions about Memory and Forgetfulness*; hereafter the *Aberglaube*), Goldziher discussed a range of literary material he believed to belong to a genre of folk medicine (*Volksmedizin*) shared and practiced by Muslim and Jewish scholars throughout the medieval period. Like many scholars of Islam working in the first three quarters of the twentieth century, Goldziher's underlying assumption in this piece was that such material did not constitute a true medicine, in that the texts of its practitioners lacked both a scientific explanation for its efficacy and indeed any basis in reality at all. His primary goal is rather to locate the ultimate sources for these beliefs and practices as a means of understanding their transmission in the period.¹⁸⁸

To this end the first part of Goldziher's analysis briefly treats the origins of certain Jewish literary traditions regarding memory before swiftly transitioning to a digest of Arabic literature on the topic, which he argues was derived and expanded from these same sources. His first remark on this Arabic literature is in reference to the *ādāb* treatise by al-Rāghib al-Iṣfahānī discussed in a previous chapter of this study, the *Muḥāḍarāt*.¹⁸⁹ We are simply told via al-Iṣfahānī that from the earliest Islamic centuries scholars believed the following practices imparted forgetfulness in their practitioners (*mimmā yūriṭh al-nisyān*): cupping the nape of the neck, urinating in standing water, eating sour apples, coriander and any foodstuff nibbled at by mice,

188 To his credit, however, Goldziher warns his readers at the outset that his summary is far from exhaustive, focusing mainly on hadith literature and the so-called folk medicine present in medical compendia and monographic studies on the subject of forgetfulness. See Goldziher, Ignác. "Muhammedanischer Aberglaube Über Gedächtnisskraft Und Vergesslichkeit: Mit Parallelen Aus Der Jüdischen Litteratur." In *Festschrift Zum Siebzigsten Geburtstage A. Berliner's: Gewidmet von Freunden Und Schülern*, edited by M. Hildesheimer and A. Freimann, Frankfurt am Main: J. Kauffmann, 1903, 131-4.

189 "Die arabische Litteratur bietet uns in einem encyklopädischen Werke des Abu-l-Ḳāsim al-Rāghib al-Iṣfahānī (gest. 502/1108) folgende Zusammenstellung der gedächtnisschädlichen Mittel." Ibid. 134.

reading tombstones, looking at crucified criminals, walking between coupled camels and flicking lice onto the ground. Upon enumerating these practices Goldziher notes that in its earliest iterations this wisdom was given no scientific explanation, but was instead a superstition solely attributed to the Prophet's cousin and son-in-law, 'Alī b. Abī Ṭālib. This report in al-Iṣfahānī's work, we are further informed, is followed by an anonymous statement that eating broad beans (*baqlān*) harms the memory more in one day than consuming marking-nuts (*balādhur*), a widespread medieval memory enhancing drug, could remedy across a year.¹⁹⁰

As we have seen, however, al-Iṣfahānī's treatise is less purely an encyclopedia in the sense that Goldziher suggests, and more an itemized anthology in the *ādāb* genre extolling the benefits of the ulema's seeking and retaining knowledge, as well as a source providing edifying anecdotes about the disciplines and institutions of Islamic intellectual society in general. The citations drawn by Goldziher occur rather naturally at an early point in this text, to be studied in more detail below, in a subsection wherein al-Iṣfahānī states he has collected "descriptions of knowledge and of the knowledgeable, transmitted with praise or censure, along with descriptions of memorization and forgetfulness."¹⁹¹ With multiple poetic interludes, Quranic excerpts, prophetic hadith, and scholarly *akhbār* typical of the *ādāb* genre, Iṣfahānī discusses the merits of individual scholarly pursuits. Al-Iṣfahānī makes use of many paragraphs of such expository text and citation to stress the importance of cultivating knowledge to the religious, professional and wider social responsibilities ulema increasingly adopted by the twelfth century. In this context,

190 For the various works described by Goldziher, see Ibid. 134-52. More on *balādhur* below.

191 Originally *mimmā jā'a fī waṣf al-'ilm wa-l-ulamā' madḥan wa dhaman wa [waṣf] al-ḥifẓ wa-l-nisyan*. It should be noted that Goldziher here cites a manuscript from 1287 Cairo, and not the edited edition of the *Muḥāḍarāt* that was available in his time. The 1999 edition of the work published by the Sharakat Dar al-Arqam b. Abi al-Arqam in Beirut, cited hereafter, includes the discussion of this topic beginning on page 48. The mention of forgetfulness occurs on page 61.

that al-Iṣfahānī relates reports warning of the harm that forgetfulness might cause to one's reputation and abilities as a scholar would seem less a matter of reflexively magical thinking than it would a practical if apprehensive response to a concern plausibly shared by his readership.

It is in this light that we can best come to understand Goldziher's approach to studying the two reports above, extracted from their context in the *Muḥāḍarāt* and re-presented in isolation as evidence of the superstitious nature of medieval Islamic folk medicine lifted from precedent Jewish sources. Goldziher largely focuses on the content of the reports in question as well as their origin, transmission and manner of ascription, rather than the reasoning behind their purposeful authorial placement in these works. Indeed, he assembles material from a wide variety of literature without placing them into relation to the exigencies of the differing genres from which they are drawn, each entailing specific commitments from their authors and expectations from their audiences. This literature includes medical compendia where remedies for forgetfulness are placed alongside therapies treating other physical ailments, *mujarrabāt* works where tested medicines were recorded for various professional and prosopographical ends, as well as hadith collections and biographies of luminaries whose scholarly practices are recounted for the purposes of edification and emulation. Goldziher does, however, mention the fact that al-Iṣfahānī's reportage eventually made its way into the *ādāb* texts of other writers, notably al-Zarnūjī's *Ta'lim* and al-Ghazālī's *Iḥyā'*, both of which we have seen are important texts in the genre.¹⁹²

¹⁹² Goldziher "Muhammedanischer aberglaube," pp. 134-45. On the importance of the authorial voice in the genre of hadith, see Burge (2011) "Reading between the Lines: The Compilation of Ḥadīth and the Authorial Voice" and (2016) "Myth, Meaning and the Order of Words." On the relationship of this authorial voice to works of medicine as such, see Ragab (2017) *Piety and Patienthood*, especially pp. 95-131. Indeed, Goldziher states that the aforementioned group of practices listed by Iṣfahānī are included verbatim in *Ta'lim al-muta'allim*, and in a different order in a didactic verse by 'Alam al-Dīn al-Sakhāwī (d. 1245). In these sources is added the caution to

For all the shortcomings of this chapter's methods, Goldziher was certainly correct in drawing scholarly attention to the widespread and enduring anxiety surrounding memorization and recall, or *ḥifẓ* and *dhikr/tadhakkur*, respectively, during the medieval period.¹⁹³ As we have seen, these capacities were considered essential to the institutions and techniques of education in the era. That the desire to maintain such an important professional and pietistic skill set should manifest itself repeatedly throughout the *ādāb* genre of the period under study is therefore unsurprising. Neither should it surprise us that such sources debate how the scholar's capacity to memorize, widely understood as a physical process of the brain and other organs associated with the intellect, could be liable to medical intervention so as to maintain or enhance its functioning. To be sure, concerns on this score have not gone unstudied following the writing of Goldziher, though few studies have had the monographic focus of his festschrift chapter.¹⁹⁴ Other scholars,

be further explored below and in the last chapter of this study; namely, that, more so than the aforementioned practices, "it is grief and worry that weaken the faculty of memory." Moreover, all of these practices, their deleterious effects on the memory and their ascriptions are included by Muḥammad b. Mūsā al-Damīrī (d. 1344) in his *Ḥayāt al-Ḥayawān*, under the entry for *mouse*, or *fa'r*, indicating that these were widely cited across a variety of literature. See *Ad-Damīrī's Ḥayāt Al-Ḥayawān, a Zoological Lexicon*, 2:1: 499-500. See also Millán (200) "Practice versus Theory" and (2010) "The Case History in Medieval Islamic Medical Literature: Tajārib and Mujarrabāt as Source."

193 This is also true of European scholarly society, from the medieval period through the Renaissance. See Carruthers, Mary J. *The Book of Memory: A Study of Memory in Medieval Culture*. 2nd ed. Cambridge Studies in Medieval Literature 70. Cambridge, UK ; New York: Cambridge University Press, 2008, especially at 50.

194 Scholars who have remarked on this phenomenon in *ādāb* and indeed wider Islamic society include Berkey, Jonathan P. *The Transmission of Knowledge* (particularly the second chapter, albeit in passing), Chamberlain, Michael. *Knowledge and Social Practice in Medieval Damascus, 1190-1350*. Cambridge: Cambridge University Press, 2002 at 146, (also in passing, though well-described here as constituting a "psycho-pharmacology of memory"), Guenther, Sebastian. "Islamic Education." In *New Dictionary of the History of Ideas*, edited by Maryanne Cline Horowitz, 2:640–45. New York: Charles Scribner's Sons, 2005, Lewicka, Paulina B. "Diet as Culture: On the Medical Context of Food Consumption in the Medieval Middle East." *History Compass* 12, no. 7 (2014): 607–617, *Food and Foodways of Medieval Cairenes: Aspects of Life in an Islamic Metropolis of the Eastern Mediterranean*. BRILL, 2011 and "Medicine for Muslims? Islamic Theologians, Non-Muslim Physicians and the Medical Culture of the Mamluk Near East." *History and Society During the Mamluk Period (1250-1517)* 5 (2014): 83–106, Waines, David. "Dietetics in Medieval Islamic Culture." *Medical History* 43, no. 02 (1999): 228–240, Birgit Krawietz, "Ibn Qayyim Al-Jawziyah: His Life and Works," *Mamluk Studies Review* 10, no. 2 (2006): 19–64 (described in passing as pertaining to "regulation" and "the field of medicine including occult practices", at 55-6), Gino Schallenberg, "The Diseases of the Heart: A Spiritual Pathology by Ibn Qayyim al-Ğawzīya," in *Egypt and Syria in the Fatimid, Ayyubid and Mamluk Eras (Proceedings of the 6th, 7th*

like Bos, have not totally abandoned an approach that privileges establishing an ultimate provenance for this medicine, but nevertheless strive to situate it more properly in its historical context.¹⁹⁵ More recent scholarship refrains from criticizing Islamic medicine for its putatively extraneous pietistic dimension and instead embraces this aspect of the discourse as an essential aspect of its specific intellectual production in the societies under study.¹⁹⁶

Whatever their differences, modern historians commonly, if obliquely, indicate that the use of memory enhancing medicine had become a common if highly contentious aspect of medieval intellectual society. While we have already seen that drugs like *balādhur* were often recommended by physicians to treat memory, there seemed to have been substantial moral and professional stigma attached to it—as if to suggest that one’s own diligence in the task of learning was deficient. Unlike the dietary strategies authors of *ādāb* advocated for the enhancement of one’s memory and intellect, the use of *balādhur* seems to have never been attributed to scholars worthy of emulation. In a notable example, Ibn Ḥajar al-‘Asqalānī’s (d.

and 8th International Colloquium Organized at the Katholieke Universiteit Leuven in May 1997, 1998 and 1999), ed. U. Vermeulen and J. van Steenbergen (Leuven: 2001): 421-8. and “‘Luxury Foods’ in Medieval Islamic Societies.” *World Archaeology* 34, no. 3 (February 1, 2003): 571–80. See also for a discussion of the humors to the *Ikhwān al-ṣafā* Zargar, Cyrus Ali. *Polished Mirror: Storytelling and the Pursuit of Virtue in Islamic Philosophy and Sufism*. Simon and Schuster, 2017, especially I-52.

195 As in the first chapter of this study, see Bos (1996) “‘Balādhur’ (Marking-Nut): A Popular Medieval Drug for Strengthening Memory,” (1995) *Ibn Al-Jazzār on Forgetfulness and Its Treatment* and (1995), and “Jewish Traditions on Strengthening Memory and Leone Modena’s Evaluation,” wherein the concerns of Islamic authors are again given their origins in Jewish literature, and further divided into treatments which are to be considered properly medical and those which are based in “popular superstition.”

196 See Stearns, Justin. “Enduring the Plague: Ethical Behavior in the Fatwas of a Fourteenth-Century Mufti and Theologian.” In *Muslim Medical Ethics: From Theory to Practice*, edited by Jonathan E. Brockopp and Thomas Eich, 38–54, 2008, *Infectious Ideas* (2011), Richardson (2012) “Drug Overdose, Disability and Male Friendship in Fifteenth-Century Mamluk Cairo,” (2016) “The Evolving Biographical Legacy of Two Late Mamluk Ḥanbalī Judges,” and (2012) *Difference and Disability in the Medieval Islamic World: Blighted Bodies*, and Ragab, Ahmed. *Piety and Patienthood in Medieval Islam*. Routledge Studies in Religion. New York, NY: Routledge, 2018, “Islam and Science.” In *The Routledge Companion to Religion and Science*, edited by James W. Haag, Gregory R. Peterson, and Michael L. Spezio, 45–57. Routledge, 2012 and “Making History: Identity, Progress and the Modern-Science Archive.” *Journal of Early Modern History* 21, no. 5 (2017): 433–444.

1449) introduction to his prominent commentary on *Ṣaḥīḥ Bukhārī*, *Faṭḥ al-Bārī* (*The Creator's Victory*, hereafter the *Faṭḥ*), dismisses the nut as having helped Bukhārī memorize the many sound traditions comprising his work. The hadith specialist al-Ḥākim al-Nīsābūrī (d. 1014) is quoted as saying, “I have heard that [Bukhārī] used *balādhur*. [Someone] once privately asked him if it was a drug helpful for memorization [*hal min al-dawā' lil-ḥifẓ*], and he said he did not know. Then he drew quite close and said, ‘I know of nothing more helpful for memorization than a man’s burning desire [for knowledge] and persistence in contemplation.’”¹⁹⁷

There was indeed no shortage of cautionary tales outside the realm of *ādāb* proper to discourage the use of *balādhur*. An ancestor of the aptly-named court historian al-Balādhurī (d. 892) was recorded in biographical dictionaries to have died of a delirium after consuming the nut to excess. Across the eleventh to fourteenth centuries scholars reported suffering the loss of facial hair, brief episodes of insanity, and shortened tempers from its use. Other users experienced leprous lesions and other kinds of skin disorders.¹⁹⁸ The famed Mamluk-era biographer Shams al-Dīn al-Sakhāwī (d. 1497) reported that his teacher, Shihāb al-Dīn al-Ḥijāzī (d. 1474), was “preeminent in sagacity and rapid memorization, until he self-medicated with *balādhur* to such excess that his health became disordered [*bi-ḥaythu kānat salāmatuhu ‘alā ḡhayr qiyās*].” Al-Ḥijāzī was later said to have confessed to colleagues and students that he “was unable to memorize anything without expending unnatural effort,”¹⁹⁹ and was thus obliged to abandon his

197 Ibn Hajar al-Asqalanī. *Faṭḥ Al-Bārī*. Vol. 1. Riyadh: Maktabat al-Malik Fahd al-Watiniyyah, 2001, at 512: the phrase here is “*naḥmat al-raḡul wa mudāwamat al-naẓar*.” The inflection of Bukhārī’s perhaps apocryphal rebuke here—that there is nothing of safe and consistent help for the memory save a perhaps inborn scholarly perseverance—is one we have already encountered across several works of *ādāb* in the preceding chapter.

198 As al-Rāzī himself warned in his discussion of *balādhur* and other warming drugs covered in the previous chapter of this study.

199 See al-Sakhāwī *Daw’* 2:148, cited in Richardson (2012) “Drug Overdose, Disability and Male Friendship in Fifteenth-Century Mamluk Cairo” pp. 168–181, for an important analysis of this anecdote—including al-

career in hadith to pursue the less prestigious study of literature. Further afield from Cairo—and illustrative of the widespread popularity of the drug among varied ranks of scholars—the litterateur, architect, and legalist Abū Ishāq al-Sāhilī (d. 1346) similarly overdosed on the nut and gained ill repute for having claimed to be a prophet during his ensuing delusional state.²⁰⁰ More generally, stories circulated in the thirteenth century featuring students walking through madrasas stark naked, oblivious to their impropriety after having used *balādhur*.²⁰¹ Others would threaten madrasa residents with violence and larceny, later to claim immunity from criminal liability due to the temporary insanity caused by the nut. Mischief-makers would at times smear mud on themselves and act like deranged men, mocking performances widely understood to be in reference to ulema under the influence of *balādhur*. It is also reported that women would spike their husbands' food and drink with large amounts of the nut's extract in order to take advantage of their ensuing confusion.²⁰²

Sakhāwī's account and general comments on the use of marking-nuts as a memory aid. It should be mentioned that Richardson's analysis of the event proceeds from the perspective of disability studies, in particular the manner in which disability features as trope across medieval Arabic erotic poetry.

200 See Hunwick, J. O. "An Andalusian in Mali: A Contribution to the Biography of Abū Ishāq Al-Sāhilī, c. 1290—1346." *Paideuma* 36 (1990): 59–66.

201 As reported by Ibn Kallikān (d. 1282) in his entry for the Iraqi madrasa teacher, jurist and biographer Bahā' al-Dīn b. Shaddād (d. 1234) in *Wafāyāt Al-a'yān*. Edited by Ihsan Abbas. Beirut: Dar Sadir, 1972, at 5:94. Bahā' al-Dīn reminisces that he and his colleagues once "were in the Nizamiyah madrasa in Baghdad when four or five jurists agreed to take [an infusion of] *balādhur* in order to quicken their memorization and comprehension [*li-ajl sur'at al-ḥifẓ wa-l-fahm*]. They had gone to a physician and asked how much of it a person should take and the way of taking it. Then they bought the amount the physician had indicated and drank it someplace outside the madrasa. Thereupon they went mad, and dispersed in all directions. No one knew what befell them. After some days one of them, who happened to be tall, came to the madrasa stark naked but for a large turban (*baqyār*) with an extraordinarily sized drape upon his head...Some of the jurists there asked him what had happened. So he said that [he and his colleagues] had come together to drink *balādhur*; and that his colleagues went mad. While they had not gotten better, he said that he had. He also said that he had attained a great intellect and sense of tranquility. Thereupon they laughed at him, but he took no notice."

202 For these and the foregoing anecdotes see again Richardson (2012) "Drug Overdose", particularly pp. 170-2, and (2016) "The Evolving Biographical Legacy of Two Late Mamluk Hanbali Judges," 29–50. See also Bos (1996) "'Balādhur'" pp. 230-4 and Hitti, Philip K. *History of the Arabs, Revised: 10th Edition*. 10th edition. New York, NY: Red Globe Press, 2002, 411. These events are also partially recorded by Goldziher's

And so it should again not surprise us that the pursuit of certain practices and therapies thought to maximize important scholarly capacities appears across the genre of scholarly *ādāb*, since the literature concerns itself not only with the comprehensive edification of the ulema, but also with the articulation of an ethical praxis to guide their behaviors in an increasingly professionalized context. In his study of Ibn al-Jazzār’s *Risālah*, Bos drew cursory attention to the relevance of these drug therapies to “didactic literature.” In this instance he simply repeated Goldziher’s quotation concerning al-Zarnūjī’s *Ta’līm* and reduced Ibn al-Jazzār’s medical justification to “magical” thinking.²⁰³ In what follows below we will demonstrate how the presence of such material was more widespread in *ādāb* than Goldziher and Bos indicates here, and that it was a discrete and internally-consistent iteration of humoral medicine that reached its zenith in the eleventh century and remained of substantial interest to scholars well into the later medieval period.

4.3 Interest in Medical Manipulation of the Memory across Medieval *Ādāb*

i. Abū Hilāl al-‘Askarī (d. 1005)

One of the earliest and foundational works of *ādāb* on an exclusively scholarly topic, Abū Hilāl al-‘Askarī’s brief *Ḥathth* shows substantial interest in ensuring one’s humoral disposition is conducive to the scholarly lifestyle.²⁰⁴ This relates to the importance scholars of his time lay upon the memorization and discussion of knowledge with one’s peers (*ḥifẓ wa mudhākarah*), which al-‘Askarī declares “the very life of knowledge. Without study there can be no

“Muhammedanischer aberglaube” and referenced by the modern editor of al-Zarnūjī’s *Ta’līm* at 132.

203 See Bos, *Ibn al-Jazzār on Forgetfulness*, 14-5, inclusive of footnotes. For Bos’s comments about Ibn al-Jazzār’s citation of al-Ṭabarī’s “magical” prescription in the *Firdows*, see footnote 36.

204 See Rosenthal. *Knowledge Triumphant* at 280.

memorization, and if there is no discussion the value of study decreases.”²⁰⁵ Despite the importance he lays on these techniques throughout the *Ḥathth*, al-‘Askarī still maintains that a student’s *ṭabī‘ah* is more or less determinative over their prospects as a scholar. Recall that this *ṭabī‘ah* is not to be confused with having a penetrating mind (*wa hiya ghayr al-dhihin al-thāqib*), which is explained as serving as one of several instruments of apprehension and understanding. The *ṭabī‘ah* is rather a formative condition of the scholar’s body, one which underlies the instruments of his intellect and may even help overcome other obstacles in his education. To al-‘Askarī’s mind even the dullard (*balīd*) and idiot (*aḥmaq*) can succeed as a scholar if there is something in his *ṭabī‘ah* that can be used to improve the acts constitutive of his learning.²⁰⁶

Thus for al-‘Askarī the *ṭabī‘ah* is a physical basis for attributes like mental acuity (*dhakā’*), giftedness (*qarīḥah*), and penetration (*thuqūb*), but is not synonymous with them. These are rather the products of the appropriate underlying constitution, which an individual either possesses or lacks. But while the invocation of a term like *ṭabī‘ah* in this context would seem to imply that there could be certain inborn, inalterable defects in an individual’s constitution that would preclude a scholarly career, throughout his *Ḥathth* al-‘Askarī nevertheless relates information that suggests that one’s *ṭabī‘ah* can be favorably influenced toward learning through circumstantial humoral manipulation. This information is clustered in the second half of his text, in which al-‘Askarī departs from his earlier explanations of what constitutes the moral benefit of a scholarly lifestyle for a discussion of its practicalities in more detail. The larger part of this section is given over to memorization, about which topic al-‘Askarī conveys medical advice related to the state of the scholar at study. This advice clearly proceeds

205 *Ḥathth* 67, where al-‘Askarī decries the use of books alone to assimilate knowledge.

206 Ibid. 48–69.

from an understanding of the body and brain along the humoral lines explained in the first chapter of this study, and which al-‘Askarī saw fit to express through a scholarly idiom to assure his audience of its efficacy and appropriateness. This idiom was commonly employed across works of *ādāb*, couching medical advice in historical reports attributed to early, foundational scholarly figures highly esteemed by medieval ulema. The use of the idiom in this way points either to the importance of such medicine to members of Islamic intellectual society from its earliest iterations, or to a pronounced desire to normalize such medicine among the ulema by the tenth century. Moreover, when studying a text as brief as the *Hathth* one may safely assume that whatever advice its author chooses to include was considered by him to be important if not essential information; oblique though al-‘Askarī’s reference to medicine may be in his treatise, that it is included at so early a point in the trajectory of the *ādāb* genre is testament to medical discourses’ fundamental resonance with the lived experience of his scholarly audience.

In a primary example of this idiom, toward the very beginning of the second part of his treatise al-‘Askarī reports that the historian and prophetic biographer Ibn Shihāb al-Zuhrī (d. 741/2), a man of capacious memory, would declare that he had “never confided a thing to [his] heart and then forgotten it.” It suffices his reader, al-‘Askarī informs us, to know that “that this was a painstaking abundance” of information. But more to the point, in the same line al-‘Askarī explains “Ibn Shihāb would not eat apples. For the physicians say that apples bloat the stomach with viscosities that distract the mind and cause you to forget [*yamla’ al-ma‘idah luzūjāt tashghal wa tunsī*].”²⁰⁷ In addition to al-Zuhrī’s efforts to avoid such insalubrious fruit, al-‘Askarī goes on to explain that he “would drink honey, and say that it sharpened his mind [*innahu*

207 Ibid. 65.

tudhakkī].”²⁰⁸ As Goldziher pointed out in his festschrift chapter, apples and honey were described as possessing these properties throughout the medieval period. Galen, Ibn Sīnā, Ibn al-Jazzār, and, much later, Maimonides held that apples were cold and moist by their nature, and so inclined the body of their consumers toward extremes not at all suitable for the purposes of learning.²⁰⁹ Honey, much to the contrary, was not only cited as a panacea by these as well as scriptural sources, but also repeatedly listed as an ingredient in electuaries as well as a simple drug thought to improve the memory.²¹⁰ Viscous yet liquid, the substance was viewed as “good for removing all troublesome fluids in the intestines, since from its slipperiness it is gentle, but from its warmth it is soothing [and] has a cleansing property.”²¹¹ Ibn al-Jazzār prescribes honey for forgetfulness in his *Risālah*, stating that it is beneficial for those “overtaken by cold diseases in [the] stomach and kidneys,” and that it “sharpens the mind, strengthens memory and is altogether excellent.”²¹² It makes good sense that al-Zuhrī would be reported as avoiding

208 Ibid. This attribution causes the editor of the modern Arabic edition some consternation, who uses footnotes five through eight of this page to claim that despite similar testimony from other sources, “these teachings should be discarded, since they have neither a scientific nor medical basis [*la sanad lahā min ‘ilm aw ṭibb*].” He also includes a reference to similar attributions given by Ibn Jamā‘ah in his own work of *ādāb*, whose modern editor likewise felt the need to express his negative opinion of such medicine.

209 See *On the Properties of Foodstuffs*, 86-7; where different apples are classified as falling into categories of harshness, sourness, bitterness and acidity. As above, tart or bitter apples tend toward a cold nature. See also Muhanna *The Ultimate Ambition in the Arts of Erudition*, 203-4, citing Ibn Sīnā, and Bar-Sela, Ariel, Hebbel E. Hoff, Elias Faris, and Moses Maimonides. “Moses Maimonides’ Two Treatises on the Regimen of Health: Fī Tadbīr Al-Sihhah and Maqālah Fī Bayān Ba’d Al-A’rād Wa-Al-Jawāb ‘Anhā.” *Transactions of the American Philosophical Society* 54, no. 4 (1964): 33.

210 Moreover, several traditions collected as early as Bukhārī’s lifetime have the Prophet directly sanction honey as a remedy for a whole host of diseases and complaints. See Deuraseh, “Health and Medicine in the Islamic Tradition Based on the Book of Medicine (Kitab Al-Tibb) of Sahih Al-Bukhari,” 3.

211 *On the Properties of Foodstuffs*, 63.

212 Bos, *Ibn Al-Jazzār on Forgetfulness*, 42–5, 69-70, with some such recipes being credited to Galen.

stupefying symptoms caused by one food and habitually consuming another to counteract them directly.

Thus al-‘Askarī establishes a precedent for the scholarly need to attend to one’s diet for the sake of memorization by placing sound and consistent medical advice in the idiom of a renowned forebear’s practice. In like fashion we are soon told that Abū Bakr b. al-Anṣārī,²¹³ a man also famed for his memory, “would bring out ripened dates [*raṭab*], and place them in front of himself without touching them. And he would say to them, ‘What is finer and sweeter than you? Knowledge is!’ And he would not eat them.”²¹⁴ Despite the explicitly medical discussion that immediately precedes this report, one is tempted to read al-Anṣārī’s actions here as an ascetic practice suited to scholars—i.e., the refusal to indulge in sensuous, worldly goods at the expense of learning.²¹⁵ Though not mutually exclusive to the point at hand, this plausibly ascetic reading of al-Anṣārī’s actions is somewhat undermined when al-‘Askarī tells us that his refusal to eat dates was “much like the occasion on which Abū ‘Alī al-Jubbā’ī [d. 916] saw his son Abū Hāshim [d. 933] sitting in his garden eating eggplant. So he called out to him, ‘Son! Cast that aside and I will give you such-and-such number of dinars!’ So he did, and took the money.”²¹⁶ Given a favorable substitution for money in this anecdote, it would seem that there was something specifically worrisome about consuming these foods from a humoral perspective, and

213 The muhaddith, linguist and litterateur who died in c. 940.

214 *Hathth* 66.

215 A theme to be taken up in the subsequent chapter of this study. The ascetic reading of this and the following anecdote is the one that Rosenthal adopts in *Knowledge Triumphant*, at 281. Some lines later al-‘Askarī records a predecessor as having said, “A person should dupe their spirit [*nafs*] while at study.” This too will be taken up in the next chapter.

216 Ibid.

not necessarily because of their worldly nature.²¹⁷ Since these two reports are preceded by a brief discussion of diet's effect on a famed scholar's memory, a medical reading may clarify the intent behind al-ʿAskarī's inclusion of them here. From a medical point of view the moist nature of ripened dates are strongly akin to the proprieties of apples—both fruits equally cause cold, viscous humors to build in the stomach and eventually impede thought.²¹⁸ Despite the positive religious and cultural associations with dates in Islam, Ibn Sīnā implicated them in bowel disturbances and advised against consuming them.²¹⁹ As for the dangers involved with eggplant, al-ʿAskarī's approximate contemporary Ibn Juljul (d. c. 994) recorded in his emendation of Dioscorides's (d. 90) *De materia medica* that the vegetable was "hot and dry in its nature, burning the blood of whoever continues to eat it and bearing black bile," humoral consequences implicated alongside phlegm in diagnosing bouts of forgetfulness.²²⁰ The medical import of

217 The ascetic and medical readings are, as I have claimed, not mutually exclusive. This is especially so since blights of a spiritual or mental nature (*rūḥānī*) often intersect in these texts with humoral blights of intellectual consequence, a theme to be taken up in the final chapter of this study. For an anecdote featuring dates and the dangers of consuming them from both a medical and spiritual perspective, see Adamson, Peter. "Abū Bakr Al-Rāzī (d. 925), The Spiritual Medicine." *The Oxford Handbook of Islamic Philosophy*, 2016. See also Goodman, L. E. "How Epicurean Was Rāzī?" *Studia Graeco-Arabica* 5 (2015): 247–80.

218 Galen, *On the Properties of Foodstuffs*, 109. See also Bos, Gerrit. "Maimonides on the Preservation of Health." *Journal of the Royal Asiatic Society (Third Series)* 4, no. 02 (1994): 219.

219 For an abbreviated recounting of these associations and Ibn Sīnā's remarks, see Muhanna *The Ultimate Ambition in the Arts of Erudition*, 196–8. The apparently well-known danger of eating ripened fruits of any variety occasioned Maimonides to include a lengthy argument against their consumption in his late-twelfth-century treatise *Tadbīr*, citing Galen's suspicion of their aptness to cause illnesses. See *Moses Maimonides' Two Treatises*, 19–20. Cf. al-İṣfahānī's *Muḥāḍarāt* 515, where he comments: "It is said that when you eat dates they praise the Lord in your stomach. If dates do that, when you eat almond cakes they pray *tarāwīḥ* there. For they are the Qāḍī al-Qudāt of sweets."

220 Amar, Zohar, Efraim Lev, and Yaron Serri. "On Ibn Juljul and the Meaning and Importance of the List of Medicinal Substances Not Mentioned by Dioscorides," 553–4. And Bos *Ibn al-Jazzār* 40. There is a recipe for a memory boosting drug given here that also appears in Ibn al-Jazzār's book on dissipating black bile and the accompanying melancholy, entitled *Kitāb khalā' al-albāb* (*Vacating the Upper Chest*). The later anthologist of *ādāb* Shihāb al-Dīn al-Nuwayrī (d. 1333) likewise quoted Ibn Sīnā as implicating eggplants in melancholia as well as "cataracts...cancers, elephantiasis, headaches, halitosis [and] blockages of the liver and spleen." See Muhanna, Elias. *The Ultimate Ambition in the Arts of Erudition: A Compendium of Knowledge from the Classical Islamic World*. New York, NY: Penguin, 2016, 189. The insalubrious properties of eggplant were noted by other *ādāb* authors as well. It is included by Ṭūsī in a list of foodstuffs that promote forgetfulness in his

al-‘Askarī’s anecdotes here are further evidenced at another portion of the *Ḥathth*, some paragraphs later: “‘Asal [b. Dhakwān]²²¹ was stingy with his knowledge, and when he would see an intelligent student understanding and memorizing, he would say, ‘May God and phlegm [*balgham*] help me!’” Al-‘Askarī explains that the man “meant that [he hoped] God would afflict [the student] with worldly trials in order to make him forget. Phlegm is such a one.”²²²

Despite its brevity al-‘Askarī’s text sets aside considerable space for reports referencing the importance of maintaining scholarly health and the possibility of enhancing one’s memory through dietary intervention based in consistent humoral reasoning. Their inclusion in such an early example of the scholarly *ādāb* genre suggests that such medicalized discourse was considered an edifying subject to the nascent ulema by the tenth century, and that engagement with this discourse was ethically warranted as their professional identities coalesced approaching the eleventh. The subsequent generation of *ādāb* texts continued invoking the practice of illustrious forebears when it came to giving advice to enhance the memory, but notably went beyond discussing dietary regimens to include opinions on more serious medical interventions like cauterization and cupping. The risks of doing so were clearly highlighted; as we shall see, in at least two instances the use of *balādhur* is singled out as being especially dangerous. Despite the inclusion of such medical advice, how *ādāb* authors chose to frame it in their treatises indicates that there remained significant reservations among the ulema about the feasibility and safety of effecting lasting changes in one’s disposition through such intervention, a practice increasingly

Ādāb al-muta‘allim. The relevant section in the Cairene manuscript occurs at fs. 22v-23r, and at 114-119 of Muhammad Reza al-Husayni al-Jalali’s edition. See the citation of eggplant here also in Berkey, *Transmission of Knowledge*, 29, which curiously does not occur in the edited edition of al-Tūsī’s work, and Waines, *Dietetics*, 237.

221 A Khuzestani poet, linguist and *ādāb* writer, whose year of death is uncertain.

222 *Ḥathth*, 65.

referred to as *mu'ālajah*. With indictments of the practice ranging from expressions of dubiousness to outright condemnation, the ethical propriety of medically enhancing the memory remained a palpable area of contention in subsequent works of *ādāb*.

ii. al-Khaṭīb al-Baghdādī (d. 1071)²²³

Al-Khaṭīb al-Baghdādī's *Jāmi'* contains several chapters in which the acts constituting memorization as well as those ensuring, preserving, and enhancing its acuity feature prominently. This is to be expected of a work that deals primarily with the methods and manners of those seeking to master the discipline of hadith, a career path and pietistic vocation that demanded voluminous memory of its practitioners. Nonetheless, another of al-Baghdādī's lesser-studied works also deals with the importance of memory enhancement to wider scholarly *ādāb*—*al-Faqīh wa-l-mutaḥḥiqqih* (*The Jurist and Student of Knowledge*; hereafter the *Faqīh*), which focuses on the ethical issues facing legalists among the ulema.²²⁴ Both treatises demonstrate that the question and, moreover, the controversy of enhancing the memory of the scholar through medical means was one that began crossing the increasingly well-defined disciplinary boundaries of Islamic intellectual society by the eleventh century.

In the *Jāmi'* the most significant discussion of memorization and how scholars can maximize this capacity appears toward the end of the work, across a section on *the Memorization*

223 The various admonitions regarding memorization included by al-Baghdādī have been lifted, in the manner of Goldziher, from the context of the works here to be examined in the modern synthetic work Haddad (1991) *Al-Jāmi' al-Hathth 'alā Ḥifẓ al-'Ilm*. While a useful work for the purposes of the present study, its de-contextualized presentation of the source material does little beyond emphasizing the importance of memorization to medieval Islamic scholarly circles.

224 This work has, of course, received attention as a site of recovering the premodern legal reasoning and self-articulated social role of the juridical ulema. See, for example, Hallaq "Considerations on the Function and Character of Sunnī Legal Theory" (1984) and (1986) "On the Origins of the Controversy about the Existence of Mujtahids and the Gate of Ijtihad"; Faruqi (1992) "The Development of 'Ijma': The Practices of the 'Khulafa' al Rashidun' and the Views of the Classical 'Fuqaha'."

*of and Penetrating Insight into Hadith, and the Beneficence of Contemplating its Kinds and Types.*²²⁵ Through the title of this section alone one can surmise the increasing professional and pietistic worth ulema believed was conveyed by seeking, learning, understanding and retaining as large a variety of knowledge as possible. Including in this context the very means of preserving one's faculty of memory—and perhaps of augmenting it—could not simply be a question of reverently or compulsively repeating the beliefs of prior generations, as Goldziher suggested. It was clearly also a matter of articulating and responding to the professional anxieties and aspirations of the ulema, a matter that was naturally charged with the pietistic importance associated with the accurate maintenance and transmission of any licit kind of knowledge. Al-Baghdādī's opening gloss on the reports explaining what best facilitates memorization (*al-asbāb allatī yusta'ān bi-hā 'alā ḥifẓ al-ḥadīth*) in this manner relate to the intentionality (*nīyah*) of the scholar undertaking memorization and his avoiding sinful acts, speaking both to the piety and social role self-consciously assumed by the ulema: "The goal of the student's memorization should be desiring after God's own countenance, and admonishing Muslims [through] explication and clarification."²²⁶

Al-Baghdādī turns to an explicit discussion of food and dietetics as such in a section entitled *Foodstuffs whose Consumption is Recommended for Memorization, and which Foodstuffs Should be Avoided* (*al-mā'kil al-mustaḥibb tanāwuluhā wa al-mā'mūr bi-ijtinābihā lil-ḥifẓ*). Like al-'Askarī before him, al-Baghdādī begins by quoting the renowned prophetic biographer al-Zuhrī as having directly stated, "Use honey; it is excellent for the memory."²²⁷

²²⁵ Or, *Ḥifẓ al-ḥadīth wa naḥādh al-baṣīrah fīhi wa in'ām al-naẓar fī aṣnāfihi wa ḍurūb fīhi*, *al-Jāmi'* pp. 394-409. This section is to be explored in greater detail in the subsequent chapter of this study.

²²⁶ Ibid.

²²⁷ Ibid. 403.

Along with al-Hāshimī (fl. 890) al-Zuhrī also declared, “Let he who wishes [or] delights in the memorization of hadith eat raisins.”²²⁸ Similarly, reports are adduced in which ‘Alī b. Abī Ṭālib states, “Eat sweet pomegranates [*rummān hulūw*], for they are well-prescribed for the stomach.”²²⁹ On another occasion he advised a man who came to him complaining of forgetfulness,²³⁰ “Take frankincense, for it emboldens the heart and dissipates forgetfulness.”²³¹ Ibn ‘Abbās is next quoted as having said that “shaving the back of one’s head augments memory.”²³² He also claimed that “About four-and-one-quarter grams [*mithqāl*] of sugar and an equal amount of frankincense taken on a man’s empty stomach for six days is excellent for urination and forgetfulness.” Likewise did the successor ‘Umar b. Shākir al-Baṣrī (fl. 700) relay, “I heard Anas [b. Mālik (d. 709)] complaining of forgetfulness. He said, ‘One should eat

228 Or, “*qāla al-Zuhrī man sarrahu wa qāla al-hāshimī man aḥabba an yahfiḥ al-ḥadīth fal-ya’kul al-zabīb.*”, Ibid.

229 Or, “*alayka bi-l-rummān al-hulūw, fa-innahu naṣūḥ al-ma’idah.*” Note the similar syntactical structure with the above quote by al-Zuhrī and the following tradition, suggesting a somewhat standard aphoristic quality to such traditions as they were cited in *ādāb*. Ibid. A relatively obscure figure, al-Hāshimī was an astronomer whose work preserves considerable information as to the transmission of Indian and Persian scientific sources in the era. See Ragep, F. Jamil. “Al-Hāshimī.” In *Encyclopaedia of the History of Science, Technology, and Medicine in Non-Western Cultures*, edited by Helaine Selin, 127. Dordrecht: Springer Netherlands, 2008.

230 Recall that such a trope was also used by Ibn al-Jazzār in framing his *Risālah*.

231 The role of the heart in learning will be taken up in the next chapter. The Arabic here reads “*alayka bil-lubān, fa-innahu yushajji’ al-qalb wa yudhhib al-nisyān.*” See *Jāmi’* 403, where cow’s milk, or *albān al-baqar*, is substituted for *lubān*. This is almost certainly a scribal error in the manuscripts consulted for this printed edition, or else an error in the transmission of the text itself indicating confusion over the word olibanum, another term for frankincense—perhaps an obscure variant beyond its use in texts of materia medica and pharmacopoeia. The term *kundur* (likely from the first element of the Greek *chóndros lívanotou* (χόνδρος λίβανωτου) referring to a lump of the resin; cf. Lane 1: 2691), which al-Baghdādī uses later on in this section, would seem to have been a way of invoking olibanum in this context as well. Among the earliest evidence of this report’s having been transmitted with the word *lubān* is from Ibn al-Sunni’s (d. 974) *al-Ṭibb al-Nabawī* (ms. Fatih 3585, folio 32). Cf. Perlo *Prophet’s Medicine*, p. 54, where also is cited Ömer Recep’s 1969 dissertation *Tibb an-Nabī*, wherein Ibn al-Sunni’s work is claimed to have survived in the above manuscript, albeit abridged. See also Abū Nu’aym al-Iṣfahānī’s (d. 1038) *Mawsū’at al-Ṭibb al-Nabawī*, p. 410, along with the footnotes of that page, where the report is also adduced in this wording. It evidently remained in circulation as late as Ibn al-Qayyim’s treatise (d. 1350), *Tibb an-Nabī*. In this latter case, Ibn al-Qayyim offers a revealing gloss that “*lubān* is frankincense [*kundur*],” before adducing prophetic precedent for burning this gum resin along with thyme. On this see 1:294.

232 *Jāmi’* 404: “*ḥalq al-qafā yazīd fī al-ḥifẓ.*”

frankincense. Soak it in water overnight, and when you awake take a draught of it on an empty stomach, because it is excellent for forgetfulness.”²³³

These reports are more substantial and al-Baghdādī’s sources for them more diverse than those cited in al-‘Askarī’s *Ḥathth*. Yet the basis for their inclusion here remains the same: the presence of honey, frankincense, and sugar here is clearly drawn from medical prescriptions similar to the above said to strengthen the memory, as is encouraging urination to purge excessive or morbid humors from the body. Shaving the back of one’s head is most certainly part of an effort to mitigate the accumulation of phlegmatic moisture in the posterior of the brain, and ‘Alī’s directive to consume of sweet pomegranates in order to calm the stomach is reminiscent of al-‘Askarī’s reference to the dangers of viscosities accumulating there. Both this fruit and raisins were said to relax the abdomen through their drying effects without weakening it.²³⁴

Next al-Baghdādī moves to discuss foodstuffs and activities which degrade the memory and cause forgetfulness (*yūriṭh al-nisyān*). He once again quotes al-Zuhrī’s simple statement that “apples impart forgetfulness.”²³⁵ A lengthy report attributed to Ibrāhīm b. al-Mukhtār, the student of the prophetic biographer Ibn Ishāq (d. 768) and Mālik b. Anas (d. 795),²³⁶ relays some of the content mentioned by Goldziher above. It reads: “Five things impart me with forgetfulness: eating apples, drinking what is left aside by mice, cupping the nape of the neck, flicking away

233 Ibid., “*alayka bi-l-kundur, inqa’ahu min al-layl fa-idhā aṣḥaḥata fa-khudh minhu sharbatan ‘alā al-rīq fa-innahu jayyid min al-nisyān.*”

234 For the warming and drying use of sweet pomegranates to cleanse the stomach, see *Practical Materia Medica of the Eastern Mediterranean* at 248-50. See the extended description of raisins on this score, with citations from Galen, in Ibn al-Bayṭār’s *Kitāb Al-Jāmi‘ Li-Mufradāt Al-Adwiyah Wa-l-Aghdhiyah*, Beirut: Dar al-kutub al-ilmīyah 2001, 2:454-5.

235 *Jāmi‘* 404.

236 See *Tahdhīb al-tahdhīb* 1: 162. See also Johann Fück, “Muḥammad Ibn Ishāq. Literarhistorische Untersuchungen,” (Phil. diss., Universität Frankfurt am Main, 1925), p. 44.

lice and urinating in standing water.” Al-Mukhtār repeats, moreover, the immediately foregoing prescription involving frankincense.²³⁷ Next, Layth b. Sa‘d (d. 791) reports that al-Zuhrī was known to declare, “I have never entrusted anything to my heart and then forgotten it.” Layth further explains that al-Zuhrī “used to dislike eating apples and the leftovers of mice, saying that they made him forgetful. He would drink honey, and used to say that it made him remember.”²³⁸ Similarly, according to ‘Ubayd b. ‘Umayr (d. c. 731) al-Zuhrī once explained to his peers, “I have not consumed apples or vinegar since I began manipulating [‘*ālajtu*] my memory.”²³⁹ It is worth noting the significant medical metaphor invoked through use of the verb ‘*ālaja* in this report, particularly in light of what immediately follows. The section concludes with the hadith master and student of Aḥmad b. Ḥanbal, Ibrāhīm b. Ishāq al-Ḥarbī (d. 813), being questioned about the manner in which memory is affected by the preponderance of certain humors over others: “It was said to Ibrāhīm al-Ḥarbī, ‘People say that those who possess [a constitution characterized by] black bile can memorize.’ He said, ‘No. It is akin to phlegm, and those who possess it cannot memorize a thing. Rather, it is they who possess [a constitution characterized by] yellow bile who can memorize.’”²⁴⁰

This subsection is followed by several more which stress the importance of regimenting one’s acquisition and repetition of hadith. To further bolster the memory al-Baghdādī advises his

237 *Jāmi‘* 404: “*kḥams tūriṭh al-nisyān: akl al-tuffāḥ, shurb su‘r al-fa‘rah, al-ḥijāmah fī al-nuqrah, wa ilqā’ al-qamlah wa al-būl fī al-mā’ al-rākid wa alaykum bil-lubān, fa-innahu yushajji’ al-qalb wa yudhhib al-nisyān.*”

238 Ibid. “*wa kāna yakrah akl al-tuffāḥ wa su‘r al-fa‘r wa yaqūl inna-hu yunsī qāla wa kāna yashrab al-‘asal wa yaqūl annahu yudhakkir*”

239 Ibid. “*mā akaltu tuffāḥan wa lā khallan mundhu ‘ālijtu al-ḥifz..*”

240 Ibid. 404-5, “*qāla li-ibrāhīm al-ḥarbī innahum yaqūlūn inna ṣāḥib al-sawdā’ yaḥfaz qāla lā hiyah ukht al-balgham ṣāḥibuhā lā yaḥfaz shay‘an innamā yaḥfaz ṣāḥib al-ṣafrā’.*” See also Thomas, David. “Ibrāhīm b. Ishāq Al-Ḥarbī.” Edited by Kate Fleet. *Encyclopaedia of Islam, Three*. Brill, 2018.

readers to recollect and discuss hadith (*mudhākarah*) in the presence of the general public (*‘āmmat al-nās*), colleagues (*atbā‘ wa aṣḥāb*), contemporaries (*aqrān wa atrāb*), and the elderly (*shuyūkh wa dhawī insān*), a theme to be examined by a subsequent chapter of this study.²⁴¹ In the final part of this subsection, entitled *the Continual Consideration and Discussion of Hadith, and the Prevention of its Lassitude* (*dawām al-murā‘āt lil-ḥadīth wa-l-mudhākarah bihi wa ittiqā‘ al-futūr ‘anhu*) economic and agricultural metaphors are used to describe the cultivation and maintenance of the scholar’s knowledge.²⁴² The final two reports are, however, of primary interest. Following his casting doubts on the feasibility of manipulating the intellect,²⁴³ the hadith master Ṣāliḥ b. Muḥammad al-Baghdādī here counsels that “there are indeed among foodstuffs those which, when eaten, increase phlegm [*balgham*], and phlegm is what imparts forgetfulness. And among them are [foods] that interfere with phlegm and bring clarity to the mind [*yuṣaffī al-dhihn*].”²⁴⁴ Ṣāliḥ b. Muḥammad lists charlock as particularly good in this regard. As a final thought he offers the observation that “many people eat marking-nuts [*balādhur*] for memory. In our view this is nonsense, and a danger. Death from them is something to be feared, as they are a poison.”²⁴⁵ His opinion is confirmed by a certain Maṣṣūr al-Faqīh, who is recorded as having

241 *Jāmi‘* 407-13.

242 Metaphors that are perhaps in keeping with the sense that knowledge can only be secured by admitting “the necessity of relentless labor,” a reading put forward by Rosenthal in *Knowledge Triumphant* at 280.

243 As mentioned in the preceding chapter of this study.

244 *Jāmi‘* 44, “*wa inna min al-aṭ‘mah mā idhā ukilat zādat fī al-balgham wa al-balgham yūriṭh al-nisyān wa minhā mā yaqta‘ al-balgham wa yuṣaffī al-dhihn.*”

245 Ibid. 414, “*wa qad ya’kl kathīr min al-nās al-balādhur lil-ḥifẓ wa huwa lā shay‘ ‘indī wa mukhāṭarah li-annahū yukhāf ‘alayhi min al-qatl huwa samm.*” One should here recall the innate risk of using this drug, cited as early as the eighth century in Ibn al-Biṭrīq’s *Kitāb al-Sumūm*. See Again Bos “Jewish Traditions on Strengthening Memory,” 47.

said, “[Consuming] *balādhur* is the most disdainful kind of ignorance.”²⁴⁶ The popularity of the nut notwithstanding, it would seem that from the perspective of the hadith sciences its use was considered an untoward and personally harmful practice.

As already mentioned, concerns of this nature are expressed also in al-Baghdādī’s work on the *ādāb* of the jurist, the *Faqīh*. The chapter on *Maintaining Memorized Material, the Times for Doing so, and Ameliorating the Illnesses and Afflictions that Beset It* (*fī al-taḥaffuz wa awqātihi wa iṣlāḥ mā ya’riḍ min ‘illatihi wa-āfātihi*) contains various strategies on these topics to be treated in the following chapter. It also includes dietary advice directly related to facilitating memorization, on the provision that the student diligently apply themselves to learning in the first place. Al-Baghdādī counsels the reader that he “should bind his spirit [or mind] by extracting blood,” citing a hadith whereby the Prophet “enjoined cupping and bloodletting.”²⁴⁷ Further, Ibn ‘Umar (d. 693) reports, “I had a superfluity of blood and it put me in urgent need of a cupper. Do it for your peer if you are able, but do not do it for an older man or younger boy. Indeed, I heard the Prophet say, ‘Cupping on an empty stomach is nearer to the ideal. In it is a healing property and blessing, and it enhances [*yazīd fī*] the intellect and memory.”²⁴⁸ Al-Baghdādī advises that if one is in the habit of taking decocted drugs (*al-maṭbūkh min al-dawā*) of any kind this therapy should not be interrupted, since the Prophet once said, “God has sent

246 Ibid. “*al-balādhur al-akbar al-anafah min al-jahl*.” This is likely Maṣṣūr b. ‘Umar al-Karkhī, who died in 1054.

247 Ibid., “*wa la-yata’āhad nafsahu bi-ikhrāj al-dam*” and “*anna al-nabī amara bil-ḥijāmah wa-l-iftiṣād*.”

248 Ibid. 210-1, “*innahu qad tabayyagha bī al-dam fa-iltamasa lī ḥajjāman wa ijalahu raḥīqan in istaṭa’ata wa lā taj’alhu shaykhan kabīran wa lā ṣabīyan ṣaghīran fa-innī sami’tu rasūl allāh ṣallā allāh ‘alayhi wa salam yaqūl al-ḥijāmah ‘alā al-rīq amthal wa fīhi shifā’ wa barakah wa huwa yazīd fī al-‘aql wa fī al-ḥifẓ*.” The injunction against cupping the very young or very old is perhaps due to the notion, dating back to Aristotle mentioned in the foregoing, that the souls of individuals at the two extremes are in flux and therefore liable to corruption. See Bos, *Ibn al-Jazzār*, p. 39. This is also reflected in al-Iṣfahānī’s *Muḥāḍarāt* at 69, where the education of the elderly is dismissed as being infeasible due to their tendency to forget what they have just learned.

down no malady without a corresponding curative, so treat yourselves with them!”²⁴⁹ This includes emetics and cathartics used to cleanse phlegm and other troublesome humors from the body. The Companion of the Prophet Asmā’ bint ‘Umayy (d. between 658 and 679) is recorded by al-Baghdādī as having been asked by the Prophet what medicine she used as such a purgative, to which she replied that she used fir spurge (*shubrum*).²⁵⁰ The Prophet replied that this was far too hot a medicine, recommending instead that she use senna (*sanā*) and adding that “if anything could cure death, it would be senna.”²⁵¹

A report next tells of Hārūn al-Rashīd (d. 809) gathering together four physicians of Central Iraqi, Anatolian, Indian, and South Iraqi extraction (*‘irāqīan wa rūmīan wa hindīan wa suwādīan*). They are challenged by the caliph to describe “a remedy without a malady.”²⁵² The more astute (*aḥdhaqahum*) South Iraqi physician remains silent while the first three weakly attempt an answer: the Anatolian physician replies with white peppergrass seeds (*ḥabb al-rashād*), the Indian physician with hot water (*mā’ ḥār*) and the Central Iraqi physician with harra fruit (*halīlaj aswad*). Roused from his silence by a Caliphal command to speak, the South Iraqi physician refutes his colleagues by saying, “Peppergrass seeds cause moisture [in the body], hot

249 This is a famous hadith used in many formulations throughout works of prophetic and other forms of medicine, devotionally authorizing the seeking of curatives. *Faqīh* 212, and *Sunan Abī Dawūd* 28:3846 and *Sunan Ibn Mājah* 31:3562.

250 Excessively hot and dry by nature, this strong purgative had a variety of medical applications including treating depression and anxiety, as well as to resolve phlegmatic coughs and other respiratory symptoms. See Lev, Efraim, and Amar. *Practical Materia Medica* at 487-8.

251 *Faqīh* 212. Another possible interpretation of this anecdote is to establish the Prophet as a source for treating women’s illnesses as such, as senna was widely used in recipes crafted for the needs of women in particular as well as being used as a general purgative of cold and moist humors. See *Practical Materia Medica* at 128-30.

252 *Faqīh*. 212-3, “*al-dawā’ alladhī lā dā’ lahu.*”

water slackens the stomach, and harra fruit heats and dries it.”²⁵³ As for the remedy that causes no malady, the South Iraqi physician's response is simply eating with moderation, so that “when setting about to eat food one has an appetite for it, and when rising to leave one still has an appetite for it.”²⁵⁴ Al-Baghdādī clarifies the meaning of this anecdote by claiming “the most beneficial things employed [by the scholar] are improving their diet [*iṣlāḥ al-ghidhā*’], avoiding food of bad quality [*aṭ‘imah radī‘ah*] and cleansing their disposition of morbid humors [*akhlāṭ mufsidah*].” Concerning managing an excessively hot or even feverish temperament (*ḥamiyah*) as it relates to these practices, a report is adduced via Umm al-Mundhir. She describes the Prophet instructing a convalescent ‘Alī b. Abī Ṭālib to avoid joining him in eating unripened dates (*dawālin mu‘allaqah*) due to his sickly condition. He instead encourages ‘Alī to eat the barley and chard [*sha‘īr wa silq*] that Umm al-Mundhir had prepared for him, saying it is better for him in his current state.²⁵⁵ The section concludes with al-Baghdādī’s summarizing gloss: “Whoever heeds what I have described here in terms of improving one’s diet, cleansing one’s disposition,

253 Ibid. 213, “*ḥabb al-rashād yuwallid al-ruṭūbah wa ... al-halīlaj al-aswad yuḥarriq al-ma‘idah*.” Recall here the use of harra in a memory-boosting prescription by Ibn Sahl Rabbān al-Ṭabarī in the previous chapter, and cited directly here by al-Baghdādī for its drying properties.

254 Ibid., “*wa al-dawā’ alladhī lā dā’fīhi anna taq‘ud ‘alā al-ṭa‘ām wa anta tashtahīhi wa anna taqāum ‘anhu wa anta tashtahīhi*.”

255 Ibid. 213-4. Recall the admonition against eating dates in the context of al-‘Askarī, above. The hadith of barley and chard can be found in the *Sunan* of Abū Dāwūd (d. 899); see tradition 29:2 in *kitāb al-ṭibb*, *bāb fī al-ḥimiyah*. Several hadith included in al-Bukhārī’s collection contain different versions of an anecdote to the effect that an old woman would cook this meal for Muslims every Friday before their afternoon nap. In al-Bukhārī see tradition 6:863 in *kitāb al-salām*, tradition 41:27 in *kitāb al-muzāra‘ah*, tradition 79:22 in *kitāb al-isti’dhān*, tradition 70:31 in *kitāb al-i‘imah* and tradition 11:62 in *kitāb al-jum‘ah*. Chard was included in al-Ṭabarī’s prescriptions for warming the brain and curing paralysis, justifying its inclusion here on humoral terms. Barley was recommended as a supplement to strengthen the memory and cure inflammations throughout medieval Islamic medicine. See *Practical Materia Medica* 111 and 353-4.

and unburdening one's heart—they will hardly have any difficulty memorizing what they have heard, if God so wills.”²⁵⁶

The organization of the *Jāmi'* and the *Faqīh* and their presentation of medical advice concerning memory suggests that in al-Baghdādī's milieu some forms of enhancement were more controversial than were others. Though the citation of precedent luminaries' memory-aiding diets abound here without any notable censure, al-Baghdādī's two reports mentioning drug therapy by *balādhur* are accompanied by reservations about and outright rejection of its usefulness. These two reports do not appear, furthermore, in any section including dietary regimens pursued by early Islamic ulema and reputed to enhance the memory. I would argue that given their privileged or at least particular placement in the two *ādāb* texts considered here, these dietary regimens were clearly viewed by al-Baghdādī as a more appropriate strategy to enhance the memory than was drug therapy as such. That the use of *balādhur* referenced within the *Jāmi'* should be accompanied by such vociferous rejection would further suggest that among al-Baghdādī's readership such strategies were certainly well known and possibly widely used, while their propriety and even safety remained a matter of debate. So too was the idea that a scholar could effect lasting, desirable changes in their humoral dispositions beyond diet subject to doubt, given the seeming ambivalence on the part of some of al-Baghdādī's sources on the matter. The expression of these reservations notwithstanding, the authors of *ādāb* apart from al-Baghdādī were clearly aware of these methods and felt them relevant enough to include in their own writing. This included *ādāb* treatises directed at a more general scholarly audience, as we shall

256 Ibid. 214., “*fa man rā'ā ma rasamtu lahu min iṣlāḥ al-ghidā' wa tanfiyat al-ṭab' wa farragha qalbahu lam yakad yasma' shay'an illā sahula 'alayhi ḥifẓahu in shā'a allāh ta'ālā.*”

see, and not those primarily concerned with individual disciplines like the transmission of hadith and jurisprudence.

iii. al-Rāghib al-Iṣfahānī (d. 1108)

As we have seen above, attributing internally-consistent medical advice concerning the health of the scholarly body and the maximizing of its recollective capacity to legendary scholarly figures was clearly a topos of the *ādāb* genre by the eleventh century. The attribution of such reports in the voluminous *ādāb* compendium written by al-Baghdādī's contemporary, Rāghib al-Iṣfahānī, does not meaningfully differ in this regard. However, the *Muḥāḍarāt*'s encyclopedic organization renders it less a monographic treatise on the exigencies of particular scholarly pursuits than it does a digest of information on topics broadly relevant to the ulema of the era. As described by Goldziher, this work aspires to touch upon every article and arena of knowledge with which a properly educated intellectual elite should be familiar. As can be expected at this point in the arc of the *ādāb* genre, this included information related to the practices and diets one should avoid or pursue to safeguard the memory.

As described by Goldziher, al-Iṣfahānī includes a short entry on forgetfulness as such under the larger chapter subheading *On the Intellect, Knowledge, Ignorance, and what Concerns Them*;²⁵⁷ the entry itself is entitled *What has been Related about the Description of Knowledge and the Knowledgeable in terms of Praise and Censure, and the Description of Memory and Forgetfulness*.²⁵⁸ This larger chapter lays heavy emphasis on the superiority of the ulema over all other believers because of their role in assembling and maintaining knowledge in all of its forms.

257 *Muḥāḍarāt* 15, “fī al-‘aql wa-l-‘ilm wa-l-jahl wa mā yata‘alliq bihā.”

258 Ibid. 48, “wa mim mā jā’a fī wasf al-‘ilm wa-l-‘ulamā’ madḥan wa dhamman wa wasf al-ḥifẓ wa-l-nisyān.”

One report cited here declares that “the Prophet said, ‘A single erudite man [*faqīh*] has more power over Satan than one thousand worshipers,’” and another proclaims that those who memorize and pass on his traditions are to be counted as his only true successors (*khulafā*).²⁵⁹ Likewise does al-Iṣfahānī cite praise for scholarly pursuits apart from hadith, such as grammar, jurisprudence, theology and arithmetic, as well as considerably less technical pursuits that still demand a sharp memory, such as the collection of witticisms (*mulah*) and tracing of genealogies (*nasab*).²⁶⁰

It is in this context—one in which the author urges the cultivation of as broad an array of intellectual disciplines as possible—that al-Iṣfahānī broaches the topic of forgetfulness. In keeping with the ascription of laudable practices to luminous forebears, the importance of attending to one’s memory is attributed first to the Prophet, who, upon learning of God’s desire that his warnings be preserved, set about memorizing everything he heard thereafter.²⁶¹ So too, we are told, did his Companions and Successors take up the practice of committing the knowledge of their day to their memory. Accounts of their capacious minds are followed by several humorous anecdotes about subsequent generations of scholars whose memories eventually lost their vitality (*‘āfiyah*) through senescence, to which a rather serious admonition from the Prophet is appended: “My community has been set above the commission of errors, forgetfulness and [other such] abominable things.” Al-Iṣfahānī hereby associates deficiency of

259 Ibid 54.

260 For the full gamut of these disciplines, see Ibid. 15-60.

261 By way of Quran 69:12, “That we would make [our deeds] a reminder for you, that an attentive ear would heed.”

memory with moral turpitude, adding Quranic citations that identify a forgetful mind with susceptibility to Satan's influence and forgetting the obligations one owes to God.²⁶²

Some lines later we are given the list of activities 'Alī b. Abī Ṭālib reported as imparting forgetfulness (*mimmā yūriṭh al-nisyān*) cited by both Goldziher and Bos: cupping the nape of the neck (*nuqrah*), urinating in standing water, eating sour apples (*tufāḥ ḥāmiḍ*), coriander and any foodstuff nibbled at by mice (*akl su'r al-fa'r*), reading tombstones, looking at crucified criminals, walking between coupled camels, and flicking lice onto the ground. This is followed by an anonymous statement that eating broad beans (*bāqlan*) harms the memory more in one day than consuming *balādhur* could remedy across a year.²⁶³ Some entries in this list makes good sense from a humoral perspective. While cupping the nape of the neck was cited as a cure for forgetfulness in most of the texts under study, one could imagine that overzealous attempts to rid the brain of phlegm in this manner could have resulted in drying the organ to a harmful point. Indeed, the *Sunan* of Abū Dāwūd relates the following sound tradition from Anas b. Mālik, in which the cupping protocol supported by the medical authors above is further authorized through ascription to the Prophet, complete with a warning against taking the practice too far: "Ma'mar [b. Rashīd] said that the Prophet used to have himself cupped three times at the two occipital

262 Through Quranic passages describing Moses's literally bedeviled travels in search of knowledge and God's intervention in history to rectify Adam's deficient transmission of revelation—18:63 and 20:115, respectively.

263 *Muḥāḍarāt* 61. This list is also given by al-Ṭūsī's *Ādāb al-muta'allimīn*, 118-9, and by the Mu'tazalī philologist and exegete al-Zamakhsharī's (d. 1144) compilation of proverbs, *Rabī' al-abrār wa nuṣūṣ al-akhbār* (*Springtime for the Pious and Citations of their Reportage*; hereafter the *Rabī'*) at 2:37. In the latter it occurs in a larger section on "Incapacity, Wavering, Stupidity, Laziness, Tardiness, Indecision and the Like [*'ajz wa tawānin wa balādah wa kasal wa buṭ' wa taraddud fī al-amr wa mā ashbaha dhālik*]." As with al-Ṭūsī, its occurrence here indicates a wide diffusion of this information as far as Persia and Transoxiana. See Agius, Dionisius A. "Some Bio-Bibliographical Notes on Abū'l-Qāsim Maḥmud B. 'Umar al-Zamakhsharī." *al-'Arabiyya* (1982): 108-130, and C.H.M. Versteegh, "Al-Zamakhsharī," in *Encyclopaedia of Islam, Second Edition*, ed. P. Bearman et al., April 24, 2012.

arteries below the ears [*akhda 'ayn*] and the nape of the neck [*kāhil*]. I got myself cupped, and so lost my mind [*dhahaba 'aqlī*] such that others had to dictate the *Fātiḥah* to me as I prayed.”²⁶⁴

Most likely due to the anthological purposes of the *Muḥadārāt*, however, this danger does not prevent al-Iṣfahānī from including further information on the salutary benefits of cupping. At a subsection further into the text entitled *the Agitation and Diminishment of Blood* he states that the Prophet enjoined cupping in the case of humoral excesses in order to prevent death. Nonetheless, al-Iṣfahānī quotes the physician Ibn Māsawayh as stating that the benefits of cupping in this manner are to be considered alongside its known harms; the practice may sharpen one’s eyesight, burnish one’s color, and add weight to one’s body, but it can also cause general enfeeblement and a slackening of the musculature, as well as the diminishment of sexual potency.²⁶⁵ This warning is followed by a short subsection on the more extreme measure of bloodletting, a practice here linked with the possibility of interrupting the humors enabling mental comprehension (*damm al-adhhān wa-l-fahm*) and those which underlie the livelihood of the student (*fa-inna arzāq ṭullāb al-nadan fihā*). Bleeding the basilic vein in particular is considered especially insalubrious by al-Iṣfahānī’s sources, and he quotes Galen as stating that clearing the body of excess humors and encouraging changes in one’s constitution were to be more safely achieved through a gentling drug therapy rather than bloodletting (*taghayyur mizāj aw faḍūl zā'idah yuraqqaq bil-adwiyah*).²⁶⁶

264 The book of medicine, in which this tradition is located, has several traditions recounting the Prophet’s practice of cupping and cautery, among others healthful practices. For this tradition in particular, see *Sunan* 6:10-11. Recall above how the occipital arteries feature prominently in cupping practices advocated by physicians.

265 *Muḥadārāt* 506, occurring in the chapter on medicine mentioned in the previous chapter of this study. According to al-Iṣfahānī these sentiments are corroborated by Galen and Jabrīl b. Bukhtīshū’, who respectively stated that the blood in one’s body is akin to oil in one’s lamp, and that the maintenance of blood in the body is akin to the even boiling of ingredients in one’s cooking.

With the same, consistent humoral reasoning clearly in mind al-Iṣfahānī also warns against eating sour apples, advice that al-‘Askarī and the medical texts considered above implicated in cases of forgetfulness, due to their causing cold humors to accumulate in the body. Likewise did al-Rāzī blame pathological scattering of thoughts on the excessive consumption of coriander, and implicate broad beans in mental disorders producing forgetfulness. As for the danger of eating food nibbled at by mice, in the century following al-Iṣfahānī’s writing Maimonides reported that physicians have always cautioned against eating food contaminated by any degree of spoilage, for doing so carries the same health risks as drinking poison.²⁶⁷ There was also a common belief that any entity involved in the preparation or even partial eating of a dish could leave behind their qualities in the food, which could then be passed on to subsequent diners. The historical use of mice in the treatment of stings and effusive urination from diabetes would suggest an astringent, drying property to the animal that may cause forgetfulness and help explain their association with the condition.²⁶⁸ Less clear from this point of view is al-Iṣfahānī’s injunction against urination in standing water, flicking lice, looking at crucified criminals, and reading tombstones—a matter whose possible explanation will be taken up in the next chapter of this study.²⁶⁹

266 Ibid. 506-7. Nonetheless, bloodletting is positively mentioned in al-Iṣfahānī’s subsection on *the Summation of Medical Treatment* on the same page, with the above given as a caveat: “The summation of treatment is fivefold: the treatment of head ailments [*mā fī al-ra’s*] through gargling, stomach ailments through emetics, intestinal ailments [*mā fī asfal al-ma’idah*] with laxatives, superficial flesh ailments with perspirants and deeper flesh ailments with bloodletting.”

267 See “Moses Maimonides' Two Treatises on the Regimen of Health” at 31.

268 See Bashir, Shahzad *Sufi Bodies* at 178, and Dawson, Warren R. “The Mouse in Egyptian and Later Medicine.” *The Journal of Egyptian Archaeology* 10, no. 1 (1924): 83–86.

269 The association of tombs with the criminally insane, the possessed and the pathologically melancholic in medical literature was observed by Michael Dos in his monumental work on insanity in the medieval Islamic period, Dols, Michael. *Majnūn: The Madman in Medieval Islamic Society*. Oxford: New York: Clarendon Press; Oxford University Press, 1992, particularly at 60-100.

In this section al-Iṣfahānī also posits more straightforward strategies for maintaining knowledge, such as being fastidious in one’s study habits as well as discussing and debating the texts one has learned with one’s peers following learning sessions (*mudhākarah wa mujādalah wa munāzarah*).²⁷⁰ Further into the text al-Iṣfahānī relates dietary information concerning the health of the scholar in a section *On Medicine, Illness and Consulting Physicians*.²⁷¹ Here it is stated as a matter of medical consensus that consuming jerky (*qadīd jāff*) is to be avoided for reasons of health, likely due to the invariably poor quality of such meat,²⁷² and an anonymous Indian doctor is quoted as stressing the dangers of consuming milk and fish. Cold eggs and fresh apricots are likewise to be avoided. The overly moistening effects of the latter two can be combatted with date palms (*nakhīl*), wine, barley mash, and oxymel (*sakanjabīn*) according to al-Iṣfahānī, to which physicians typically ascribed warming powers that relax the stomach.²⁷³ One should be careful not to overdo it; even the feverishly-tempered should not eat yogurt paste (*kashk*) and only consume soothing pomegranates in moderation.²⁷⁴

Further still into the text al-Iṣfahānī relates more comprehensive dietary information in a chapter entitled *Foodstuffs (al-aṭim ‘ah)*. While the humoral reasoning underlying the information

270 *Muḥāḍarāt* 97-8. Cf. *Tadhkirah* 97-100, below.

271 Or *al-ṭibb wa-l-maraḍ wa-l-‘iyādah*; *Muḥāḍarāt* 501.

272 See Marianne Brisville, “Plats Sûrs et Plats Sains Dans l’Occident Musulman Médiéval. La Harīsa Comme Contre-Exemple ?,” in *De La Nature à La Table Au Moyen Âge : L’acquisition Des Aliments* (138 e Congrès national des sociétés historiques et scientifiques, Rennes/Paris: HAL, 2017), at 111.

273 See *Muḥāḍarāt* 505-6. Though far west of Central Asia and writing a century hence, Maimonides recommended the consumption of fish in those suffering from skin disorders such as leprosy, the result of excessively dry and warm humors in the body. But on the balance he advised that one should avoid fish as much as is possible, since they are poor nutrition and exacerbate moisture in the body. See *Practical Materia Medica* at 141-3, 177, 337-8 398, 407-8 and 566-7 for other substances here, as well as “Moses Maimonides’ Two Treatises on the Regimen of Health” 19.

274 *Muḥāḍarāt* 505-6.

is altogether consistent with both the *ādāb* and formally medical texts already examined, due to the anthological organization of the *Muḥāḍarāt* al-Iṣfahānī places descriptions of each food under an individual subheading listing the idiosyncratic properties and anecdotes associated with them.²⁷⁵ But much like other authors of *ādāb*, al-Iṣfahānī states at the outset of the section that physicians generally associate bodily health with eating as little food as is practical (*ṣiḥḥat al-jism qillat al-ṭu‘am*), for “wisdom cannot dwell in a body filled with food.”²⁷⁶ Throughout his comprehensive citation of this dietetic and historical material, al-Iṣfahānī’s larger point of advice is that the scholar’s digestion should be made as regular as possible and his diet equally unvaried, lest humors that overtake the body with morbidities.

Much like the works considered in the foregoing, al-Iṣfahānī also discusses foodstuffs and related practices that can help the memory. He paraphrases the Pythagorean philosopher Democrates’s (fl. c. 50) famous declaration that honey extended his lifespan, and includes several other anecdotes praising the power of confections made from the substance to promote one’s natural vigor (*quwwah*).²⁷⁷ One must be careful not to consume too much of the substance, however; just as al-Rāzī warned about the deleterious effects of honey cakes (*fālūdḥaj*) on the mind, al-Iṣfahānī here reports that the fabled humorist al-Ghāḍirī (fl. 760) was cautioned by a friend who witnessed him wolfing down the sweets, telling him to be more careful lest he find himself “on the road to the cemetery. I once saw a funeral passing by, and it was said that the man had died from eating such food.” Pomegranate seeds are praised instead, and in this instance

275 Replete with medical content but not immediately relevant to the concerns of this chapter, this material can be found on pages *Muḥāḍarāt* 704–767.

276 Ibid. 728; moreover, one should avoid having sex when fully sated. See also 501–6.

277 *Muḥāḍarāt* 714. One such anecdote goes as far as to equate one’s abstaining from such foods with rendering oneself as feeble as an untenable fetus (*khidāj*).

by a prophetic tradition attributing them the power of dispelling intrusive thoughts and a variation of the report al-Baghdādī ascribed to ‘Alī—i.e., that pomegranates are a “softener of the stomach.”²⁷⁸ Barley mash (*sawīq*) fortifies the heart by evacuating phlegm and clarifying the blood in the manner also reported by al-Baghdādī. Additionally, al-Baghdādī’s wariness of eggplants is repeated here in a far less elliptical manner: “Eat squash [*qar*] but avoid eggplants...their flesh is the color of scorpion carapaces and their tips like those of cupping glasses. Eating them is like eating of the Infernal Tree [*zaqqūm*].”²⁷⁹

That an eleventh-century *ādāb* text not directly treating the subject of education in the context of specific disciplines like hadith and jurisprudence should address these issues relating to medicine and the memory evinces broad interest in the relevance of these discourses to the ulema of the period. Perhaps owing to the different literary structure of the *Muḥāḍarāt*, the material al-Iṣfahānī discusses is more abbreviated and diffusely cited than that of al-Baghdādī’s roughly contemporaneous *ādāb* texts. However, subsequent works in the *ādāb* genre that do describe proper scholarly education in monograph form likewise abbreviate this information in a manner that suggests sustained interest as well as increasing familiarity with it. Moreover, there is evidence in these subsequent *ādāb* texts indicating that authors of *ādāb* were both aware of and had indeed read the treatises of their predecessors, presenting their own work as epitomes

278 Ibid. Literally, “the tanner of the stomach,” or *dibbāgh al-ma‘idah*.

279 Ibid. 704-5, 712-4. Squash was used as a food supplement to treat inflammations underlying sore throat, cough, eye problems, kidney ailments and headaches. See Practical Materia Medica of the Medieval Eastern Mediterranean 120. This infernal tree is mentioned in Quran 37:62-8, 44:43-9 and 56:51-6. It is located in the depths of hell and yields only bitter fruit that torments the stomach of sinners in the manner of boiling oil. In keeping with the alternative reading of al-Baghdādī’s admonition against eating eggplants, elsewhere in the *Muḥāḍarāt*—particularly 728—there are attributions to notable ascetics like Mālik b. Dīnār (d. 748) and Bishr b. al-Hārith (d. 841) where denial of one’s desire for food is associated with better learning.

containing the most important information to be found in them. This medicine was clearly thought to be one such kind of information worth restating.

iv. **Burhān al-Dīn al-Zarnūjī (fl. 1210)**

The brevity of al-Zarnūjī's *Ta'lim* is akin to that of al-ʿAskarī's *Ḥathth* written two centuries prior, and the treatise is similarly concise in its commentary. However, much like the works of al-Baghdādī and al-Iṣfahanī, al-Zarnūjī's contribution to *ādāb* is organized under topical subheadings and is designed to serve as a summary digest for students to consult as they undertake their education.²⁸⁰ The *Ta'lim* proceeds from a discussion of what constitutes knowledge and the scholarly lifestyle to an explanation of the several virtues and habits the scholar must cultivate in order to thrive. The topic of good memory, forgetfulness, and the humoral disorders that could occasion either are kept to two sections to be further studied below, the coherence of which indicates that by the thirteenth century it had become expected of *ādāb* authors to address these important matters for the edification of their audiences on a discrete basis. In these two sections—one of which explicitly references memory and forgetfulness in its title—al-Zarnūjī affirms the connection of laziness and bad memory with phlegm and moistures accruing in the body, paraphrases the theory of precedent medical authorities on this score and prescribes simple drugs and dietary habits that are fully in keeping with their humoral reasoning. Notably absent from the text is mention of *balādhur*, or any ethical meditations on the propriety of enhancing the memory by such means. The strategies for doing so are simply explained and presented as indispensable information to the student, accompanied by scant justification and

²⁸⁰ Al-Zarnūjī explains his intentions as such in the incipit of the treatise: “I would very much like to clarify for [students] how to go about learning according to what I have read in precedent books and heard from my instructors.” *Ta'lim* 57.

citation when compared to the works considered above. This, I would argue, indicates the progressively intertextual nature of the *ādāb* genre as one approaches the later medieval period, the authors of which could freely draw from a repository of information that was largely familiar to and resonant with the professional identity of the ulema.

The first occasion for al-Zarnūjī to broach the topic of memory and forgetfulness occurs midway through his *Ta'lim*, in a section entitled *On Earnestness, Persistence, and Determination* (*fī al-jidd wa-l-muwāḏabah wa-l-himmah*). In al-Zarnūjī's view these are indispensable attributes for the ulema to cultivate, since they are a scholarly class whose pursuits in learning demand a level of effort and solicitude that is both emotionally and physically daunting, if not crippling when met with an impotent will. Al-Zarnūjī states that the seeker of knowledge should guard himself against intellectual blights of a purely physical nature as well, as "sluggishness [*kasal*] might be generated by an excess of phlegm and moistures [in the body], and the means of decreasing these is to decrease one's food intake."²⁸¹ Imprudent dietary habits might blunt one's natural disposition (*kalālat al-ṭab'*) toward learning; al-Zarnūjī states as many as seventy doctors concur that "forgetfulness is caused by an excess of phlegm, which is caused by drinking too much water, which is caused by eating too much food."²⁸² One can rectify this issue by eating dried bread or raisins on an empty stomach, though one should not eat too many of the latter and become thirsty so as to rekindle the offending humor. Also helpful in this regard is the use of emetics to purge excess humors via vomiting (*qī'*). Quoting Galen, al-Zarnūjī also recommends

281 Ibid. 96

282 Ibid. The invocation of seventy doctors here likely serves to signify a great number; its being a multiple of seven is also of strongly symbolic resonance to al-Zarnūjī's readers. On this see Conrad, Lawrence I. "Seven and the Tasbī': On the Implications of Numerical Symbolism for the Study of Medieval Islamic History." *Journal of the Economic and Social History of the Orient/Journal de l'histoire Economique et Sociale de l'Orient*, 1988, 42–73.

the consumption of every part of pomegranate fruit to benefit the memory, and warns against eating fish of any kind or part. Moderation is also called for here, as “a little fish is better than too much pomegranate.”²⁸³ These now familiar strategies are given no further rationale beyond their stated basis in sound medical reasoning.

Al-Zarnūjī also relates medical advice to prevent and resolve humoral disturbances in another, discrete section titled *On What Imparts Memory and Forgetfulness*.²⁸⁴ In this latter section he is sure to state at the outset that the strongest means of enhancing the memory are both medical as well as pietistic, including earnestness and persistence in study, limiting food intake, praying by night, and reciting the Quran.²⁸⁵ Brushing the teeth with an arak twig (*siwāk*) dissipates phlegm, enhances the memory, and makes for an articulate tongue (*faṣāḥah*). It is additionally the Prophet’s sunnah, the emulation of which secures pietistic benefits.²⁸⁶ Less a part of the sunnah as such but likewise effective in dissipating phlegm and moisture from the body is

283 Ibid. 98. This is seemingly a development or alternative of al-Ḥṣṣānī’s cautioning that too much pomegranate does the same damage as too little, at *Muḥadārāt* 506.

284 As in the foregoing works of *ādāb*, “*ḥimā yūriṭh al-ḥifẓ wa ḥimā yūriṭh al-nisyān*.” *Ta’līm* 130. This section bears a striking resemblance in content and wording to the eleventh section of al-Ṭūsī’s *Risālah*, cited above. Recall al-Zarnūjī’s enjoinder to memorize al-Mustaghfirī’s *Ṭibb al-nabī* at the conclusion of this work, treated in the previous chapter.

285 Recitation of the Quran—especially portions praising God and beseeching his protection—is considered by al-Zarnūjī as the best means of enhancing the memory (*azyad lil-ḥifẓ*), especially when done while reading the actual codex comprising the Quran (*naẓaran*) rather than from memory. An additional ritualization attending this recitation that is good for the memory is given on 130-1.

286 Ibid. 98, and 132. This aspect of *siwāk* and its citation here is discussed by Bos in “The Miswāk, an Aspect of Dental Care in Islam.” *Medical History* 37, no. 1 (1993): 68–79. See in particular 75, as well as the first footnote of this page, wherein the early author of *ādāb* Muḥammad b. Aḥmad al-Washshā’ (d. 936) extolled the use of this dental implement, since “it whitens the teeth, purifies the mind, is good for the foul breath of the mouth, extinguishes [the fire of] the bile, dries the phlegm, strengthens the gums, strengthens the flesh between the teeth, makes the sight clear and sharp, puts an end to constipation and stimulates the appetite.” These properties were also related by al-Ghazālī’s *Iḥyā’*: “three things enhance memorization and minimize phlegm: *siwāk*, fasting and reciting the Quran.” See both 342 and 157, respectively, which discuss the dental implement in chapters on the ritual aspects of *tilāwah* and *wuḍū’*. These citations were noted by Goldziher in his “Muhammedanischer aberglaube,” 147-8. See also al-Rāzī’s *Manṣūrī* fs. 46r-46v.

drinking honey,²⁸⁷ eating frankincense with sugar, eating twenty-one red raisins, all on an empty stomach and daily basis. This regimen “imparts memory and heals many an ailment and malady” related to the intellect, because “everything that minimizes phlegm and moistures enhances the memory, and everything that increases phlegm imparts forgetfulness.”²⁸⁸ The latter includes familiar habits like eating fresh coriander and sour apples, along with participating in each of the insalubrious, distressing, or distracting activities cited by al-Iṣfahānī and discussed by Bos and Goldziher above.²⁸⁹

v. Badr al-Dīn Ibn Jamā‘ah (d. 1333)

Rather than presented under their own chapter headings as in the works above, Ibn Jamā‘ah subsumes his advice concerning the humors and their relationship with memory to chapters dealing with the conduct of the scholar and student. Here references to forgetfulness are initially phrased in terms more didactic than medical in nature, relating primarily to the recitation of the Quran.²⁹⁰ These didactic measures aside, Ibn Jamā‘ah relates information concerning

287 Though as above the Prophet was well-known to have urged his Companions to use honey as the panacea it was believed to be, al-Zarnūjī does not attribute the practice to him here.

288 *Ta‘līm* 132. See the humoral rationale for eating raisins above, a practice al-Baghdādī attributes to al-Zuhrī. Less clear is why one should eat twenty-one red raisins, apart from the fact that this roughly corresponds to a handful and is, again, a multiple of the strongly symbolic number seven. The items in the list given by al-Zarnūjī here are also recommended verbatim by al-Ṭūsī’s *Ādāb al-muta‘allimīn*, 114-6.

289 The modern editor cites Ibn Qayyim al-Jawzīyah (d. 1350) as stating in his work of prophetic medicine that these activities are widely known (*bil-tajribah*) to impart forgetfulness. See footnote 3 on *Ta‘līm* 133, and al-Jawzīyah’s earlier contemporary Ibn Jamā‘ah’s similar such claim below. They also seem akin to the relatively more medicalized insalubrious activities criticized by al-Iṣfahānī’s *Muḥadārāt* at 506-7, such as sleeping in full sunlight after drinking and eating meat. This report is included by al-Mustaghfirī in his *Ṭibb al-nabī*, which was likely the more proximate source for al-Zarnūjī and other authors of later *ādāb*, who cite it by name. The reports are to be found in this work at 311 in particular, and many of the same mentioned by other works in this chapter at 302-312.

290 *Tadhkirah* 60-117.

specific foodstuffs that affect the mind in its own subsection, entitled *The Student Should Minimize his Use of Foodstuffs Causing Stupefaction and Weakened Senses*.²⁹¹ This includes the now-familiar admonition against consuming sour apples, broad beans, and vinegar. One should generally avoid foods “whose use generates phlegm stupefying to the mind and burdening to the body, such as excessive milk, fish, and the like.” The student should also avoid “things which impart forgetfulness by their intrinsic nature [*bil-khāṣṣīyah*],” mentioning the list of imprudent and insalubrious activities cited by al-Zarnūjī and others above, whose effects upon the memory Ibn Jamā‘ah declares to “have been borne out by experience.”²⁹² Instead, students should make use of “things which God the Almighty has made occasion for an excellent mind, like chewing frankincense and mastics according to one’s humoral disposition [*mizāj*].”²⁹³ One should likewise eat raisins in the early morning and drink rosewater, and consume other foodstuff like these “whose explanation has no place here.” Though Ibn Jamā‘ah’s justification for these substances’ improving the memory is quite elliptical, rosewater was widely cited by physicians like Ibn Sīnā and Maimonides to calm the stomach as well as rid the body of phlegm and black bile. Much in the same manner, the chewing of mastics and frankincense was advocated by doctors such as Ibn

291 Or, *an yuqallil isti ‘māl al-maṭā‘im allatī hiya min asbāb al-balādah wa ḍa‘f al-ḥawāss*. Ibid 92.

292 Ibid. The list lacks two of the previous entries—looking at crucified criminals and urinating in standing water—for unclear reasons. In any case, the term Ibn Jamā‘ah uses here to convey his assurances is *mujarrabāt fīhi*, which in medical and other associated texts refers to treatments that the physician himself has seen work in clinic or had read about in works compiling such reliable treatments. As Ibn Jamā‘ah was himself a physician it is not impossible that he should be speaking of his own experience in this instance. Further, in the footnotes of this page the modern editor suggests that there is no real basis for his holding this opinion, and that Ibn al-Jamā‘ah was simply transmitting information he had heard from the physicians of his time—a somewhat contradictory statement. See Álvarez Millán, Cristina. “The Case History in Medieval Islamic Medical Literature: Tajārib and Mujarrabāt as Source.” *Medical History* 54, no. 2 (2010): 195–214. Earlier in the text Ibn Jamā‘ah also warns against the scholar frequenting places of distress to him for fear of it hurting his natural disposition; see *Tadhkirah* 51.

293 *Tadhkirah* 92. The word here for “humoral disposition” is *mizāj* in one manuscript, and ‘*adah* in others. On the use of ‘*adah* in a similar such medical sense, see Perho *The Prophet’s Medicine*, 71. At *Tadhkirah* 51 ‘*adah* is poetically complemented with the word *ṭab‘*.

al-Bayṭār, a mechanical activity which, along with the intrinsically warming properties of these substances, helps to evacuate phlegm from the head and thereby improves memory and speech.²⁹⁴

4.4 Conclusions

As early as the tenth century medical strategies concerned with limiting the occurrence of phlegm and subtly warming the brain occupied a prominent place in works of scholarly *ādāb*. Some of these strategies, previously ignored, discussed in passing, or relegated to the realm of superstition by secondary scholarship, were significantly though not uniformly consistent with the humoral theory underlying the practice and theory of medicine between 900 and 1400. Since the earliest iterations of scholarly *ādāb* in this period authors discussed the utility and relevance of such strategies by means of a pietistic and professional idiom characteristic of the genre. This idiom attributed procedures, dietary habits, and simple prescriptions drawn from medical discourses to past luminaries of particular veneration and capacious memory, thereby raising the profile of these treatments and assuring *ādāb*'s audience of their efficacy and propriety. In this manner the ulema benefited not only from knowledge of the treatments themselves and the ostensible intellectual improvements that resulted from them, but also from participation in a rich tradition of scholarly emulation that constituted and marked them as members of a professional class.

Balādhur extract, the most popular means of enhancing the memory during the medieval period, makes only a limited appearance in these *ādāb* treatises despite its consistent citation in

²⁹⁴ *Tadhkirah* 92. See Ibn al-Bayṭār: *Kitāb Al-Jāmi'* at 2:489 and *Practical Materia Medica of the Medieval Mediterranean* at 261-6.

medical texts. Its single mention in the *ādāb* oeuvre of al-Baghdādī is, moreover, accompanied by expressions of outright disdain for the drug. This is likely due to the inherent and apparently well-known risks involved with it, as attested by the widespread cautionary tales beyond *ādāb* featuring scholars losing their minds and students making fools of themselves due to its use. More respectable practices among the ulema seem to have consisted of the dietary strategies and simple drugs extensively catalogued by authors of *ādāb* during and after the eleventh century, which were likewise part of the medical canon but here attributed to scholarly figures of the past. Inclusion of these practices was increasingly abbreviated as one approaches the fifteen century, when seminal texts in the genre such as those of al-Zarnūjī and Ibn Jamā‘ah begin to evince an intertextual awareness of the humoral reasoning underlying such strategies, and therefore spend comparatively fewer pages on their explanation. Their inclusion of this medical content, however abridged, nevertheless indicates the abiding influence of early *ādāb* discourses and the importance of medical erudition to the ulema through the later medieval period.

And yet direct treatments and therapies understood to enhance the memory and minimize forgetfulness by maximizing certain humoral advantages were not the only means ulema promoted in *ādāb* as they articulated the importance of their embodied experience to their professional lives. Apart from medical interventions based in the discourse of *ṭabī‘ah*, *mizāj*, and *mu‘ālahjah*, ulema also had recourse to an understanding of their bodies’ susceptibility to certain emotional and mental states that could facilitate or hamper learning independent of their individual humoral constitutions. This understanding was rooted in a parallel discourse within *ādāb* concerned with the careful organization of daily schedules, wholesome care for the body, and thoughtful management of intellectual hardships as each came to bear on the overall health

and intellectual potential of the scholar. The investigation of this discourse in the final chapter of this study will provide a more complete account of how multiple and interwoven medicalized discourses were of significance to the articulation of the medieval ulema's identity as a professional class of learned Muslims.

5. The Health of the Heart and Spirit in *Ādāb*

Mild, modulated, and measured voices balance the humors and gladden one's nature; spirits are raised and souls are delighted by them.

– *Risā'il ikhwān al-ṣafā*²⁹⁵

5.1 Introduction

In the previous three chapters we have seen how medieval ulema used the genre of scholarly *ādāb* to discuss their embodied experience of the religious and ethical education that had become emblematic of their ranks by the twelfth century. Over the centuries the genre became a means for the ulema to describe the strident intellectual qualities they believed were required by their careers. Mental acuity, physical endurance, sound health and strength of recall were usually listed as the most desirable among such quantities, and as the result of an optimally balanced humoral disposition that tended toward the dry and hot. As authors of *ādāb* described the physiological profile characterizing those who actually could join the ulema's ranks they referred to medical and philosophical discourses theorizing the inherent natures of human beings and their liability to change. The possibility of approximating humoral dispositions suited to scholarly life through dietary or medical measures was a topic of interest to consumers of *ādāb* and medical treatises alike, though in their aggregate such texts offered no final word on the efficacy, propriety, and safety of such measures.

While the medical and natural philosophical knowledge enabling this debate remained a hallmark of *ādāb* throughout the medieval period, the ulema's experience of their intellectually arduous education raised yet another set of questions about the malleability of scholarly aptitudes. Authors of *ādāb* show a universal concern for how the acknowledgedly intense

²⁹⁵ *Rasā'il Ikhwān al-Ṣafā*, 170-1.

emotional dimension of this education exerted a physical effect on the bodies of scholars, including disordering the humors responsible for regulating the intellect and overburdening the cognitive capacities of the heart with excess sensations. While we have seen that authors of medical and *ādāb* treatises alike thought that the brain was responsible for memorization and recollection, they generally agreed that the heart served as the principal instrument for the experience and retention of such knowledge. While the sensitivity and capacity enjoyed by an individual's heart was mostly a matter of inborn nature, *ādāb* authors warned that the ulema's lifestyle was so conducive to emotional disturbance that every scholar faced the risk of succumbing to despair and exhaustion. Expected to spend sleepless nights at study, ruthlessly interrogate their intentions on a regular basis, and lead an especially ascetic life, the scholar described by authors of *ādāb* faced a career path defined by rigor and restraint. Authors caution that not all those who aspired to scholarly life could bear the constant pressure of these activities, and those who were able to do so still risked exasperation with their repetitive and restrictive courses of study. Scholars of all temperaments and constitutions were vulnerable to the distress and distraction posed by worldly matters, such as the pursuit of sexual relationships, social intercourse, and financial interests. Treatises of *ādāb* uniformly advise their readers to strictly limit their exposure to such occasions for anxiety, concupiscence, and inattention—emotional states which were explicitly named as hindrances to scholarly success.

It is tempting to understand content of this kind exclusively in terms of self-discipline, a regimentation of the ulema's emotional experiences, intellectual enterprises, and daily intentionalities that helped cohere and control them as a socioreligious class. The *ādāb* genre was indeed a major arena in which the ethical systems that shaped the hierarchical worldview of

Islam's medieval scholarly elite were debated. As we have seen, in the tenth century this discourse was concerned with questions of natural human capacities and the practices that maximize them. The scholar of this early era is described as prone to fatigue and despondency largely because of study's tendency to frustrate the body's concupiscent spirit and exact a severe toll on an individual's intellectual capacities. For enduring these terribly harsh and austere career circumstances the scholar was to be compensated with divine blessings unavailable to other believers; moreover, an individual's heavenly reward for seeking knowledge would be proportionate with the hardship it caused in their life. As the ulema continued to coalesce as a social class in the eleventh century, however, *ādāb* treatises ceased citing the adversity of scholarly life as a fundamental virtue. Authors instead began to counsel their readers to proceed slowly and deliberately with their course of study, to take heed of their individual capacities for the assimilation of knowledge, and to avoid overburdening themselves for the sake of ambition. To this end they were instructed to practice moderation in all things, including the denial of earthly pleasures. They were likewise obliged to note their bodies' observed resiliences at particular times of the day and schedule certain activities for certain hours in order to take advantage of them. They were also told to avoid emotionally disturbing, vitally draining, and intellectually idle activities such as attending public executions, excessively indulging in sex, wandering through traffic, and reading the text of grave-markers. Activities of this kind are described as threatening the functioning of their intellect by overwhelming the heart with confusing sensations in a manner not unlike reading a text beyond one's intellectual ability.

Advice on this score tended to be dismissed in early twentieth-century scholarship for its purported lack of a basis in physical reality and the legal prescriptions of Islam. Nevertheless,

ādāb's consistent characterization of such activities as dangerous to scholarly well-being gives ample evidence that the ulema held reasoned beliefs about the effect of commonly-had emotional experiences on their intellectual abilities. After the twelfth century and the influential career of al-Ghazālī, understanding one's own intense emotional experiences and passions of the spirit attained a new level of significance in Islamic intellectual society. As a pivotal point of reference in his discourses on the refinement of character and the malleability of natural dispositions, the heart served as the primary instrument for the reception of knowledge and the locus where the divine realities of that knowledge were directly experienced by human beings. With his own spiritual crisis in mind, al-Ghazālī argued that a mournful disposition animated by fear of God and suspicion of one's own motivations was a natural corollary of being an educated Muslim. He understood negative emotions that lack appropriate provenance—like jealousy over a rival's promotion or anxiety about one's reputation—as a symptom of sickly character traits that must be identified and excised from the heart through a mystically-inflected diagnostic procedure.

The broad appeal of al-Ghazālī's writings on the need for this intellectual and affective reorientation of scholarly life gives evidence that by the early twelfth century the ulema had long been engaged in accommodating and theorizing the emotional complexity of scholarly life. While incalculably influential over late-medieval Islamic intellectual society, the thirteenth- and fourteenth-century reception of al-Ghazālī's ethics substantially tempered his advice that scholars subject themselves to a relentlessly withering examination of conscience. Briefer and more concisely-worded than their immediate predecessor's sprawling corpus, these later treatises of *ādāb* were written by a more fully professionalized ulema who spoke of the need to improve their character and challenge their intellects in order to grow as scholars. But these treatises more

vocally urged their readers to complement their efforts in study, repentance, and self-reflection with realistic expectations, emotional resiliency, and rest. According to these later authors, a gradual steeling of the heart against worry and exhaustion is what best hones its capacities, and rushing headlong into an overly ambitious course of study may blunt even the sharpest intellect. Though differing in these respects, *ādāb* authors still exhibited the belief that every individual's intellectual and emotional capacities were based in their humoral natures. Along with curiosity about the malleability of these constitutions, the ulema's use of bodily allegories and medical metaphors to describe the role of the human heart and spirit in learning are a likewise hallmark of the medieval *ādāb* genre.

5.2 Caring for the Heart in Medieval *Ādāb*

i. Abū Hilāl al-‘Askarī (d. 1005)

Perhaps the most emblematic among the several themes that dominate al-‘Askarī's early entry in the *ādāb* genre is the author's conviction that the path to scholarly competency is beset on all sides by personal hardship and worldly temptation. As we have seen in the second chapter of this study, al-‘Askarī's decision to amend the teachings of his predecessors at the outset of the *Ḥathth* to include a nuanced discussion of inborn natures is clear evidence that the tenth-century ulema believed themselves to belong to a class of human beings uniquely suited to enduring these hardships and temptations. This fact was either due to the self-discipline, resilience, and determination they learned on the way to becoming a fully fledged scholar, or, as in al-‘Askarī's apparently narrower view, to a primal disposition facilitating acclimation to harsh scholarly life and the constant assimilation of knowledge. While this discussion betrays an early-medieval Islamic engagement with the relevance of inborn natures to intellectual aptitude, it is clear from

the popularity of the *Ḥathth* that a large portion of the ulema living were beginning to concede that a career spent in pursuit of knowledge was a particularly challenging, if not wholly daunting, proposition. “It is a broadly acknowledged matter,” al-‘Askarī warns, “that a human being can only attain a measure of knowledge after intense struggle and great toiling.”²⁹⁶

Al-‘Askarī so often advises his readers that to commit to the pursuit of knowledge is to accept the endless toiling that accompanies it that the largest portion of the brief text is dedicated to the topic. He reminds them at the outset that they must carefully ensure their minds remain in a state of serenity throughout this process, and endeavor to derive comfort from the hardships of the scholarly lifestyle itself: “Striving after [knowledge] which secures respect for oneself and increases one’s noble rank,” al-‘Askarī explains at the beginning of the work, “grants comfort to the intelligent. Slackening in this task, however, is the wont [*‘ādah*] of the ignorant.”²⁹⁷ While it is perilously easy to fail in the task of becoming a learned Muslim, al-‘Askarī continues, rising high in the ranks of the knowledgeable is prohibitively difficult, requiring a “cleaving of the spirit [*shaqq al-nafs*]” to accomplish it.²⁹⁸ Several poems and anecdotes speak of the toiling (*ta‘ab*) ulema experience at study in terms of the only true respite for the pious believer. “The rank of the *adīb* is among the highest, and the class of the knowledge[able] the noblest. So whoever thinks they can debate it with equanimity [*bil-da‘ah*] or to seek maturity in it while at ease is sorely mistaken.” He cites the famed litterateur Jāḥiẓ (d. 868) as having warned, “Knowledge will not give the least part of itself over to you unless you give the whole of yourself over to it. And when you do give the whole of yourself over to it, in the course of the

296 *Ḥathth* 81. See again Mottahedeh, Roy. “The Transmission of Learning” at 63–72.

297 Ibid. 41. Recall the medical sense of *‘ādah* explored in the second chapter of this study.

298 See also Ibid. 89.

giving you place yourself at grave risk!” Many are those who have ignored his advice, al-‘Askarī admonishes, only later to find their intellectual capabilities compromised by the momentous effort required by walking the path to knowledge.²⁹⁹

In keeping with the themes of *ādāb* discussed in the previous chapters of this study, al-‘Askarī offers familiar counsel as to how the fledgling scholar might survive and indeed thrive amid the harshness of his career. Far from believing his readers would be served by his underplaying the reality of these hardships, al-‘Askarī invokes medical metaphors of the mind to illustrate the importance of adversity to intellectual formation:

Comprehension is to be found in the balancing of [one’s intellectual] instruments; when this balance is missing the acquisition of knowledge is impossible. It is like a clay that is too dry or too runny, and will not bear the image of a stamp. However, it will bear such an image when it reaches a state of balance. So if the student can only acquire knowledge amid so great a struggle, how could it possibly be sought when they are languid or at leisure? So, my brother, yearn after the heights of distinction, the fame of remembrance and your elevation to a rank above humankind. Seek glory, and do not otherwise suffer the loss of your days and nights, nor waste a moment or year of your time [on anything but] knowledge. Seek it out in its proper place; for if you strive in its acquisition but for a few trifling evenings, you will savor the sweetness of its blessings for the rest of your life, [and] after your death leave behind a lasting memory of yourself.³⁰⁰

Al-‘Askarī so closely associates preparing oneself for the hardships of scholarly life with the act of acquiring knowledge itself that he suggests these twin pursuits mutually require, or even occasion, a balancing of the body’s intellectual faculties. In a turn of phrase that authors of *ādāb* would repeat for centuries, al-‘Askarī declares to his readers that “knowledge cannot be bestowed when a body is at ease [*lā yunāl al-‘ilm bi-raḥat al-jism*].” Dis-easing one’s body in this regard involves a harnessing of its arbitrary passions (*shahwah*), from which the scholar

299 Ibid. 42-3. The final clause of al-Jāhiz’s remarks here read, “*kunta min i‘ṭā’ihī iyyāka al-ba‘aḍ ‘alā khaṭar*.”

300 Ibid. 43. According to al-‘Askarī the scholar need only pursue knowledge as such to find success; to do so is to “seek to inspire awe without political office, to be rich without property, to defend without weapons, to stand high without kinsmen, to render aid without compensation, to command armies without treasuries or allocated funds.” See also 44-7.

must learn to discern what he wishes to learn for its own sake. It is in this introspective manner that the scholar avoids wasting his time and disordering his intellect in the pursuit of knowledge, and enables his livelihood to attain devotional and professional meaning.³⁰¹

The meritorious struggle to rule one's spirit and its passions is a broadly present theme in the *Hathth*, and has been widely studied feature of medieval *ādāb*. Indeed, al-ʿAskarī records the Yemini *adīb* Ibn al-Marāghī (d. 981) as having said, “A person should dupe [*yukhādi*] their spirit while at study,” implying that baser desires interfere with the attention called for by scholarly pursuits.³⁰² Yet the term *shahwah* does not only appear in the sense of distracting bodily whims that may waylay the seeker of knowledge. Quite to the contrary, the voracious appetite of a body for satisfying its passions is a that tool students may bend to the task of amassing as much knowledge as possible—though, as above, they never do so without incurring considerable risk. When discussing the six prerequisites that make for an effective scholar—among which *ṭabīʿah* conspicuously featured—al-ʿAskarī notably includes a discussion of the term *shahwah*. “And we mention passion because if one's spirit desires after a thing it becomes more likely that it will allow itself to seek it out and become more enthusiastic in attaining it,” al-ʿAskarī explains. For this reason,

when in the grips of passion the spirit more readily grasps concepts. And when this happens it can neither reserve its powers nor hold a single thing back from its deepest reaches, strongly preferring the consuming intensity of rational reflection over the ease of doing something else [*āʿtharat kadd al-naẓar ʿalā rāḥat al-tark*]. That is why it has been said the student of knowledge should begin his education with weighty matters, and

301 Ibid. What is more, such a noble examination of one's conscience is not without its collateral benefits. Al-ʿAskarī is sure to remind his audience of the power and respect that their suffering in pursuit of knowledge will afford them—expressly immaterial blessings simply unobtainable to unscholarly and, therefore, deficient believers. “The value of a human being,” a simple poem offers in summary toward the end of this selection, “is what they know.”

302 Ibid. 60. This is also likely why al-ʿAskarī discusses the scholar's need for material self-sufficiency (*kifāyah*); i.e., so as to limit attending to the needs of his body and maximize his time at study.

select subjects he is enthusiastic about and which are best suited to his natural disposition [*tab‘uhu bi-hi aghnī*]. For whether or not one grasps a concept is a question of one’s enthusiasm, and whether or not one truly learns something is a question of one’s interest.³⁰³

A lack of the ability to channel one’s enthusiasms toward these productive ends is clearly inimical to the scholarly lifestyle, for it is a skill that one must only begin honing in the early stages of education and continue to exercise throughout one’s life. Aside from the pedagogical insight into how one might best maximize their youthful vigor and enthusiasm, al-‘Askarī comments that “anyone who knows anything of knowledge and its superiority will never satisfy their burning desire for it [*nahmatahu minhu*], and will never be sated from assimilating it their entire life.”³⁰⁴

One must avoid conflating such lifelong enthusiasm with undue haste. The sheer amount of information that demands the ulema’s attention leads al-‘Askarī to conclude that “he who rushes headlong toward attaining authority in knowledge will injure himself with its extent.” It is far better for the student to seek out and mature in knowledge at a more reasonable pace. Otherwise, they risk straining their skills past the limit of their endurance, crossing the boundary between industrious effort and pathological obsession: “As for the one who is desirous to know everything, let their kith and kin give them medical treatment [*yudāwūhu*], for that will demonstrate just what kind of insanity has befallen them.”³⁰⁵ Though the student should attenuate

303 Ibid. 47-8. See also al-‘Askarī’s summary on p. 67.

304 Ibid. The matter is imbued with further physical meaning by two reports from the Prophet: in the first, the Prophet states that “there are two kinds of covetous people who will never satisfy their greed—the one who desires after knowledge, and the one who desires after the material world.” In the second report, the Prophet more emphatically states that the most famished [*ajwa‘*] person in the world is he can think of is “the seeker of knowledge.” When further pressed as to who the most sated person in world is, he answers “the one who has no desire to seek knowledge [*alladhī lā yabtaghīhi*].”

305 Ibid. 62-3 and 69. Interestingly, al-‘Askarī also reveals that some scholars would send others to attend lectures in their place so as to maximize the amount of knowledge they could attain in one lifetime. The practice was apparently looked down upon by the ulema, with at least one source here quoted as declaring, “Whoever is

their desire for knowledge so as not to harm themselves in this fashion, throughout the remainder of the *Ḥathth* al-‘Askarī continues to insist upon the importance of hewing to the pursuit of knowledge as much as is practicable. The skill of memorization features prominently in his comments, especially insofar as its proper execution improves the scholar’s study and social life as much as his bodily and emotional health. Apparently always lusty for knowledge, we are told that the Buyid-era paragon Abū Sahl al-Ṣu‘lūkī (d. 979) would audibly “murmur parts of his lessons and recitations even as he entered the bathhouse, and would say that knowledge accompanies you there.” Al-‘Askarī clarifies that what he meant to do “was to enjoin the task of memorization.” The knowledge won in this way is such a reliable companion that al-‘Askarī cites certain philosophers as having similarly said, “Knowledge is what swims alongside you when your ship sinks—that is, knowledge which has been committed to memory.”³⁰⁶

The lifelong aid knowledge stands to furnish its seeker in this manner does not preclude al-‘Askarī from counseling his readers about measures they must take to minimize intellectual and emotional frustration. As will prove true of *ādāb* treatises written in the centuries after al-‘Askarī’s death, these measures are directed toward the most cognitively and affectively loaded organ of the human body: the heart. Through one’s training one may hope to improve the organ’s resiliency; al-‘Askarī cites the famed memorizer al-Zuhrī as having rather elliptically said, “When a man seeks after knowledge he does so with his heart much like one mountain pass among many; he will not hesitate thereupon to enter a valley and devour anything he finds

absent from a lecture will meet with failure, and his colleagues will feast on his share of knowledge [*man ghāba khāba wa akala naṣībahu al-aṣḥāb*].”

306 Ibid. 67.

there.”³⁰⁷ In an immediate gloss al-‘Askarī offers the following explanation, along with two heartening scholarly anecdotes:

He meant that memorization is so intensive [*shadīd*] that it is severely hard on a person [*yashuqq ‘alā al-insān*] at first, and then gets easier as one becomes accustomed to it. This is corroborated by what [our uncle] Abū Aḥmad related on the authority of...al-Ḥārith b. Usāmah [d. 895]: “The knowledgeable used to say, ‘Any vessel into which something is poured will become cramped, except the heart. Anytime you pour something into it, it broadens.’” Further, Abū al-Samḥ al-Ṭā’ī [d. 869] once said, “I was listening to my uncles sitting together and reciting poetry. When I tried repeating what they had said from memory [*ista‘adtuhum*] they rebuked and abused me, saying, ‘You heard what we recited but did not commit it to memory!’ Then the teacher said, ‘Memorizing was next to impossible for me when I first tried my hand at it. So I accustomed my spirit to it [*‘awwadtuhu nafsī*] until I could memorize *The Poem of the Tent Patch* in one night—and it has almost two hundred lines in it!”³⁰⁸

Apart from relying on such a sympathetic instructor to allay their students’ anxieties about memorization, al-‘Askarī goes on to state that students may cultivate certain study habits that increase the likelihood of their lessons’ being (quite literally) taken to heart. “The student should raise his voice during his lessons such that he can hear himself,” al-‘Askarī suggests, “for what the ears hear becomes deeply rooted in the heart. This is why people more easily commit to memory [*aw‘ā*] what they hear versus what they read.” Reading aloud is generally better than doing so quietly, al-‘Askarī adds, for in addition to enhancing a student’s power of recall the practice improves the aesthetic quality and analytic clarity of his speech, as well as help stave off sleep.³⁰⁹

307 See Ibid. 71. The original Arabic reads, “*inna al-rajul la-yaṭlub wa-qalbuhi shi‘b min al-shi‘āb thumma lā yalbath an yaṣīr wadīyan wa-lā yūḍa‘ fīhi shay’an illā iltamahahu.*”

308 Ibid. 71.

309 Ibid. 72.

With the considerable risk that frustration and boredom posed to the student tasked with memorizing large quantities of knowledge, al-‘Askarī follows the above with additional advice about making one’s sleep habits conducive to the scholarly lifestyle. “How great a teacher is study!” al-‘Askarī exclaims at one point in the *Ḥathth*, “How great a helper is sleeplessness, how great a guide is the reading lamp, how great an instructor is the night!” Belief in the night’s special relevance to study will prove a pervasive theme in the *ādāb* treatises of subsequent generations, usually betraying a medical understanding of how excessive sleep is harmful to the intellect. As in these later texts, al-‘Askarī’s *Ḥathth* documents a similar distrust of too much sleep, which he considers harmful to one’s ability to memorize in the daytime and wasteful of nighttime hours better spent at study. Students are best served by avoiding activities known to induce sleep, such as eating too much, and by bracing themselves against the drowsiness that might result from their abstention.³¹⁰ Al-‘Askarī relates that Abū Ḥanīfah believed good memory to be a matter of purifying the disposition, which involved keeping oneself from immoral, insalubrious and, especially, soporific behavior. The much-cited theologian Abū ‘Alī al-Jubbā’ī would to this end “strip his back of clothing on cold nights, warding off sleep that way.”³¹¹

Indeed, studying only at night, limiting one’s sleep and curtailing one’s diet had a clear disciplinary inflection for al-‘Askarī as well, especially insofar as it helped curtail other distracting bodily needs. Fāṭimah, a daughter of al-Shāfi‘ī, described her father’s extraordinary focus on the pursuit of knowledge in terms of how much reading lamp oil he consumed. She

310 Ibid. 72-86. On this point lexicographer al-Khalīl (d. 786) taught, “The most disagreeable time for me of study for me are those hours when I have eaten,” evidently due to the distraction the task itself poses and the physical burdening of the body it involves.

311 Ibid. 87, and 73, 77-8. Al-‘Askarī recounts Abū Ḥanīfah’s counsel as, “*wa sa’ala rajul abā ḥanīfah ‘ammā yūriṭh al-ḥifẓ fa-qāla al-bazr al-bazr*,” with the repetition of the final word included for emphasis. Capacious in meaning, *bazr* connotes a variety of fastidiousness that encompasses all the meanings above.

would have to bring him as many as sixty refills per night, and as she did so al-Shāfi‘ī would often comment that “nightly gloom is the best light for the heart.”³¹² So too did Socrates explain his ability to memorize vast quantities of knowledge by his habit of burning more lamp oil than he drank water. Maintaining such a rigorous study schedule at night may also lead the ulema to experience their desire for knowledge in terms of bodily needs surpassing those for rest, nourishment, and sexual gratification. To this end al-‘Askarī includes a famous anecdote in which some colleagues of al-Shāfi‘ī purchased a slave girl and placed her in his quarters. Wishing either to sabotage or surprise their friend, they hoped “that when night fell and he made to study, al-Shāfi‘ī would instead look to have sex with her. But he paid her no mind. When day broke she went back to the slave trader and said, ‘They stuck me with a lunatic!’” After hearing of these remarks al-Shāfi‘ī maintained his scholarly perspective, commenting that the true lunatics “are those who lose even a small amount of knowledge they have learned, or fail to maintain it until it vanishes.”³¹³ Only after satisfying their scholarly urges in this manner will the ulema think to answer these more basic necessities of their bodies: “Once you gain an ample share of knowledge, you will feel so sated that you will [again] prefer sleep to study and eating to reading.”³¹⁴

This discussion of sleep and the distractive potential of other bodily needs occasions a further shift in al-‘Askarī’s focus toward explaining the necessity of disciplining oneself to attend

312 Ibid. 73.

313 Ibid. 78. Note that in the medieval era it would not be considered an immoral act on the part of a free male adult of any marital status to have sex with a slave. The intent here is clearly to indicate that al-Shāfi‘ī’s preoccupation with knowledge was such that he would not give in to even the most licit temptations of the flesh.

314 Ibid. 77-81. Abū ‘Alī al-Jubbā‘ī’s son, Abū Hāshim, went further in comparing his desire for knowledge with his more literal bodily needs. When asked about the large number of books his father left behind, Abū Hāshim informed his students that he had no further need for the physical copies, for he had “eaten them and drunk them while at study, and had come to know them inside and out.”

to the task of learning at all times. The scholar should make use of every hour of the day to maximize his learning potential, which has an ancillary benefit of habituating his body to intense study. To this end al-‘Askarī reports a rather amusing anecdote about the grammarian Abū Bakr al-Khayyāt (d. 932), who “spent all his time at study, even when on the road. At times he would fall down a bluff, or his steed would carry him off in a random direction. Some say that he would fasten twine around his midriff when he stayed up at night to study this way, fearful of dozing and falling from his mount.” Each day the Abbasid vizier Ibn al-Furāt (d. 924) would rise in the morning and immediately set about memorizing an article of knowledge, however small, in order to preserve his mental acuity. The Buyid statesmen Ibn al-‘Amīd (d. 970) would amaze his colleagues with seemingly boundless feats of memory, and his son would endeavor to memorize two thousand lines of poetry each day before lunch. Every Friday at the same hour his contemporary, the jurist Abū Ḥasan al-Karkhī (d. 951), would travel to his teacher’s lecture hall knowing full well that lessons were suspended on the day of congregational worship. He later explained to his colleagues that, were he to go to the mosque on that day instead, he would be sure to lose his habit of attending lecture on every other day of the week.³¹⁵

However much al-‘Askarī centers the *Ḥathth*’s moral narrative on the hardships involved with acquiring knowledge and the benefits of having one’s life consumed by the quest to do so, both its opening and closing pages feature anecdotes advising readers not to harm themselves in the process. In one notable example toward the end of the text, the teacher of the Abbasid-era poet Ibn al-Jarrāḥ (d. 908) saw that his student’s notebook had been stained with blood. After asking for an explanation, Ibn al-Jarrāḥ replied that when he stayed up on warm nights to study

³¹⁵ Ibid. 77-9, and 86. Throughout these pages is much debate about how many lines of poetry or articles of knowledge these individuals were capable of memorizing, pointing to the likely apocryphal nature of these anecdotes.

by lamplight he tended to develop nosebleeds. Taken aback, his teacher exclaimed, “No, no! You should seek knowledge for your own sake [or own mind/spirit; *li-nafsika*]! If you neglect yourself then what good will your knowledge do you?”³¹⁶ In much the same way the notably learned caliph ‘Umar II (r. 717-20) once mused to his courtiers that his spirit was like a draught animal, and that he risked losing both his mount and his way if he overburdened the beast on his journeys. In response, the traditionalist Muḥammad b. Ka‘b (d. 727) advised the caliph that what made the journey worthwhile was the hardships involved with acquiring knowledge in the first place, and that the traveler endured them to remedy the disease of ignorance as one endures uncomfortable treatments for other ailments. Unconvinced, the caliph mildly replied that “the speaker is right to invoke [the hardships of] knowledge. However, overstepping the bounds of moderation in seeking it may lead to its forfeit!”³¹⁷ None other than the Prophet himself was in agreement: “Is this not a strident faith? So apply yourself to it, but gently [*bi-rifq*]! For a man who loses his mount to misadventure has neither land left to traverse nor backbone left to spare!”³¹⁸

The *Ḥathth* stands apart from other entries in the *ādāb* genre for its early publication, distinctive brevity, and singular focus on the hardship ulema endure on the path to becoming

316 Ibid. 87. The verb al-‘Askarī uses for *neglect* here is *atfala*, which powerfully invokes the idea of making oneself literally odious through slovenly habits or lack of adequate perfume. It likewise implies a failure to provide for one’s own basic needs and comforts. At 90 similar metaphorical language is used to explain how ignorant people tend to remain ignorant due to a lack of self-awareness. Al-‘Askarī likens them to those who smell of garlic after eating it; while others may be able to detect the odor of the herb on their breath from afar, its originator tends to become so inured to its presence that before long they cannot detect the smell on themselves.

317 Ibid. 87: ‘Umar’s initial remarks read, “*inna nafsī maṭīyatī fa-idhā ḥamaltu* [or *ḥammaltu*] *‘alayhā khasirtuhā*.” The individual who replied is listed only as Muḥammad in the text, but was likely the courtier Muḥammad b. al-Ka‘b. The latter’s response reads, “*inna lam taṣbir ‘alā ta‘ab al-‘ilm ṣabarta ‘alā shifā’ al-jahl*.”

318 Ibid. This report reads, “*fā-inna al-munbatt lā arḍan qaṭa‘a wa lā ḡahran abqā*.” Multiple sources cited here attest to similar themes.

learned. With this lattermost aspect in mind, al-‘Askarī’s taking such care to explain how overexertion and fatigue can best be avoided is all the more significant. Subsequent *ādāb* treatises exhibit a similar lionization of historical figures who flourished amid the prohibitive difficulty of scholarly life, insisting as al-‘Askarī did that their readers discipline themselves in order to survive it. Nevertheless, beginning in the eleventh century authors of *ādāb* began to take even more care in underlining the importance of heeding one’s physical and emotional health while at study.

ii. Khaṭīb al-Baghdādī (d. 1071)

Khaṭīb al-Baghdādī’s *Faqīh* and *Jāmi‘* both offer substantial evidence of the significance the ulema laid on maintaining one’s emotional as well as bodily health. In the previous chapter we have seen the role al-Baghdādī attributed the humors of the body in determining one’s intellectual abilities. We have also seen how his corpus exhibits ambivalence over the wisdom and efficacy of altering one’s inborn nature. It is perhaps in the same vein that al-Baghdādī emphasizes the challenge of the scholarly lifestyle and how its adherents may most productively meet them, focusing less on the elasticity of one’s intellectual gifts and more on the limitations every student will encounter on the path toward knowledge. This focus is no less medically-inflected than other content to be found in the *Faqīh* and *Jāmi‘*; much like al-‘Askarī, al-Baghdādī locates the emotional and cogitative sensations that the ulema will inevitably feel amid the difficulties of their studies in the heart. The call to moderation and the setting of realistic expectations for oneself suffuse these two *ādāb* texts, and in this manner exerted a clear influence on subsequent entries in the genre.

The theme of moderation and reduced expectations in scholarly life is first broached as such in a section of the *Faqīh* al-Baghdādī titled *The Extent of What the Student of Law Can Memorize*. The section begins with an extended piece of counsel that explicitly affirms the embodied nature of learning and, especially, the figuratively physical weight with which learning encumbers the body:

Know, reader, that the heart is an acquisitive organ that can either endure or be weakened by things, in the same way that the bodies of some people can carry twenty pounds whereas other bodies are weakened by a tenth of that. Likewise are those that can walk a league in one day and not tire, while others find it difficult to walk more than a mile or two. And some can eat several pounds of food, and others not a fraction of that. This is how the heart is.³¹⁹

As with al-‘Askarī, in al-Baghdādī’s view the organ most relevant to the reception and maintenance of knowledge is not the brain, but the heart. The organ acts as a vessel for both acquired information and the sensations that accompany their acquisition. For this reason its capacities are more directly in question when speaking of one’s ability to learn in the first place, rather than the swiftness of recollecting learned information for which the brain is responsible. Al-Baghdādī therefore urges that students of the law understand the role and capacity of the heart in their studies, particularly as concerns memorization. “There are, among all people, those who can memorize the contents of ten sheaves of paper in one hour, and others who could not manage half a page across several days,” al-Baghdādī continues. Knowing one’s limits is important in this regard, since “when a person who can memorize only half a page sets out to memorize ten

319 *Faqīh* 2:215, rendered as: “*i’lam anna al-qalb jāriḥah min al-jawariḥ taḥtamil ashyā’ wa ta’jaz ‘an ashyā’ ka-l-jism allādhi yaḥtamil ba’ḍ al-nās an yaḥmil mā’itay raṭl wa minhum man ya’jaz ‘an ‘isrīn raṭlan wa ka-dhālik minhum man yamshī farāsakh fī yawm la ya’jazuhu wa minhum man yamshī ba’ḍ mīl fa-yuḍīrr dhālik bihi wa minhum man ya’kul min al-ṭa’ām arṭālan wa minhum man yutkhimuhu al-raṭl fa-mā dūnahu fa-ka-dhālik al-qalb.*” A *raṭl* is roughly five-hundred grams in weight, and a *mīl* is roughly four thousand cubits, the latter of which are each roughly three-quarters of a meter in length; thence comes the reckoning of weight and distance above.

sheaves in imitation of another, he will grow bored and exasperated. He will forget what he has memorized, and whatever he hears will not avail him.”³²⁰

Moreover, the intake, digestion and excretion of food is the primary metaphor al-Baghdādī employs here to explain the heart’s good and bad functioning at study. “What we have mentioned above,” al-Baghdādī explains, “is also the case of the man who eats food whose amount he knows to exceed his daily habit, leading to a weakened stomach. If on the following day he eats a smaller amount of food, it would lead to the indigestion of what is left over of the former food in his stomach.” So too does the presence of partially integrated or, worse still, inappropriately complex knowledge in the scholar’s body disturb the processes of learning. Al-Baghdādī’s metaphorical use of food in this sense is accompanied by the devotional connotations evoked by moderating one’s consumption of material pleasures, which are also present in the *Jāmi’*. In this text al-Baghdādī cites Ibrāhīm al-Anṣārī (d. c. 781) and Ḥasan b. Šāliḥ’s (d. c. 785) advice that memorizing hadith is made easier by doing so while fasting. This is followed in short order by al-Baghdādī’s metaphorical gloss that the reader should in this manner “sweeten the taste of his acquired knowledge [*kasbahu*]” just as he would “improve his diet and limit his intake of food.”³²¹ A statement attributed to Jesus immediately reinforces the figurative

320 Ibid.

321 *Jāmi’* 401. Straightforward devotional advice is also expressed here. Al-Baghdādī mentions reports attributed to Ibn ‘Abbās (d. 687), ‘Alī b. al-Madīnī (d. 894) and Abū ‘Āṣim al-Nabīl (d. 827) to the effect that that one can only hope to memorize in proportion to the degree that one is of sincere intention. Likewise, avoiding sinful acts (*ma‘āṣin*) and putting hadith into practice protects against forgetting one’s lessons: “Even the noblest of men will forget what he’s learned if he commits moral blunders; he can regain a hold on himself by heeding hadith and putting them into practice.” The advice is repeated in several alternate narrations immediately following this one. See Ibid. 399-400. The contemporary scholar of hadith, Ibn ‘Abd al-Barr, likewise recommended teaching hadith to the less fortunate in order to safeguard the hadith as well as his capacity to memorize. See *Bayān* 454. At *Jāmi’* 407-13 al-Baghdādī likewise advises his readers to recollect and discuss hadith (*mudhākarah*) in the presence of the general public (*‘āmat al-nās*), colleagues (*al-atabā’ wa-l-aṣḥāb*), contemporaries (*al-aqrān wa-l-atrāb*) and the elderly (*al-shuyūkh wa dhawī al-insān*). In the final part of this subsection, entitled *the Continual Consideration and Discussion of Hadith, and the Prevention of its Lassitude* (*dawām al-murā‘āt lil-ḥadīth wa-l-mudhākarah bihi wa ittiqā’ al-futūr ‘anhu*) economic and agricultural

association of sound knowledge with a circumspect diet: “Abū ‘Abd al-Raḥmān al-‘Umarī [d. c. 800] said, ‘A scrupulous servant should leave aside what occasions doubt in him and turn toward what does not. For a man once said to Jesus, ‘Oh, Soul of God, advise me!’ So Jesus said, ‘Think whence comes your bread!’” Such wariness of food, the overindulgence in which is tied for al-Baghdādī to dabbling in knowledge of questionable provenance or complexity, receives a more explicitly medical association in a poem from the grammarian al-Aṣma‘ī (d. 833): “Brother, take from the world what suffices you / And abstain from what is too much for you / Take heed of yourself and of overeating / For it will surely occlude your natural intelligence [*fiṭnah*]!”³²²

It is indeed al-Baghdādī’s stated view in both the *Faqīh* and *Jāmi‘* that it is more praiseworthy for students to concern themselves with learning and memorization in times of hunger than in times of satiation. But it is the student’s responsibility to determine whether this is a realistic study habit to pursue.³²³ After all, al-Baghdādī further adds to his comments in the *Jāmi‘*, “when severe hunger and burning desire for [food] befall some people, they cannot memorize at all. So they ought to satisfy their spirits with something light and simple, such as sucking on pomegranates and the like, and not overeat.”³²⁴ The Prophet was equally a proponent

metaphors are used to describe the cultivation and maintenance of the scholar’s knowledge. These latter metaphors are perhaps in keeping with the sense that knowledge can only be secured by admitting “the necessity of relentless labor,” a reading put forward by Rosenthal in *Knowledge Triumphant* at 280 and which is evocative of al-‘Askarī’s sustained commentary on the hardship central to the pursuit of knowledge.

322 *Jāmi‘* 401 and 149. This call for moderation is further supported through a famous prophetic hadith reported by the Companion al-Miqdām b. Ma‘dīkarib (d. 705): “Humans fill no more vile a vessel than their stomachs. It should suffice them to eat enough food to keep their backs upright, but if they must [eat more] let a third [of their stomachs] be for food, a third for drink and a third for breath.” Another report features a certain Greek emperor who was asked by his courtiers, “Who do you reckon is the most foolish one among you?” The emperor responds, “The one who fills his belly with whatever he finds.”

323 Ibid.: “*awqāt al-juw‘ aḥmad min awqāt al-shab‘ wa yanbaghī lil-mutaḥaffīz an yataṣṣid min nafsihi ḥāl al-juw‘.*”

324 Ibid. See the previous chapter on the common invocation of pomegranates.

of moderation in this regard; a Companion related that he once asked him, “Have I been rightly told that you pray by night and fast by day?” [The Companion] answered in the affirmative. So the Prophet said, ‘When you do that you strain your eyes and weaken your spirit. Your eyes and your spirit have rights. So fast, but also break your fast; pray, but also sleep.’”³²⁵ Yet another Companion had a similar anecdote to share about seeking moderation in devotion:

‘Amr b. Al-‘Āṣ [d. 663] said that the Prophet once asked him, “Have I been rightly informed that you fast all day and pray all night?” He said, “Indeed, you have.” The Prophet said, “It is enough that you fast every Saturday and Sunday,” to which ‘Amr replied, “But Messenger of God! There is a strength in me exceeding that.” So the Prophet asked him, “Do you wish to be as King David was in matters of fasting? For he was the most upright in its practice, and he fasted only every other day.” ‘Amr answered, “But Messenger of God! There is a strength in me exceeding that.” The Prophet declared, “Conducting yourself that way will make you ill, aged, and weak. It would be enough for you to recite the Quran completely every half-year.” So ‘Amr said, “But Messenger of God! There is a strength in me exceeding that.” So the Prophet said, “It would be enough for you to recite it every ten days!” ‘Amr said, “But Messenger of God! There is a strength in me exceeding that,” to which the Prophet replied, “Recite it every seven days, and do not rush through it.”³²⁶

‘Amr reveals that later in his life he saw the error of his ways, commenting that even after the Prophet’s admonishment, “I had insisted, and it was hard on me. It would have been better had I accepted the Prophet’s license to recite and fast less often.”³²⁷ Al-Baghdādī summarizes this

325 Ibid. Al-Baghdādī mentions that Ibn Abī al-Dunyā (d. 894) used to teach, “Your spirit convalesces from things. When it tires it will have no desire for them, as your eyes flow with tears when they begin to strain.”

326 This last phrase should read *wa lā tunaththirhu*; the printed edition’s *tunaththirnnahu* is likely the editor’s error or else a flaw in the original transcription.

327 Ibid. 2:218-9. The Prophet’s example of moderation is invoked throughout this section: “Anas b. Mālik was asked about the Prophet’s manner of praying and fasting, so he said, ‘From the new moon onward he would fast such that we would say he would not break his fast, and would break his fast such that we would say he would not begin fasting. And whenever we wished to see him praying at night we saw him at it, and whenever we wished to see him sleeping, we saw him at it,’ at Ibid. 2:215-6. Also cited here is an additional report from Āi’shah, who recounted that once, “I was with a woman, and the Prophet entered the room. He said, ‘Who is this?’ I said, ‘So-and-so. She does not sleep by night, and is excessively rigorous in her prayers.’ So he said, ‘Hush now. You should practice only according to your capacity, for God will not grow tired of rewarding you until you do.’ Āi’shah said, ‘The most beloved act of devotion according to the Prophet was one in which its practitioner persisted,’” at 2:219.

counsel and what precedes it as follows toward the end of the section: “The wise have taught us that such hearts [as ‘Amr’s] have an aversion in them akin to an aversion toward destitution. So seek moderation in instruction and a middle path in the pursuit of upright character, to improve the heart’s obedience and make its vigor last.”³²⁸

Having permitted these accommodations for the variation in inborn scholarly aptitudes, al-Baghdādī is careful not to suggest that those who can readily memorize more information more quickly necessarily make for better scholars. To the contrary, in the *Faqīh* he states that “every person is limited to an extent of knowledge that remains in them [after study] according to their spirit [*naḥs*], and which does not sap their every vigor.” Knowing and respecting one’s limits “is what is most helpful for a mind to excel at learning and skillful instruction,” and not, according to al-Baghdādī, pushing oneself beyond one’s capabilities.³²⁹ As with the practice of fasting during the hours one spends at study, finding and respecting these limits are the individual responsibility of each student and the key to better scholarly outcomes. Medical metaphors referencing bad eating habits and physical exhaustion remain the operative means by which al-Baghdādī explains this to his readership. He states that the scholar should

discern the extent that his spirit can bear, and whenever he reaches it he should stop for some days without pursuing further study...so that [what he has learned] stands firmly in his heart. Through this stopping his spirit is soothed, and if he desires to learn with vigor he can return to study later. If he desires this, but has no vigor, let him ignore the desire. For humans may at times wish themselves capable of tasks that will overwhelm them, or see a capacity in their spirit with no vigor to match it in their natural disposition, and thus fail to establish what they learn in their heart. But if they desire after learning armed [with such] vigor, then what they hear and memorize will be firmly established in their heart. This is like a man who desires food with an uncleanly stomach. If he eats, it will be

328 Ibid. 2:216.

329 Ibid. 2:215., “*fa-la-yaqtaṣir kull imri’ min naḥsihi ‘alā miqdār yabqā fihi mā lā yastafrigh kull nashāṭihi fa-inna dhālik a‘wan lahu ‘alā al-ta‘allum min al-dhihin al-jayyid wa-l-mu‘allim al-ḥādhiq.*”

hard on him and he will not digest properly. If he does this with a cleansed stomach instead, he will digest the food and strengthen his body.³³⁰

Al-Baghdādī echoes advice found in al-‘Askarī’s *Hathth* about how the student should moderate their study accordingly. The ulema, we are told, have found that nighttime is the best time to study, whereas the foolhardy choose to spend this time in sleep or at play. Al-Baghdādī relates a familiar report concerning Plato via the Basran grammarian and poet Abū Bakr b. Durayd (d. 938) on the topic: “An ignorant young man asked Plato how he came by the vast knowledge he had learned. Plato answered, ‘I did so by consuming more lamp oil than you do wine.’”³³¹

As suggested above, one may fairly detect in al-Baghdādī’s statements that students not overburden or overexert themselves a quiet critique of al-‘Askarī’s emphasis on the merit of hardship in and of itself as one pursues knowledge. Quite unlike his predecessor in this regard, al-Baghdādī advises that when students are not at study that they “should improve their spirits with activities that impart calm, relaxation, and pleasure. For this will benefit their intentions”³³² and thereby clear the mind of ill thought before study. More interestingly still, al-Baghdādī

330 Ibid. 2:217-8. Al-Baghdādī highlights the same theme in another lengthy passage, at 2:216, that suggests an additional fear that scholars might fall into a bad habit this way: the scholar “ought not mix himself up with things that exhaust his every effort. And he should know that if he does, he will in effect learn two times the information in one day, which might harm him. This is because when he learns a great deal of what he has no competence for in one day—even if he is prepared to do so accurately—he will suppose that he has memorized it. When he repeats this on the following day he will forget what he learned on the previous day, and so fall into a habit. His like would be of the man who carries more than his capacity on one day, this having an effect on his body. And the following day he carries what he can bear, this also having an effect on his body. And if he does the same on a third day, he will become sick without knowing the cause.” He also uses the metaphor of construction here: “It is like construction; have you not witnessed a person who wishes to improve a structure, and so builds on it through small measures? He leaves what he builds aside until it settles firmly, and then builds on it anew. For if he built the structure all in one day it would not be sound, and perhaps what remains standing will not do so sturdily and quickly dilapidate. Likewise should a student determine a limit for his spirit.”

331 Ibid. 2: 207. A similar lesson is to be derived from an anonymous report cited immediately following: “A man asked Plato, ‘Are we not standing together in the same school?’ [Plato] said, ‘That we are.’ So the man said, ‘Then how is it that you mount the pulpit of instruction, and my lot in knowledge is as you see it now?’ [Plato] said, ‘Because I give my money to the oil seller, and you to the vintner.’”

332 Ibid. 2:219.

recommends that scholars make time in their schedule for the pursuit of pleasure as much as worry over one's intentions and devotions. On this matter the Yemeni traditionalist Wahb b. Munabbih (d. 737) once stated that

among the wisdom of David's people is the imperative that the intelligent man not be heedless of four hours: the hour in which to converse intimately with his Lord, the hour in which to hold his spirit to account, the hour in which to approach his brothers to inform them of his shortcomings and speak forthrightly of his spirit, and the hour in which to let his spirit freely partake of its licit and appropriate pleasure. This [latter] hour is indeed helpful for those other hours, and is an unburdening for the heart.

This advice seems to have been relatively widespread among hadith transmitters like al-Baghdādī himself, who were well-known for their exhaustive knowledge of both prophetic tradition as such and biographical details of their reporters. So too was the student of law expected to memorize some measure of this material, in complement to a vast juridical literature. This emphasis on taking one's leisure regularly and responsibly would seem to have been current even in the earlier period; the Basran traditionalist Qusāmah b. Zuhayr (d. c. 700) summarizes the above as follows: "You should let your heart rest in order to remember."³³³

As the ulema became less of a vague grouping of learned Muslims and more a discrete class of professionals expected to adhere to codified sociocultural roles, *ādāb* approaching the twelfth century is especially characterized by a concern over scholarly overexertion. It is in this later era that the genre of *ādāb* entered its fullest bloom alongside this emergent class of ulema, and more expressly stated the importance of maintaining emotional balance and physical health to the scholarly elite. As an important milestone to be marked both in the genre's development itself and in its later study by twentieth-century historians, *ādāb* of this period did not take for granted the effects that poor emotional states might have on intellectual performance. More so

333 Ibid. 2:220.

than this, treatises in the genre written in toward the twelfth century exhibit an even more strongly stated association of medical theories of the heart and mind with scholarly emotional experiences.

iii. Rāghib al-Iṣfahānī (d. 1108)

In the previous chapter of this study we have seen how the intertwined themes of health, wellness, and memory so prevalent in *ādāb* was first studied through the lens of Rāghib al-Iṣfahānī's *Muḥāḍarāt* in early-twentieth-century European scholarship. Foundational scholars in the then-nascent field of Islamic studies like Ignác Goldziher understood content pertaining to the medicalization of the scholar's body and the related discourse of enhancing one's intellectual abilities in the *Muḥāḍarāt* as pointing both to the precedence of Rabbinical texts authored on similar topics in earlier centuries as well as the role folk beliefs played in later Islamic scholarly society. Goldziher's reception of al-Iṣfahānī's list of deleterious behaviors that imparted forgetfulness—cupping the nape of the neck, urinating in standing water, eating beans, sour apples, coriander, and any foodstuff nibbled at by mice, reading tombstones, looking at crucified criminals, walking between coupled camels, and flicking lice onto the ground—centered on its apparent lack of a scientific basis and comment explaining its inclusion.³³⁴ It was the shortcoming of Goldziher's source-critical analysis that did not permit him to speculate as to why a noted *ādāb* treatise would associate the items of this list with poor scholarly performance beyond interpreting al-Iṣfahānī's lack of explanation for superstition. At several points in the *Muḥāḍarāt* that appear to have escaped Goldziher's notice, the danger of these behaviors are further elaborated. Some items of this list, as we have seen, possess coherent bases in dietary

³³⁴ Recall, as above, that the same such list of activities is present in the *Ādāb al-muta'allim* of Ṭūsī.

reasoning. Others activities, such as viewing crucifixions or reading tombstones, are explained in terms of the danger these activities pose to the intellect due to their indolent and emotionally disturbing nature.

Like al-‘Askarī and al-Baghdādī before him, al-Iṣfahānī dedicates a significant portion of the *Muḥāḍarāt* to discussing the ulema’s need to organize their time and discipline themselves in order to achieve scholarly success. Such content appears early in the text, in a section treated in the second chapter of this study, entitled *On the Intellect, Knowledge, Ignorance, and Related Matters*. After echoing al-‘Askarī’s counsel that the learned must possess “a natural disposition conducive to knowledge utter meticulousness, adequate support, subtle inventiveness, and a skillful instructor,” al-Iṣfahānī turns to the topic of what times of day are most conducive to study. Even if one possesses the above qualifications “they will be unable to hold licit knowledge in their memories unless they extirpate worldly matters from their mind.”³³⁵ For al-Iṣfahānī the most propitious time to cleanse one’s mind and undertake memorization in this manner is, as above, after nightfall. He urges his readers, “Turn your attention to knowledge at night, for during the day your heart takes flight. At night it lies still and tranquil.” Yet there are other times of the day where attending to one’s conscience in preparation for study are also commendable. According to al-Iṣfahānī, some scholars were once asked why they instead preferred the hour of lunch to study; they replied, “it was because at this hour the intellect is at its most collected, due to its powers’ proximity to peacefulness and its instruments’ distance from sinful behavior.”³³⁶

335 The relevant section begins at *Muḥāḍarāt* 65, and this counsel and the content that follows appears at 68-9. The latter quote reads in the original, “*lā tastaṭī‘ an ta ‘īy al- ‘ulūm al-sunniyah ḥatā taḥmū min dhihinika al-umūr al-dunyah.*”

336 Ibid. 69-73. Recall al-‘Askarī’s invocation of this hour as propitious for study, either due to the above reasoning or the idea that a scholar would laudably replace eating the hour’s meal with study.

As in earlier treatises of *ādāb*, for al-Iṣfahānī the heart remains the most relevant organ to the acquisition and maintenance of knowledge. It is again described as a highly sensitive organ, and expansive in its ability to store the various input it receives. After posing a rhetorical question about the optimal means of conferring knowledge to a student, al-Iṣfahānī answers, “a questioning tongue and capacious heart!” In a section entitled *the Heart’s Ability to Broaden with Increases in Knowledge*, he cites the Abbasid-era poet Abū Nuwās (d. 814) as having marveled, “Have you ever seen such a thing? However small it is to start, it becomes lighter and easier to bear as it grows!” The late-Antique Sassanian ruler Anūshirwān spoke more artfully still when told his courtiers that “the heart of a knowledgeable person is restrained [*kabū*], and is possessed of an incandescence that never tires from manifesting light within it. Instead, it stretches to accommodate rational reflection, growing ever brighter.”³³⁷ Citing Ibn al-Muqaffa’ earlier in the text, al-Iṣfahānī ties these ideas about the heart’s capaciousness with the scholarly lifestyle: “Were your heart to stop memorizing knowledge it would grow barren [*aqīman*], just as your nature [*ṭab*] would grow sickly were you to stop debating it with one another.” According to the Prophet’s grandson Ḥasan, “such hearts as these are quick to fall into oblivion.”³³⁸

Hearts may indeed be able to distend themselves to encompass whatever sensoria they encounter, but for al-Iṣfahānī it is clear that some hearts are more elastic and resilient than others. Much like *ādāb* authors before him, he counsels his readers that they should not lament their inability to absorb as much information as their more adept colleagues, and to avoid despairing if their competent natural capacities seem frustrated by the effort to compare with them favorably.

337 Ibid. 73. Recall similar sentiments put forward by al-‘Askarī above in slightly different wording.

338 Ibid. 97. The original adjectival phrase occurring in this lattermost line is *sarī‘ al-duthūr*. In his immediate gloss of Abū Nuwās’s poem above al-Iṣfahānī cites a familiar statement: “any vessel into which something is poured will become cramped, except the heart. Anytime you pour knowledge into it, it broadens.”

To al-Iṣfahānī this arrested condition is best resolved by a student of knowledge's stopping to consider the scope of their task to seek and assimilate as much information as possible, and by finding comfort in whatever abilities they do possess to help accomplish this task. “The vastness of knowledge is greater than your grasp,” al-Iṣfahānī advises, “so take the best of it wherever you find it...Unbind your inborn nature [*ḥalla ṭab‘aka*] with purpose and parsimony! For a tree would not be criticized for its tiny yield if the fruit it bore were wholesome.”³³⁹ Moreover, overeager students who attempt to cram too much information into a short period of time in order to compete with colleagues will experience a deleterious effect on their ability to comprehend any information at all. The desire to do so is explicitly pathologized by al-Iṣfahānī’s sources: “It has been said that if you meet a man desirous to learn about every species of knowledge you should offer him medical treatment.” A rhyming couplet further claims that “the man who presumes to undertake study of every field of knowledge heaps scorn upon his natural disposition [*naḥīzah*], and acquaints everyone with his faults [*ghamīzah*].”³⁴⁰

However circumspect students of knowledge might be in selecting materials that do not overtax their hearts and natural dispositions, it is still likely that they will experience some form of solicitude disruptive to their studies. The advice al-Iṣfahānī adduces here about limiting these disruptions references the importance of not excessively denying one’s spirit its leisure, the relevance of one’s good health to the quality of one’s study, and the perils of endangering one’s intellect through poor diet and sleep. Most interestingly, and perhaps due to the anthological nature of his *ādāb* treatise, al-Iṣfahānī includes advice somewhat at variance with the foregoing

339 Ibid. 73. The second sentence of this quote reads, “*ḥall ṭab‘aka bil-‘uyūn wa-l-faqr*.” The lattermost word connotes both solicitude and satisfaction with what little one has, so long as it satisfies one’s basic necessities.

340 Ibid. 74; recall the same rhetorical device featuring medicine in al-‘Askarī above.

but nevertheless speaking to an abiding interest in the effects of eating and resting on the intellect. The doctor of the Umayyad emir Ḥajjāj b. Yūsuf (d. 714) told his patron that “nothing maintains one’s health like eating by day and drinking little by night, provided one not hold back the urine, feces, or flatus symptomatic of bodies belonging to those looking to maintain their health. Reduce your intake of food, your swooning over women, and your drinking of water.” Quoting an even greater medical authority, al-Iṣfahānī relates an anecdote about Hippocrates, who told his students on his deathbed, “Learn this epitome of medicine from me: whosoever sleeps much, gentles his natural disposition [*lānat ṭabī‘atuhu*], and moistens his skin [*nadiyat jildatuhu*] lengthens his life.” The salubrious virtue of sleep was also touted by the caliph al-Ma’mūn (r. 813-33). The ruler is said to have once posed a riddle to his court: “I have discovered a medicine that is pleasant but is neither eaten nor drunk.” When his courtiers ask what it is, he states, “Sleeping right after eating!” Apparently unimpressed with the caliph’s reasoning about sleep, one courtier ventures to suggest that whenever he takes this particular medicine he should at least “recline on his left side, since the liver sits upon the stomach to process and digest food,” and may not function nearly as well in an alternate posture. Al-Iṣfahānī does not fully share this courtier’s incredulity about the salubrious properties of sleep, but nevertheless admits to the importance of its regularity and cites its possible aggravation through diet. He states that one should only sleep on level surfaces, avoid the din of loud voices when doing so, and strictly limit how long one stays up at night deep in thought, “for such things wear the body down with fear” when done to excess.³⁴¹

341 Ibid. 505-6. One should also avoid eating jerky, having sex on a full stomach, eating meals one after another, alternatively eating and drinking in the same sitting, and drinking water on an empty stomach. We are told these things “may destroy the body, or kill it.”

As in prior centuries of *ādāb* writing, al-Iṣfahānī understood diet and physiology to be of great relevance to learning. The familiar theme of knowledge’s superiority over material comforts predominates in the *Muḥāḍarāt*. When it comes to the act of learning itself, al-Iṣfahānī argues that doing so on an empty stomach is better than pursuing knowledge during times of satiation. The consequences of eating to excess and then attempting to learn are dire. A famous admonition regarding the stomach’s serving as the most vile vessel that humans fill is repeated, to which al-Iṣfahānī adds the caution that “when the stomach is filled one’s thought slumbers, one’s wisdom perishes, and one’s limbs shrink from worship. Overeating is the death of intelligence.”³⁴² The Basran mystic Yaḥyā b. Mu‘ādh (d. 871) taught that “whosoever eats until sated will suffer three effects: a veil will descend over their heart, a blindfold over their eyes, and a lassitude over their body.” Excessive indulgence in heavy foods like meat particularly risks degrading (*naqasa*) the intellect, just as total abstention from such foods may disorder the humors (*sā’a khulq*). On this we are told the physician al-Ḥārith b. Kaladah (d. 635) advised the Prophet’s Companions that “the best medicament is eating only one meal a day (*azm*), and the most evil of medicaments is eating meals one after the other.”³⁴³ Drinking alcoholic beverages such as wine and “anything else that quaffs your intellect” or “consumes your intelligence” is also to be avoided as far as is possible, even if one must occasionally imbibe at symposia and friendly gatherings.³⁴⁴

342 Ibid. 727-8. Likewise is the avoidance of sin requisite for the health of the soul: “*ṣiḥḥat al-rūḥ ijtināb al-ithm*.” The addition to the lattermost admonition—*al-biṭnah tudhhib al-fiṭnah*—is cited as originating from Ibn al-Muqaffā’s (d. c. 757) *Kalīlah wa dimnah*. It also forms the final couplet of the Bedouin poem cited by al-Baghḍādī in both his works of *ādāb*, above. Similar admonitions abound from Ibid. 505-7. See also 72.

343 Ibid. 704-5, 727-9.

344 Ibid. 277-8. The allowances made for alcohol here likely reflect the multiple disciplinary focus of the *Muḥāḍarāt*, which offers advice for all manner of erudite reader from jurists to socialites and practical jokers to Quran reciters. This observation notwithstanding, al-Iṣfahānī also records an instance where Ibn Abī Shaybah

Just as such an insalubrious diet might produce this kind of “illness, which is a confinement of the body,” not attending responsibly to one’s emotional states also tends to generate “worry, which is a confinement of the spirit.” While a degree of solicitude is warranted of all pious people, excessive worry threatens the soundness of one’s intellect by disordering the senses and preoccupying the mind.³⁴⁵ Much deeper in the *Muḥāḍarāt* al-Iṣfahānī mentions that the knowledgeable might turn to wine to soothe their spirits in times of such emotional crisis, but is sure to note in an extended passage that this may begin a vicious cycle whereby the wine becomes the cause of anxiety rather than its cure. Students must bear in mind that the substance likewise exaggerates both their good and bad traits, particularly through the aggravated emotional turbulence it causes.³⁴⁶ Intense emotions and all that occasion them are to be avoided for this very reason. In a subsequent chapter specifically dealing with the topic of medicine, a meditation on the relevance of the humors to scholarly capacities includes a rather dire warning on this topic: “both immoderate worry and mirth [*farḥ al-ghamm wa-l-surūr*] kill; worry kills by cooling the blood and mirth by kindling it. The latter raises its heat past its natural threshold [*gharīzah*].” Though not described explicitly here, by the same analogy grief must cool the blood to a level inconsistent with the processes of life. What is more, such a cooling effect would

(d. 849) is chastised by a slave-boy whom he has just reprimanded for his idle play in the dirt: “The stupid one is rather he who purchases his stupidity and makes it enter through his face, vomit from his abdomen, and egress from his bottom, such that he goes to sleep flushed and awakens yellow-tinged!” Recall similar admonitions against wine drinking in al-Baghdādī above.

345 Ibid. 501; and see starting at Ibid. 521, the next section of the *Muḥāḍarāt*, where anxiety’s (*hamm*) lexical association with laudable intellectual zeal (*himam*) is apparent. More on this in al-Zarnūjī below. Justin K. Stearns cites Ibn Qayyim al-Jawzīyah as citing fear of worldly matters as a contributor to poor humoral constitution; fearing God instead has the opposite effect. See *Infectious Ideas* at 77.

346 *Muḥāḍarāt* 776-99.

certainly arrest one's thinking and impair one's memory before proceeding to death, faculties that depend upon sufficient heat in the humoral system.³⁴⁷

In this light we can best interpret the reasoning of al-Iṣfahānī who stressed the danger that participating in distressing activities such as reading tombstones and looking at crucified criminals poses to memory. Several other *ādāb* sources that cite this same list of activities add the revealing comment that “excessive disquiet and distress about worldly affairs,”³⁴⁸ along with “grief and worry, weaken the faculty of memory.”³⁴⁹ Considered alongside imprudent, inattentive, or uncleanly activities like picking lice from one's body, urinating in standing water, and walking amid camel traffic, the items of the list may have been understood to distract one's attention from study through the distress they cause or the idleness of thought that occasioned them.³⁵⁰

347 Ibid. 519. This section on the humors was studied in the second chapter of this study. However, as we saw in the case of al-ʿAskarī's citation of Abū ʿAlī al-Jubbāʾī's wont of stripping his back on cold nights to help stave off sleep when studying at night, some level of cold may be beneficial to scholarly pursuits. On similar themes in sufi texts, see Bashir, Shahzad. *Sufi Bodies* at 74. Eating too much food is also explicitly stated as strangling the transit of pnuemas at Ibid. 506.

348 See al-Tūsī's *Ādāb al-mutaʿallimīn*, 117-8. This list has a long history of ascription, and is seemingly drawn from a hadith reported as early as Ibn Bābawayh's (d. 991) *Man lā yaḥḍuruhu al-faqīh* and *Kitāb al-khiṣāl*. It nevertheless makes good medical sense here, in the context of avoiding intellectual disquiet. See footnote 165 at *Ādāb al-mutaʿallimīn* 118. This reading is supported by Chamberlain, Michael. *Knowledge and Social Practice in Medieval Damascus, 1190-1350*. Cambridge: Cambridge University Press, 2002, at 146.

349 Also as cited by Goldziher in the foregoing. The same advice is given by al-Zamakhsharī in his *Rabīʿ*, where he follows the above list of insalubrious activity with the gloss that among the things that increase forgetfulness is “excessive disquiet [*kaḥtrat al-hamm*].” In contrast, al-Rāzī recommends in his *Hāwī* that those beset by forgetfulness can re-prime their cognitive power by focusing on distressing sounds, thoughts, or objects. On this see 1:54. In any case it would seem that our authors here are referencing what they believe to be a significant and strong connection between the health of the mind and anxiety. Also to be considered is the moral issue with reading gravemarkers in light of the Prophet's well-known condemnation of ornamenting such stones with writing.

350 The inverse emotional extreme seems of equal consequence; both al-Baghdādī in his *Faqīh* and Ibn Jamāʿah in his *Tadhkirah* report that “the best place for memorization...are places far remote from diverting amusements (*mulhīyāt*).” Ibn Jamāʿah stresses that when one is learning one's mind must be thoroughly focused on the teacher and material to be assimilated, with minimal distractions. See 90 and footnote one of the *Tadhkirah*, as well as what follows below regarding *Tadhkirah* 108.

Al-Iṣfahānī's comments on the ulema's emotional responses to the difficulties of learning and the care they should take to preventing them abound, filling many dozens of pages in the *Muḥāḍarāt*'s printed edition. Al-Baghdādī's influence on the treatise is evident, and the sheer number of reports cited here speaks to the abiding importance of these discourses to the ethical formation of the increasingly institutionalized class of scholarly Muslims that consumed *ādāb* literature by the twelfth century. Notions fundamental to these discourse—the centrality of the heart to learning, the need to satisfy one's concupiscent spirit with licit pleasures, medical and ethical concepts ensuring the body's good functioning—were enthusiastically taken up by al-Ghazālī. While widely studied in its own right, understanding the content of the *Iḥyā'* with respect to this fuller arc of ethical writing will enrich our understanding of this pivotal text of Islamic ethical and devotional formation.

iv. Abū Ḥāmid al-Ghazālī (d. 1111)

As scholars of medieval Islamic ethics have long noted, devotional discourses on the role of the human heart in worship and learning pervades al-Ghazālī's *Iḥyā'*. The *Iḥyā'* is particularly indebted to the work of al-Baghdādī and al-Iṣfahānī in this regard, even as it draws on a distinctive strand of devotional practice informed by mystical and Platonic philosophical sources.³⁵¹ In the previous chapters of this study we have studied how these intellectual systems provided a framework for al-Ghazālī to present his own understanding of the ways in which humankind's inborn qualities and inclinations can be bent toward spiritual development. The

Book of Spiritual Exercise is the most relevant section of the *Iḥyā'* for exploring how the

351 These are summarized in Good, Byron, and Mary-Jo DelVecchio Good. "The Comparative Study of Greco-Islamic Medicine: The Intergration of Medical Knowledge into Local Symbolic Contexts." In *Paths to Asian Medical Knowledge*, edited by Charles M. Leslie and Allan Young. University of California Press, 1992 and *On Disciplining the Soul* at XV-LXXI.

emotional health of students came to bear on their scholarly and pietistic identities. As we have already seen, here al-Ghazālī uses terms associated with acquiring character traits through self-discipline (*khuluq*, *akhlāq*, and *khalq*) in passages that betray an additional belief that human beings possess certain devotional and intellectual capacities so fundamentally rooted in their individual essences that they are much like “a light buried deeply in their hearts.”³⁵² Access to these capacities may differ from person to person to the point that some are not truly meant to learn the hidden realities of existence, but al-Ghazālī resolutely insists throughout the *Iḥyā’* that individual human beings can always stand to improve their spiritual status through the discipline of proper devotion.³⁵³

On this score, attention to the heart’s unique sensitivity in matters of emotional and intellectual consequence suffuse the *Iḥyā’* and more generally animate its revivalist vision. Elsewhere in the corpus composed at this late stage in life, al-Ghazālī justifies the special place the heart enjoys in his writings with reference to its most essential role: as a looking glass or portal that must be properly maintained in order to perceive the divine realities obscured by the human condition. For example, in the first section of his *Kīmīyā-ye Sa’ādat* (*the Alchemy of Happiness*, hereafter the *Kīmīyā*), entitled “On Knowing One’s Own Spirit (*dar shanākhtan-e nafs-e khwīsh*),” al-Ghazālī explains that he locates the heart’s true role (*ḥaqīqeh-yeh del*) in human life not in terms of its function as an “organ on the left side of our bodies,”³⁵⁴ but rather as

352 *Iḥyā’* 101. As in the commentary by Winter above—especially at XVIII—this latent ability is often referred to as humankind’s *lubb*, a term which carries connotations of an inborn intuitive sense rather than a discursive one.

353 Recall that at *Iḥyā’* 104 al-Ghazālī similarly speaks of the blossoming of one’s inborn nature “like a light shining upon the spirit [*nafs*] whose dawn breaks and sun rises at the age of discernment, and only stops increasing and compounding in stages at the age of forty, when it reaches completion.”

354 Al-Ghazālī. *Kīmīyā-Ye Sa’ādat*. Translated by Hossein Khadiujam. Vol. 1–2. Tehran: Sharakāt-e Intishārāt ‘ilmī wa farhangīzabān, 2001, 16. Cf. the highly abridged and antiquated English translation of the text, which has also been consulted: Field, Claude, trans. *Al-Ghazali: Kimiya-e Saadat: the Alchemy of Happiness*. Islamic

a principal force within humans that orders their faculties and directs them to seek the divine truths latent in the knowledge they acquire. Described here and in the *Iḥyā'* as “a fine, divinely-oriented, and vital substance [*laṭīfah rabānīyah rūḥānīyah*]”³⁵⁵ that receives impressions of the forms it encounters, in the manner of a mirror it encompasses all forms of apperception that fall within its field of vision. Hence come the human powers of imagination and intellection.³⁵⁶ The emotional significance of the organ was also not lost on al-Ghazālī as he described the spiritual crisis he had weathered in coming to this realization. Unable to eat, drink, or speak intelligibly while in the depths of that crisis, al-Ghazālī described his physician’s reaction to his state in his autobiographical *Munqidh min al-ḍalāl* (*Deliverance from Error*; hereafter the *Munqidh*) thus: “Something has descended upon his heart and crept therefrom into his humors! There is no way of treating it, except that he should relieve his innermost thoughts of the anxiety that has befallen them.”³⁵⁷

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- 355 *Iḥyā'* at 877, in a section entitled '*ajā'ib al-qalb*'. The fleshed description of the heart found in the *Kīmīyā* is also included here.
- 356 Ibid. 986-900. The heart is also here compared to a reservoir of water which may accrue sediment or other impurities that must be resolved in order to remain clear and potable. At 902 the heart is compared to a large tent that constantly admits a multitude of visitors, and even the missiles of foemen, through its many openings.
- 357 See al-Ghazālī. *Majmū' Rasā'il al-Imām al-Ghazālī*. Edited by Ahmad Shamsuddin. Beirut: Dār al-Kutub al-Ilmīyah, 1988, at 60 and 72. The quotation reads in the original, “*hādha amr nazala bil-qalb wa minhu sarā ilā al-mizāj fa-lā sabīl ilayhi bil-'ilāj illā bi-an yatarawwāḥ al-sirr 'an al-hamm al-mulimm.*” Later in the text he declares this analysis of his condition is proof that “the Prophets are physicians for maladies of the heart,” and not earthly doctors. Al-Ghazālī clearly believed that the Prophets left behind enough instruction for others to derive remedies for such disorders. These are to be drawn not from intellectual discourses like medicine, which he sharply criticizes, but devotional ones instead. Thus the best remedy for such illnesses of the heart is to worship fervently and behave piously. See also the Ghazzālī. *Deliverance from Error: An Annotated Translation of al-Munqidh Min al-Dalāl and Other Relevant Works of Al-Ghazālī*. Louisville, KY: Fons Vitae, 1999 at 79-80 and 87-8, which have been here consulted. At 877 in the *Iḥyā'* al-Ghazālī further specifies that the fleshed organ of the heart is a matter for books of medicine, and not the *Iḥyā'*. For a description of the heart’s ability to receive forms, see the section beginning at 888.

With his legendary spiritual crisis in mind, al-Ghazālī is perhaps uniquely qualified to speak passionately about the tendency for emotional exhaustion to accompany pious scholarly living. It is clear from the *Kīmīyā*, *Munqidh*, and *Iḥyā'* itself that al-Ghazālī felt all humans face considerable challenges in identifying what aspects of their attitudes and habits work to hide the divine realities underlying their knowledge from their view. It is only through the scholar's own strenuous effort and God's gracious permission that their hearts can finally turn away from their concupiscent passions (*hawā*), which serve only the arbitrary desires of the *nafs*, to pursue spiritual development.³⁵⁸ Much like the *Munqidh*, the *Iḥyā'*'s *Kitāb riyāḍat al-nafs* notably draws on medical metaphors used to describe this process: "To be balanced in character is to be healthy in spirit," al-Ghazālī begins a chapter on purifying one's disposition of unsavory traits. "To be out of balance is to be sick and diseased in spirit. This is in the same way that balance in the body's humors is tantamount to its health, and imbalance is tantamount to its disease. So I invoke the body by way of example when" speaking of how best to resolve such illnesses of the heart. A person can certainly not expect their spiritual maturation to be a speedy affair, for just as each human is born with a soul, so too are they given "a body at the start of life, which is not yet complete. It rather becomes so by strengthening as it matures and growing as it takes in nourishment." Therefore the logic of dietary guidelines and therapies based in the allopathic contraries of the humoral system apply equally to the health of soul—i.e., negative traits and emotional experiences are to be cured by applying their opposite trait or experience. While essentially unlike medicine of the body, care similar to that of a Galenic physician must be taken here not to apply a remedy to a sickened soul simply because it worked for another. Each

358 *Iḥyā'* 878 and 888. See also *On Disciplining the Soul* at XVIII-XIX, and the remainder of introduction more generally, to XCII. See also al-Geyoushi, MI. "Al-Tirmidhi's Conception of the Struggle between 'Qalb' and 'Nafs.'" *Islamic Quarterly* 18, no. 3 (1974): 3-14.

person's natural gifts and shortcomings are as idiosyncratic as their humoral makeup, and may simply not respond to a proven treatment. Be that as it may, al-Ghazālī warns that the potential unpleasantness of such curatives cannot compare to the eternal death that awaits those who do not heal their souls in the same manner that they heal their bodies.³⁵⁹

This unpleasantness is why, we are told, al-Ghazālī chose to title this section of the *Iḥyā'* with the term for strenuous exercise, *riyāḍah*. Since not all bodies are the same, the type or intensity of exercise may be misprescribed; an eclectic, flexible approach is therefore necessary. Individuals beset by ignorance of devotional norms should be invited to pray *salat*, for example, while those preoccupied with material possessions should renounce earthy wealth. It would not do to apply the cure for the former condition to the latter. What all treatments should have in common is their inducing a sickened individual to “empty their heart of the [offending trait], such that it is no longer inclined toward it.”³⁶⁰ It may not be simple to identify these traits in oneself, but al-Ghazālī offers some clarification in the next section of the *Kitāb riyāḍat al-naḥs*:

Know that every organ of the body was created for some function peculiar to it, and is to be deemed ill when it becomes difficult to exercise that function. [For example,] diseases of the hand make seizing things difficult, and diseases of the eye make seeing things difficult. So too do illnesses of the heart make difficult its created function, which is [receiving] knowledge, wisdom, apperception, and the love of God the Almighty and others among his servants, as well as savoring his remembrance and esteeming this above every other passion.³⁶¹

359 *Iḥyā'* 943-4. When al-Ghazālī invokes the notion of *balance*, he speaks of *i'tidāl* as well as *al-waṣṭ bayn al-ṭarīqayn*. In the latter sense he identifies it with the *ṣirāṭ mustaqīm* that all Muslims are urged to follow. At 945 al-Ghazālī states how caution of a medical intensity is called for in these circumstances by way of example: if the treatment for “the disease of avarice [*dā' al-bukhl*]” is to encourage the patient to spend their money, one must take care that they do so without “spending to the point of profligacy [*tabdhīr*], for this is also a disease. It is just like when a person treats a disease of the cold with hot treatments the point that the heat becomes overbearing, which is itself a disease. Indeed, the desired outcome is a balance of hot and cold, just as the desired outcome [above] is a balance of profligacy and miserliness [*taqtīr*].”

360 Ibid. 943-4.

361 Ibid. 945. The first three functions of the heart in the original are: *'ilm*, *ḥikmah*, *ma'rifah*.

The reception of knowledge (*‘ilm*) and apperception (*ma‘rifah*) comprise the heart’s essential function (*fā’idah*). The *nafs* plays an important role in this function as well, separating humankind from all other animals (*bahā’im*) in its granting the ability to perceive things as they truly are (*ma‘rifat al-ashyā’ ‘alā mā hiyya ‘alayhi*). In practice, this means that the *nafs* is the agent responsible for the human ability to sense the creative origin of all things in God. Being in denial of this creative origin is a sure sign of a sickened heart and *nafs*, just as a person’s preference for mud over bread indicates a stomach suffering from disordered desires.³⁶²

Healing sickened hearts is not always as straightforward as this, however. Those with the affliction often fail to realize they are ill because of their clouded reasoning and need a qualified physician (*ṭabīb ḥādhiq*) to attend to them. “Such physicians,” al-Ghazālī states, “are to be found in the scholarly class”—this notwithstanding that scholars themselves are often beset by sicknesses of heart. Some individuals may be unable to undergo a prescribed treatment due to other defects in their disposition. “Among the means of gentling this exercise [*min laṭā’if al-riyāḍah*]” for those unable to rid themselves of a serious trait in this way “is to focus instead on a lesser degree of the censurable trait, like the person who washes a daub of dye first with urine and secondly with water, when water alone does nothing.”³⁶³ They may take additional solace in the fact that no Muslim has ever found the process of extirpating such flaws from their hearts easy by any means, down to the Prophet himself. An acolyte known to al-Ghazālī supposedly saw the Prophet in his dreams and asked, “Messenger of God, you once said that *Hūd* gave you gray hair [*shayyabatanī hūd*]. What did you mean by that?” The Prophet replied, “I said that

362 Ibid.; see also 879-82.

363 The phrase used by al-Ghazālī here is *lā yaskhū bi-tark al-ra‘ūnah*, which conveys the sense of liberality or openness, and notably occurs in poetry. See *Lane’s Lexicon* 1327-8.

because of God's saying [in that surah], 'Remain on the upright path, as you have been ordered.'" Al-Ghazālī glosses the anecdote by reminding his readers that "remaining on the upright path is, in this sense, a matter of absolute uncertainty [*fī ghāyat al-ghumūd*]. So each person should endeavor to approximate doing so if they cannot truly do so."³⁶⁴ The task is made all the more difficult because the heart is always in a state of involuntarily receiving suggestions and temptations (*khawāṭir wa wasāwis*) arising from the spirit's drive to satisfy its passions, and a person's natural temperament may accelerate the rate by which these leave lasting impressions on the heart. Maintaining a righteous lifestyle is therefore a process of self-reflection as idiosyncratic as the individual in question: "There is no salvation for any who desire it but that they win it through upright practice, and such practice arises only from good traits of character. So let every servant examine his own attributes and traits, enumerate them, and set about curing them one by one, in their proper order."³⁶⁵

Al-Ghazālī additionally states that this examination of conscience may be made more tolerable if its subject avoids persons with negative traits they wish to extirpate, and pursues instead the company of a teacher or trusted friend skilled in exposing and addressing poor character. Even one's enemies may be of help in this regard, since they can be trusted to speak freely of their rivals' flaws. In the same vein, al-Ghazālī encourages his readers to mix with as broad variety of people as possible in order to expose themselves to the full gamut of human failing and thereby gain perspective on their own shortcomings: "Search your spirit and set it in relation to the censurable things you witness in humankind. Every believer is a mirror for the others, for in the flaws of others they see their own reflected, and learn that all natural

³⁶⁴ *Iḥyā* 946. The citation offered by the Prophet is the 112th verse of that surah.

³⁶⁵ Ibid. See also 903-4.

dispositions are essentially the same in their pursuing arbitrary passions.”³⁶⁶ The metaphor of the heart or the attendant *naḥs* working in this mirroring fashion to disclose the reality of perceived objects is present throughout the *Iḥyā’*. Al-Ghazālī generally explains the processes of intellection in these terms, citing the following as possible reasons for why the mirror of the heart may not serve a person well in their intellectual pursuits: a defect in their nature (*nuqṣān fi dhātihi*), distractions caused by sinful behavior or worldly responsibilities, holding unquestioned, erroneous beliefs, and general ignorance about how to identify and rectify these issues.³⁶⁷ More generally still, since the heart serves as the principal receiver and receptacle for an individual’s entire sense experience, it remains in danger of emotional incursion at every moment—even if one takes strident measures to prepare against this. Al-Ghazālī describes these vulnerabilities in terms of gateways (*abwāb*) that allow ill influences in the figurative form of satanic hosts to enter the heart. A stormy emotional disposition (*ḥiddah*) is the first such gateway, with anger, appetite, and envy its foremost porters. Eating to satiation poses a like vulnerability, since feeling fully satisfied with food tends to empty the heart of altruistic sentiment, make individuals less inclined toward wise or elegant speech, and may cause disease. Eating in this way should be replaced with acts of worship and remembrance of God.³⁶⁸

366 Ibid. 946-50. Al-Ghazālī cautions that one must be careful trusting one’s enemies to do the work of assessing one’s flaws, since they are inclined by their very nature to lie or else speak only out of envy (*al-ṭab‘ majbūl ‘alā takdhīb al-‘adūw wa ḥaml mā yaqūluhu ‘alā al-ḥasad*). On the same topic, the lattermost clause here reads as follows in the original: “*al-ṭibā‘ mutaqāribah fi ittibā‘ al-hawā*.”

367 Ibid. 888-9. Al-Ghazālī allows that while inborn defects may make intellection difficult, in principle every person is born with a pristine disposition (*fiṭrah*).

368 Ibid. 909-15. He also mentions fear of poverty as one such flaw at 912, much like al-Baghdādī’s characterization of those who seek to learn too much information in too short a span above. In keeping with his reformative vision, al-Ghazālī characterizes the ulema of the *madāris* system as especially exhibiting these spiritual flaws at 913.

Al-Ghazālī also urges his readers to avoid speaking with the inexperienced on theological topics beyond their understanding, since this will not only lead them to beliefs unworthy of God but also let others feel joy (*farah*), delight (*masrūr*), and gladness (*mubtahij*) at their own false expertise. “The most direly idiotic people are those who set great store by their own intellect,” al-Ghazālī warns, “while the most intelligent are those who worry most about their own abilities [*ashadduhum itihāmmān li-nafsihi*] and are quicker to inquire with a knowledgeable person.”³⁶⁹ From the majority of his comments it would seem that al-Ghazālī believes only unrelenting personal sobriety, adherence to legal prescriptions, and dutiful worship help to cure human hearts of their afflictions. By the same token, it seems that he viewed human pleasure as inimical to this end, casting suspicion on emotions like joy and contentment for fear that they leave the ever-suggestible heart open to attack. In a manner reminiscent of al-‘Askarī, al-Ghazālī suggests that a degree of misery is necessary to maintain righteous comportment. Toward the end of this larger section he declares that

the most resolute among the masters of their hearts have tested them in times of joy [*hāl al-farah*] occasioned by worldly bounty, and found them to be obdurate and loathsome in their inability to be swayed by remembrance of God or the Last Day. They also have tested them in times of sadness [*hālat al-huzn*], finding them to be tender, gentle and pure, ready to be touched by such remembrance. They learned that salvation lies in prolonged sadness and distance from occasions for joy and carefree living [*farah wa baṭar*], and so they weaned themselves of its pleasures [*malādh-dhihā*] and habituated themselves to forbearance of their passions, be they licit or illicit.

Moreover, while the most proper “way of struggle and exercise differs from person to person according to disparities in their circumstances, the principle of the matter is that each person should turn away from earthly occasions for their joy,” al-Ghazālī offers. “They must do so their whole lives long, for the struggle only ends with death.” Beyond highlighting the importance of

³⁶⁹ Ibid. 913. Earlier in the text at 85 al-Ghazālī uses this verb to describe the true scholarly class as those who concentrate their intellectual abilities on introspection concerning the hidden realities perceived by the heart.

moderation and renunciation to the ulema in a manner typical of previous entries in the *ādāb* genre, the *Ihyā*'s *Kitāb al-ʿilm* also echoes al-ʿAskarī's valorization of the difficulties of scholarly life. Here al-Ghazālī states that Muslims who seek and teach knowledge are to be judged most harshly because of their position of authority and esteem. They are therefore especially disposed toward the temptations of the world, and must guard against complacency at all times. "Let the [scholar adopt] a despondent, defeated, downcast, and taciturn manner...in dread of God," al-Ghazālī states, conveying additional reports that laughter and levity of all kinds are harmful to the scholar's piety and intellect.³⁷⁰

Al-Ghazālī's later corpus focuses primarily on reorienting the life of the medieval scholarly class toward renunciation and mystical devotion. It therefore sets great store by the emotional dimensions of that life and the need to suppress certain affective aspects of its experiences that compromise true scholarly piety. For al-Ghazālī the best rest for the heart is remembrance of God and reflection on his creative mastery, and not, as in the *ādāb* of the foregoing era, taking leave of study for the temporary fulfillment of licit pleasures. The *Ihyā*'s influence over subsequent *ādāb* entries was considerable. While these renunciatory themes did not wholly abate in the *ādāb* of subsequent generations, authors writing for a more professionalized ulema in this era found it more appealing to adopt less dire phrasings of scholarly ethics that were not so explicitly mystical in their inflection. In so doing authors like al-Zarnūjī and Ibn Jamā'ah sought to accommodate the inevitable periods of frustration and exhaustion besetting

³⁷⁰ Ibid. 950-1 for the bloc quote, and also 71-91. The terms used in the last sentence here are *ḥazīn munkasar muṭriq šāmīt*. See Vignone, Joseph L. "Fear and Learning in Medieval Islam: Dread as an Affective Marker of the Scholarly Class." *Body and Religion* 3, no. 1 (2019): 27-51 and Melchert, Christopher. "Early Renunciants as Hadīth Transmitters." *Muslim World* 92, no. 3-4 (2002): 407-418, "Exaggerated Fear in the Early Islamic Renunciatory Tradition." *Journal of the Royal Asiatic Society* 21, no. 3 (2011): 283-300, "Renunciation (Zuhd) in the Early Shi'i Tradition." In *The Study of Shi'i Islam*, edited by Farhad Daftary and Gurdofarid Miskinzoda, 271-294. London: I.B. Tauris, 2014, "The Piety of the Hadīth Folk." *International Journal of Middle East Studies* 34, no. 3 (2002): 425-39.

scholarly endeavors while framing these obstacles as challenges sent by God to confirm their emotional and intellectual superiority.

v. Burhān al-Dīn al-Zarnūjī (fl. 1210)

Written in the century following al-Ghazālī's monumental *Iḥyā'*, the significantly more parsimonious *Ta'lim* of al-Zarnūjī distills the themes broadly discussed in the former work into a statement of scholarly ethics likewise prioritizing the emotional health of the ulema. As we have seen above, al-Zarnūjī relates medical advice to prevent and resolve humoral disturbances known to cause forgetfulness in its own section in the *Ta'lim*. He is also sure to state at its outset that, these measures notwithstanding, the strongest means of enhancing the memory are earnestness and persistence in study, limiting food intake, praying by night, and reciting the Quran. The seeker of knowledge must constantly guard himself against falling into lassitude or becoming sluggish (*kasal*) in such pursuits, and especially avoid seeking easier courses of study instead of assiduously pushing his own limits in securing such scholarly virtues for himself.³⁷¹ The "sweetness of knowledge, erudition, and understanding" should suffice as motivation for them to strive after this goal, as should the pietistic worth they stand to gain. Students should occupy their concupiscent spirits with the commission of good deeds so their passions do not lead them astray from them; "You should preoccupy your spirit," al-Ḥallāj once warned, "otherwise it will preoccupy you."³⁷² Scholars may also reinforce their desire for such a lifestyle and increase their learning potential by actively participating in the communal activities of memorization,

371 Recitation of the Quran is considered by al-Zarnūjī to be the best means of enhancing the memory (*azyad lil-ḥifẓ*), especially when done so while reading the text as it is written (*naẓaran*) and not from the memory itself. An additional ritualization attending this recitation, which is likewise good for the memory, is given on *Ta'lim* 130-1. On sluggishness, also see Ibid. 111.

372 Recall this theme in al-Baghdādī, al-ʿAskarī, and al-Iṣfahānī.

argumentation, and formal debate. Those who instead prefer to consume material pleasures such as extravagant meals (*akūl*) in place of knowledge are, to the contrary, among the three categories of otherwise righteous people most despised by God. These have a particular loathsomeness their vices have wedged in their hearts and are unable to cleanse the organ of its harm unless they cease overeating.³⁷³ Consuming as little as food as possible—the maximum is the edge of satiation—promotes the cultivation of other virtues like chastity (*'iffah*) and magnanimity (*īthār*), the desirability of which might provide ample motivation to limit one's diet given their association with a reprieve from punishment in the afterlife. If the scholar cannot easily limit their food intake by these means, he might consider easing himself into the regimen by first consuming a diet of fatty foods followed by progressively leaner meals. He should eat only with pious intention and alongside those sharing the cleansing goal. Such people are not to be found in one's *sūq*, we are told, so avoiding this area and the fare found within it are necessary for cultivating a properly scrupulous lifestyle.³⁷⁴

Quite interestingly for such a brief statement of scholarly ethics, al-Zarnūjī fills several pages of the *Ta'lim* with citations advocating for activities less neatly identified with self-discipline. In the first section of the text, entitled *On the Essence and Merit of Knowledge and Erudition*, al-Zarnūjī links the pursuit of knowledge with the fundamental traits of human nature that set them above other earthly creatures. The section quickly turns its attention toward the centrality of bodily experience as the means of understanding how these traits can be fostered

373 For the various admonitions in this regard, see Ibid. 88-96, especially for the quotation cited here on the lattermost page. See also Ibid. 103, 114. The other two categories of people God despises are the miserly (*bakhīl*) and the haughty (*mutakabbir*). See Ibid. 96-9. At Ibid. 108, al-Zarnūjī reports a prophetic statement also asking, "Is there any ailment more harmful than miserliness?"

374 Ibid. At 126 al-Zarnūjī also suggests that students avoid the food of the *sūq* as part of cultivating a scrupulous lifestyle, itself described from 130-2.

within the natures housing them. Al-Zarnūjī counsels that before embarking too hastily in search of knowledge scholars should make an honest psychological accounting of themselves; the first article of knowledge they should pursue is that of the emotional and mental states that reliably characterize them (*jamī‘ al-aḥwāl*), and afterwards the more transitory states they may experience in the course of their studies (*aḥāyīn*). This injunction is notably medicalized; al-Zarnūjī argues that the necessity of the first kind of introspection is “at the level of food, which is an act all must take part in” regularly, and that of the second kind is “at the level of medical treatment [*dawā’*], which is only needed every so often”³⁷⁵ by the ulema.

That this process of self-examination should be understood in terms of medical intervention becomes an explicit theme as al-Zarnūjī continues to explain how his readers should manage their embodied psychological states while at study. His advice begins at the practical level—scholars should strive to become learned in the discourse of medicine in order to treat themselves when they inevitably fall ill; “if one can learn the direction and times for prayer from studying the stars, and this is allowed, then so too is it allowed for one to learn from the discipline of medicine. For it is one among many precipitating causes which, like all such causes, is permissible to study.”³⁷⁶ In keeping with the literary ascriptive norms of *ādāb* al-Zarnūjī adduces additional pietistic license for these pursuits, stating that “The Prophet pursued medical

375 Ibid. 63. These pursuits are contrasted in like fashion with astrology, which is forbidden on the plea that it is “at the level of disease...because it is harmful and of no benefit. Flight from God the Almighty’s determinations and will is impossible.” Al-Zarnūjī also employs the legal metaphors of *farḍ kifāyah* and *farḍ al-‘ayn* here. The latter addition of “in times of illness only” comes from a variant manuscript cited by the modern editor.

376 Ibid. 64: “*allāhumma idhā ta‘allum min al-nujūm qadr mā tu‘rifa bihi al-qiblah wa awqāt al-ṣalāt fa-yajūz dhālik wa ammā ta‘allum ‘ilm al-ṭibb fa-yajūz li-annahu sabab min al-asbāb fa-yajūz ta‘allumu ka-sā’ir al-asbāb.*”

treatment, and al-Shāfi‘ī did say, ‘There are two kinds of knowledge: that of law for religions, and that of medicine for bodies. Anything beyond these is worthless.’”³⁷⁷

In deploying these anecdotes al-Zarnūjī suggests a more figurative practice of medicine, attending to one’s psychological health as the physician does one’s body. Even the intentionality of the student as he pursues knowledge should be partially understood in a medicalized sense: “the student should orient himself toward [knowledge] with thanks for the blessing of their intellect and the health of their body, rather than the attention of others, the procurement of baubles, and the esteem of rulers.” As they grow accustomed to being circumspect in the knowledge they seek, “it is likewise incumbent upon [scholars] to acquaint themselves with the states of their hearts [*aḥwāl al-qalb*] in terms of reliance on God, repentance, dreading his punishment, and practicing gratitude for his boons. For [the scholar will eventually] find themselves in every such state.” Experience of even the worst of these states is inevitable, and each scholar should fill their hours with remembering and thanking God in preparation for enduring them. They should to this end strive to keep in mind that “every hardship is preordained and inexorably comes to pass. But God has prepared us for them, and blessedly provides patience if so petitioned.”³⁷⁸

Such prayerfulness and moral circumspection are certainly al-Zarnūjī’s favored means of overcoming the difficulty of intense emotions. He nevertheless cautions that one must be careful

377 Ibid.: “*wa qad tadāwā al-nabī ‘alayhi al-salām wa qad ḥukiya ‘an al-shāfi‘ī rahmat allāh ‘alayhi annahu qāla al-‘ilm ‘ilmān ‘ilm al-fiqh lil-adyān wa ‘ilm al-ṭibb lil-abdān wa mā warā’ dhālik bulghah majlis.*” Fiqh is further metaphorically glossed at 65 as “ascertaining the intricacies of knowledge along with a species of remedy [*wa-l-fiqh ma‘rifat daqā’iq al-‘ilm ma‘a naw’ ‘ilāj*].” The same sentiment is conveyed in al-Zamakhsharī’s *Rabī‘*, at 4:17. Here too al-Zarnūjī draws on familiarity with the sources used by al-Iṣfahānī, al-Baghdādī and other works *ādāb* in repeating the rhyming warning against scholars eating too much food, “Overeating is the death of intelligence.”

378 Ibid. 60-67. On this same theme see 104, 105-7 and 116. For medieval scholarly discourses on the affect of dread (*khashyah*), see Vignone, “Fear and Learning in Medieval Islam.”

not to take the call to contrite studiousness too far. Al-Zarnūjī assures his readers he understands the difficulty of examining one’s conscience in this manner while at study: “It is a matter of course that students of knowledge be prone to great zeal in their work. For indeed human beings take to flight on their ambitions just as birds take to wing.” Al-Zarnūjī allows that a student may stand to gain more knowledge if they favor difficult workloads over more elementary ones. All the same, scholars “should not overtax their spirit to the point of fatigue [*lā yujhid nafsahu jahdan*], such that it weakens and withdraws from work. Rather, they should employ gentleness [*rifq*] in the matter. Gentleness is a mighty principle in all things.”³⁷⁹

To this end, al-Zarnūjī provides a course for elementary study (*qadr al-sibq fī al-ibtidāʾ*) with a mild pacing by which students can face the rigors of their education without fear of exhausting themselves. Being gentle with oneself and modest in one’s expectations are much better study habits to cultivate than self-critique and conceitedness. Al-Zarnūjī describes such a gentle course of study as it was put forward by his early Central Asian contemporary, the jurist Ibn Muḥammad al-Zaranjarī (d. 1189):

The elementary student’s study should begin with memorizing what they can twice exactly recite from memory, through gentle means. Then they should add one further word to this each day until they are able to exactly recite it from memory twice; they should even be able to do so as their study advances and the amount of material to be learned compounds. Their memory will thereby increase gently and by gradations. As for when the beginning of their study goes on for quite a long time and the student needs as many as ten repetitions from memory—[they should know that] this also happens when they have come to the end of their course, and that they can proceed the same way as above. This is because they will have accustomed themselves to [learning more and more], and cannot break this habit except by great effort. It has been said that by

379 Ibid. 91-2. Both scholarly feats of memorization and the efforts of Alexander the Great are given as examples of what is possible for extremely ambitious individuals. Al-Zarnūjī also ascribes to the Prophet the report al-ʿAskarī credits to ʿUmar II, whereby the spirit is likened to a draught animal, “which must be treated gently [*fa-irfuq bi-hā*]!” Giving these injunctions prophetic license, al-Zarnūjī echoes a hadith marshaled by al-ʿAskarī several centuries past: “Is this not a strident faith? So apply yourself to it, but gently [*bi-rifq*]. For a man who loses his mount to misadventure has neither land left to traverse nor backbone left to spare!”

following a course of study you will learn but a single word, but with such repetition you will learn a thousand.³⁸⁰

Students may also help themselves to master more advanced material without wearying if they first select simpler and more broadly known texts (*ṣighārāt al-mabsūt...akthar al-waqū‘ bayn al-nās*) of a level suited to their comprehension and retention (*aqrab ilā al-fahm wa-l-dabṭ*). Once the material is memorized, the student should excerpt it in writing and repeat it. They should avoid doing so with texts they does not understand, for this will “bring about a blunting of their inborn nature [*ṭab‘*], a dissipation of their perspicacity [*fiṭnah*] and a waste of their time.” These caveats should not prevent the student from earnestly striving to meet the demands of his instructor, posing meaningful questions as they arise in class, and attending carefully to the communal processes of learning with “a questioning tongue and capacious heart.” Such discussions should be held under the supervision of a teacher so as to keep them free of passions like provocation and anger (*shaghab wa ghaḍab*). This will ensure that debates are not dominated by those of an ill or otherwise unsavory natural disposition (*salīm al-ṭabī‘ah* vs. *ghayr mustaqīm al-tab‘*), for aspects of these “dispositions steal about quietly and their traits of character are contagious; staying around them will leave its mark on you.” If left in the unsupervised company of these individuals, or even advanced texts, the student might misunderstand his study materials or, worse, fall into bad habits that are just as difficult to break as his good ones.³⁸¹

380 Ibid. 100-1. This report is cited as having come from al-Zaranjarī by way of Abū Ḥanīfah, which would not make chronological sense. If the individual who died in 1189 is the al-Zaranjarī meant here, it is more than possible that his interlocutor was Jamāl al-Dīn b. Aḥmad al-Maḥbūbī (d. 1233). The latter was a student of al-Zaranjarī, and later came to be known as Abū Ḥanīfah al-Thānī. See Al-Azem, Talal. *Rule-Formulation and Binding Precedent in the Madhhab-Law Tradition: Ibn Quṭlūbughā’s Commentary on The Compendium of Qudūrī*. BRILL, 2016 at 76.

381 Ibid. 101-3, 6. Al-Zarnūjī also here lays out general rules for debate (*munaẓarah*). The relevant adjectives here are expressly medical, blended with the virtue ethics of al-Ghazālī: “*al-ṭab‘ mutasirriyah wal-akhlāq*

Apart from taking preventative measures against these specific pitfalls, al-Zarnūjī encourages his readers to organize their daily schedules and study habits carefully in the manner of his predecessors in *ādāb*. Some aspects of the schedule he proposes are expressly pious, such as the directive to begin new courses of study on Wednesdays due to the Prophet's preference for the day. Other advice includes keeping rigorous count of the repetitions from memory required to advance through a course of study, striving to memorize an additional article of knowledge each day, and holding writing implements with them at all times in case anything of interest should occur in their presence. They should be diligent and active in their formal learning sessions, and ensure that these meetings take place on a regular schedule to maximize learning potential. While a good amount of zeal on the part of the student is certainly welcome, al-Zarnūjī cautions that they should be careful not to take their dedication to study tasks too far. Some students attend to their exercises for as many as five consecutive days, not taking any time off to eat, drink, or sleep. Al-Zarnūjī humorously tells of a scholar who died during the very act of study itself, later appearing in a colleague's dream to declare that he had been so engrossed in his work at the time that he failed to notice his own passing. Toward the end of this section, however, al-Zarnūjī flatly advises that "the best of such measures are the most moderate [*khayr al-umūr awsaṭuhā*]." ³⁸²

There are, moreover, particular times of the day and stages of one's life where such rigorous study is more propitious and less harsh. In a section entitled *On the Times for Instruction* al-Zarnūjī states that the prime of one's youth (*sharkh al-shabāb*) is the best time to begin study. This is likely due to the vigor and toil required of the student; they must be prepared

muta'adiyah wa-l-mujāwazah mu'aththirah." Subsequently at 108, and in this same vein al-Zarnūjī asks if "there is any illness more sickening than avarice?" Also, Recall al-Iṣfahānī's invocation of the quote pertaining to a questioning tongue and capacious memory; al-Zarnūjī attributes it to Ibn 'Abbās.

382 Ibid. 100-4 and 111-6. Al-Zarnūjī states that private time (*khalawāt*) should be spent in study or in praise of God.

to fully engross themselves in the tasks of learning, especially during the hours between nightfall and daybreak (*waqt al-saḥar wa mā bayn al-‘ishā’ayn*). Ḥusām al-Dīn Ibn Māzah (d. 1141) reported that his father would instruct him at forenoon (*dahwah kubrā*), and that he would often complain that his “natural disposition was weary and exasperated at that hour.” His father would respond that he was obliged to teach his illustrious patrons’ children at the more propitious hour of the dawn, and that the next best thing for his own children was just before noon.³⁸³ Hours of the day aside, al-Zarnūjī does not specify what portion of the night the scholar is meant to sleep, though he does state through two anecdotes that “the night is long, so do not waste it on sleep!” The noted jurist Ḥasan b. Ziyād (d. 819) “did not recline on a sleeping mat once in the forty years” during which he became learned in law. The revered Muḥammad b. Ḥasan (d. 805) also seldom slept by night. He preferred to surround himself with a variety of books to read. Some were kept on hand in case he became bored of a subject and dozed; in their absence, he would have water nearby to stay awake. “Sleep comes from feeling hot,” he reasoned to his colleagues, “and thus can be suppressed with cold water.” In all cases, al-Zarnūjī clearly deems it preferable for scholars to use the time that others waste on sleep for the pursuit of knowledge, even if the subject of one’s study at these hours is rarefied, trivial, or elementary. “If the student should ever grow bored of one kind of knowledge, let him turn to another,” al-Zarnūjī says of these moments, just as Ibn ‘Abbās would ask that poetical anthologies be brought to him when he grew exasperated with speculative theology.³⁸⁴

383 It appears that this time of day was also deemed good for study. On Ibid. 134 al-Zarnūjī specifically states that “sleeping in the morning (*nawm al-ṣubḥah*) cuts off one’s sustenance, and too much sleep engenders both literal poverty and poverty of knowledge,” pointing to this time’s general usage for study. These specific times are given despite al-Zarnūjī’s repeating an old chestnut more than once to the effect that “the aptest time for study is between the cradle and the grave [*min al-mahd ilā al-laḥd*],”

384 Ibid. 117-24.

Toward the end of the *Ta'lim al-Zarnūjī* broaches the subject of what imparts memory and forgetfulness. Apart from the pharmacological discussion of certain foods explored in the preceding chapter of this study, he gives further emotional context for his advice on the subject:

things that impart forgetfulness are disobedient behavior, excessive sinfulness, anxiety, as well as sorrow about worldly matters and too many distractions and social relationships. We have already stated that the intelligent person ought to avoid concerning themselves with worldly matters, since these are of no benefit to them and only do harm. Indulging anxieties about this world casts a pall over the heart, whereas indulging anxieties about the hereafter casts a light over the heart[,] commending a person to good deeds.³⁸⁵

What is more, taking pride in one's stock of knowledge and working tirelessly to expand it helps to drive out feelings of worry and sadness such as these, and can be trusted to do so like no other earthly activity. Avoiding the tribulations of this world and focusing instead on the righteous comport of scholarly forebears are also good means of securing the intellect needed to flourish as a scholar—and, moreover, the decades of healthy years in which to do so. As the Prophet said, “Only prayerful petitions can avert the will of God, and only an unimpeachable life [*birr*] can add years to your life [*yazīd fī al-‘umr*].” Behavior constituent of such life-boosting and anxiety-reducing *birr* include avoiding sinful deeds as well as keeping a clean home, appropriately grooming oneself, going on regular pilgrimages, and petitioning God at dawn and nightfall.³⁸⁶

Though only second in its brevity among the *ādāb* treatises studied here to al-‘Askarī's

Ḥathth, al-Zarnūjī pays close attention to the subject of emotional and bodily health across the

385 Ibid. 132. On 135 al-Zarnūjī lists many insalubrious or otherwise disreputable practices that engender poverty of this nature, including sleeping naked, burning odiferous food detritus like onions and garlic, speaking rudely to one's parents, leaving one's house in an unkempt state, mending clothes while wearing them and performing ablution in a latrine. All such entries seem to serve the purpose of socializing the ulema to be members of an outwardly respectable, reasonably cleanly, deeply pious and socially graceful class. These are also listed in Ṭūsī's *Ādāb al-mu'tallim* at 120-7.

386 On Ibid. 135, where this content appears, al-Zarnūjī lists many insalubrious or otherwise disreputable practices that engender poverty of this nature, including sleeping naked, burning odiferous food detritus like onions and garlic, speaking rudely to one's parents, leaving one's yard in an unkempt state, mending clothes while wearing them and performing ablution in a latrine. All such entries seem to serve the purpose of socializing the ulema to become members of an outwardly respectable, reasonably cleanly, deeply pious and socially graceful class.

Ta'lim. Early twentieth-century historians remarked upon this material with some curiosity, reasoning that its lack of a basis in medical or legal discourses meant that it belonged to the realm of self-discipline or folk practice. While the analysis above has given evidence for these activities' coherent basis in the medical and ethical discourses of the medieval period, and has documented some areas of disagreement whereby *ādāb* authors discuss their own evaluation of these inheritances, the role that self-discipline played in the period's *ādāb* is also undeniably present. Itself an epitome of significant entries in the genre of *ādāb*, Ibn Jamā'ah's *Tadhkirah* aimed to weave these threads into a more straightforward presentation of scholarly ethics that encouraged scholars to attend to their the emotional health in the same way they attended to their bodily health.

vi. Badr al-Dīn Ibn Jamā'ah (d. 1333)

Ibn Jamā'ah's epitomizing project in the *Tadhkirah* similarly marshaled material on the effects of bodily and emotional health on the intellect from precedent entries in the *ādāb* genre. As above, Ibn Jamā'ah pays particular attention to the consequences that unwise or immoral behaviors may have on the faculties most important for reasoning. Ibn Jamā'ah explains these consequences across the *Tadhkirah*, and especially in those sections dedicated to explaining the set of protocols that scholars and their fledgling students should follow.

The disciplinary intent of Ibn Jamā'ah's writing in these sections is unmistakable. The reader is informed how they must dress, wash themselves and their accoutrements, greet and interact with their peers and teachers, as well as respect the books and tools of the scholarly trade. Ibn Jamā'ah also minutely explains how they must comport themselves in communal study

in order to remain alert and active.³⁸⁷ Nevertheless, in his description of how and why one must adhere to these protocols in order to flourish as a scholar Ibn Jamā‘ah pairs the need for self-discipline with a keen understanding of scholarly life’s unique stressors and emotional pitfalls. This concern for the ulema’s emotional health while at study has clear devotional and cosmological resonances. Ibn Jamā‘ah states that the conviction that God supervises all aspects of one’s private and public affairs³⁸⁸ should impart a scrupulous, humble, and sober attitude for the properly pious. But the circumspection required by one’s status as a scholar goes beyond what can be expected of the common believer in this regard: the scholar “should be keenly interested in knowledge and its acquisition most of the time, remembering that God the Almighty has placed the knowledgeable high among his favored ranks. For they are the heirs of the prophets—prophets who, alongside martyrs, mount pulpits of light to sing their praise.”³⁸⁹

In broaching the topic of how scholars might directly improve themselves for better professional outcomes, Ibn Jamā‘ah explicitly lists the traits and intentions which his readers must learn to emulate. These are drawn from precedent *ādāb* treatises, especially al-Ghazālī’s *Ihyā’*. Excellent traits (*makārim al-akhlāq*) worthy of the scholar’s aspiration include, inter alia, patience, selflessness, and a charitable disposition toward the poor, whereas rotten traits (*akhlāq radīyah*) include hypocrisy, vanity, and slander.³⁹⁰ These latter traits can be cured through

387 See *Tadhkirah* 60-78, 102-22.

388 Ibid. 48-9. The Arabic for this phrase reads *sirr wa ‘alānīyah*; these terms do not neatly correspond to modern notions of public and private, but the suggestion is that God has access to all activities, including those done in the privacy of one’s home or heart as well as those done in the full view of society.

389 Ibid. 73.

390 Ibid. 53-7. Other laudable traits include preventing harm done to others even while others are actively doing harm to oneself, maintaining a cheerful countenance, acting as peacemaker, nourishing oneself with food, suppressing boorishness, practicing good manners, setting others at ease, striving to rectify social deprivations, sacrificing one’s reputation in the resolution of conflict, treating the poor well, demonstrating love, patience,

commendable ones (*akhlāq murḍīyah*) like shame before God and others, charitable thinking, sympathy for others, patience, renunciation of the world, serenity, as well as total reliance on and fear of God. Especially bad for scholarly respectability is permitting oneself to feel fearful, desirous, indignant, zealous, or loyal toward any other but God. Such flaws, Ibn Jamā‘ah continues, are insidiously present even among the scholars of his own time. The only exception are those whom God has chosen to protect from these evil traits; all others must regularly submit to unpleasant programs of treatment, such as contemplating the true scope of their flaws and finding solutions for them in the content of their studies. In other sections of the *Tadhkirah* Ibn Jamā‘ah states firmly that before doing so the scholar should seek to purify their heart of bad but easily extirpated traits. Thus “sweetened in preparation for knowledge,” the organ will be able to “nurture its blessings, as land made agreeable for farming grows a thriving crop.”³⁹¹

Ibn Jamā‘ah urges his readers to attend closely to their academic pursuits in order to prevent the recurrence of such flaws. As in the preceding chapter of this study, the importance of preserving the faculty of memory features prominently. Scholars should, for example, continually recite the Quran while pondering its meaning and content when sinful or unhealthy urges threaten to reappear. This activity is also recommended so the scholar might “guard against forgetting the Quran after memorizing it,” a grave sin of which “prophetic reports mention the

and piety to one’s neighbors and relations, wording petitions kindly, behaving selflessly instead of enviously, and, finally, dealing justly in one’s affairs without demanding justice for oneself. The opposite kind of traits include calumny, slander, defamation, deceit, rancor, envy, fraud, malice, recklessness, and other kinds of injurious behavior. Ibn Jamā‘ah likewise condemns derogatory and foul language, hypocrisy, conceit, vanity, pride, ambition, self-adornment, arrogance, validation-seeking, miserliness, and unctuousness. Scholars may also be taken to task for ignoring the spiritual flaws of their fellows while preoccupying themselves with their own physical flaws, as well as for competing, boasting, and fawning over one another’s worldly status.

391 Ibid. 86. Recall that the second chapter of this study cites this section of the *Tadhkirah* as specifically recommending certain measures to resolve intellectual defects in the same manner.

reprimand.”³⁹² Ibn Jamā‘ah likewise quotes al-Baghdādī’s *Jāmi‘* as urging the scholar to pursue literary composition and compilation for the same distracting purpose, since the exacting technical skills of surveying, perusing, investigating, and verifying information will keep the mind occupied and productive. In Ibn Jamā‘ah’s estimation these are the most important means of “strengthening the memory, kindling the heart, honing the natural disposition, improving speech and securing fine recall.” So too does undertaking to memorize the names, nicknames, and death dates of famed figures of the past make for “a comprehensive power of recall.” While the student should try to study alongside their peers, when forced to memorize alone they should repeat aloud their study material in its exact wording while contemplating its meaning in one’s heart, so as to fix it fast to the organ’s underlying cogitative function (*li-ya‘laq dhālik ‘alā khāṭirihi*).³⁹³

Anxieties about misspending one’s time and youthful energies on pursuits other than memorization pervade this section of the *Tadhkirah* much like it did previous *ādāb* entries. “Let the scholar divide his night and daylight hours,” Ibn Jamā‘ah counsels, “and take firm hold of what remains of his time!” The task of learning becomes more difficult as the scholar ages, and so it is a matter of great urgency that they “take advantage of their youthful vigor and direct all

392 According to the modern editor of the text, by this Ibn Jamā‘ah means prophetic reports habitually cited in *ādāb* and mentioned the previous chapter—warnings along the lines that whosoever forgets memorized knowledge will meet God in as a cripple on Judgement Day, a bodily state corresponding to the mutilation of his knowledge through forgetfulness. See footnote 1 on Ibid. 53. A report from Ibn Ḥanbal is also cited by Ibn Jamā‘ah here stating that regular recitation of the Quran—namely, reciting the entirety of the text every six days—will ensure one will never forget it.

393 Ibid. 59-60, 79; the citation from al-Baghdādī is given here occurs at 2:422 in text. This biographical information includes that of the Rashidun Caliphs (*al-khulafā’ al-arba‘ah*), the ten Companions the Prophet promised paradise (*al-baqīyah al-‘asharah*), and those who fought at the battle of Badr (*al-badrīyīn*), among other groups of noteworthy early figures. Al-Shāfi‘ī is here quoted as having said that he had not felt sated in sixteen years due to his practice of avoiding food to focus on his studies. A poem is also given: “The most commonly seen illness / comes from too much food and drink.” Ibid. 90. Recall that al-Baghdādī also shared the opinion that memorizing by night is superior to memorizing by day. On this also see the second footnote in *Tadhkirah* 117-8.

the hours of their life to study”, being careful “not to beguile themselves with procrastination or great expectations. For every hour that passes can neither be replaced nor compensated.” More so than simply attend to the tasks of learning at all practical moments, Ibn Jamā‘ah specifies that scholars should exercise different study techniques at different hours of the day, attuning them to their bodies’ observed resiliences at these times. Studying by night, as we have come to see, is generally preferable to study by day, as is doing so when one is hungry rather than full. Nevertheless, certain hours should be dedicated to certain pursuits: “the best time for memorization is the predawn hours [*ashār*], dialectical inquiry in the morning hours [*abkār*], writing at midday [*waṣṭ al-nahār*], and deep reading and communal study in the evening [*layl*].” In all cases the scholar should avoid eating before study so as to acquire knowledge unencumbered by languidness.³⁹⁴

The disciplinary edge to these statements are clear. Ibn Jamā‘ah invokes al-Baghdādī’s *Jāmi‘* and *Faqīh* to state that “the best place for memorization is within one’s chambers, or in places far remote from diverting amusements [*mulhiyāt*].” The potential of one’s surroundings to disorder the intellect with competing sensory input also leads Ibn Jamā‘ah to repeat al-Baghdādī’s admonition that “it is not praiseworthy to memorize in the presence of plants and the verdancy of rivers, nor to do so on open roads or amid the clamor of voices, because these tend to prevent the emptying of one’s heart” necessary for the successful acquisition of knowledge. In passages also reminiscent of al-‘Askarī’s *Ḥathth*, Ibn Jamā‘ah reports that al-Shāfi‘ī neither ate by day nor slept by night, nor did he have time enough to buy a single onion at the marketplace. He instead directed all his energies to study and composition. Arguing that this is the level of dedication that one must cultivate in order to thrive as a scholar, Ibn Jamā‘ah again cites al-

394 Ibid. 87-9.

Baghdādī to declare that “knowledge will only be imparted to him who abandons his shop, lets his garden go to waste, disassociates from his brothers, and fails to attend his relatives’ funerals when they die.” Students should even avoid purchasing white clothing, and instead “dye their robes dark colors, lest their thoughts become distracted with the need to wash them.” While Ibn Jamā‘ah readily admits that these reports “might be exaggerated, their intention is to express the need to dedicate the whole of one’s heart and every thought”³⁹⁵ toward the pursuit of knowledge.

For Ibn Jamā‘ah, the careful maintenance of one’s diet is another means of eliminating potential disturbances to the scholar’s intellectual functioning. Apart from avoiding foods known to increase phlegm and instead consuming those which decrease it, “eating simple portions of licit food is one of the best ways to secure concentration, comprehension, and freedom from boredom.”³⁹⁶ In the same manner as al-Zarnūjī, Ibn Jamā‘ah reasons that eating too much causes one to drink too much, which, in addition to being inconsistent with proper religious devotion and the example set by scholarly forebears, causes sleepiness, stupefaction, a lax mind, weak sensory perception, and bodily indolence. It is far more honorable for a scholar to maintain a healthy mind (*dhihin ṣaḥīḥ*) than to squander it on insalubrious foods, and to disrupt its functioning by constantly feeling the need to void the bowels. Hence comes the directive in the Quran for Believers to “eat and drink, but not to excess,” a commandment in which Ibn Jamā‘ah claims “God has summarized the entirety of medicine.” Practicing scrupulous fear of illicit things (*wara‘*) aids in this endeavor, illuminating the heart to make it suitable for the reception of

395 Ibid. 57, 80-89.

396 See Ibid. 88 for a statement from Abū Ḥanīfah along these lines: “The aggregation of anxiety [*jam‘ al-hamm*] is useful for jurisprudence, and taking simple food only when necessary and not to excess is useful for cutting off material attachments.”

knowledge.³⁹⁷ Likewise, sleeping more than eight hours a night—a third of one’s daily schedule—is to be avoided, given its tendency to degrade the mind and body. In sum,

Let the scholar not squander a moment of their life on anything but that which pertains to knowledge and [its] practice, and only then having had taken the bare minimum of food, drink, sleep, and relaxation due to boredom; the same goes for carrying out their marital duties, attending to guests, obtaining provisions, [tending to] pain, or any other thing that makes studying difficult.³⁹⁸

Indeed, no early figure of repute can be cited as praising the virtues of eating or resting more than is necessary. Al-Shāfi‘ī once commented that he had not felt sated in twenty-six years because of his quest for knowledge, and the traditionalist Yahyā b. Abī Kathīr (d. 747) counseled that in his experience “knowledge cannot inhere in a body at repose” if such restfulness is caused by laziness or overeating. The Prophet himself said that these kinds of “loathsome things hem the very walls of paradise.”³⁹⁹

Yet for all the disciplinary weight these injunctions and admonitions carry, Ibn Jamā‘ah dedicates significant space in the *Tadhkirah* to ensuring his readers understand the consequences of excessive self-denial and overexertion. “The reader should acquaint themselves with the means of self-improvement gently and mildly, not with severity and abusiveness,” Ibn Jamā‘ah counsels, “intending thereby the betterment of their education and improvement of their disposition. [They should] proceed in gradual steps to acquire sublime *ādāb* and rid themselves of sickly morals.”⁴⁰⁰ Far from achieving more knowledge, those who strain themselves with the fatigue and listlessness that accompany heavy study almost always induce the opposite effect.

397 Ibid. 90-1; the Quranic quote is at 7:31. Again is quoted the prophetic report that humans fill no more vile a vessel than their stomach. On this matter Ibn Jamā‘ah relates an anecdote wherein the Prophet refuses to eat a date found by the roadside, piously dreading (*khashyatan*) the consequences of eating a food that might possibly have been meant for charity. Ibid.

398 Ibid. 57.

399 Ibid. 87, 90-2.

According to Ibn Jamā‘ah the ulema have devised their system of education with the intention of resolving the worrisome distractions that often beset even the most enthusiastic scholar:

Let the student steep themselves in knowledge by proceeding in the gradations stipulated for its acquisition, which restrict their studies to simple matters [*iqtiṣār ‘alā al-maysūr*] and offer only what is truly needed from the material world. The goal in this is to moderate the preoccupation of their heart with attachments to the world, and all the distracted thinking and disruptive anxieties that go with it. For emptying the heart of attachment to baubles—of the desire for their increase and of the sorrow at their loss—is more bracing for their heart, more restful for their thoughts, more worthy for their spirit, and more elevating for their station. It minimizes the envy of others, and is better suited for memorizing and multiplying knowledge.⁴⁰¹

Scholars who adhere to such advice in the first years of their studies and who thereafter strive to avoid the allure of worldly comforts may hope to earn a large share of knowledge. This has certainly been the case for the majority of the ulema, Ibn Jamā‘ah explains, and the reason why teachers should not be unreasonably hard on their struggling students. Teachers should take careful note of circumstantial factors which might make the process of learning extraordinarily difficult, such as lecturing for too long or in rooms with temperatures known to impede reason. For their own part, students must take care “not to burden their own spirits beyond their capacity [*fawq ṭāqatihā*], otherwise sleep or boredom will overtake them. And perhaps then their spirits will take a strong dislike to study, which cannot be resolved.” Concluding his remarks on the issue, Ibn Jamā‘ah charitably suggests his readers “let the matter be dictated by individual circumstance, for each human being knows themselves best.”⁴⁰²

400 Ibid. 74-5. In what follows Ibn Jamā‘ah lays out a step-by-step curriculum for the fledgling scholar seeking to increase their knowledge.

401 Ibid. 73. See also 52 and 102.

402 Ibid. 58. This last line reads, “*bal yakūn amruhu fī dhālik qaṣḍan wa kull insān abṣar bi-naḥsihi.*” See also 105, 113-6, 77 and 63-65.

Ibn Jamā‘ah betrays the significant tension present here and throughout the *Tadhkirah* about the need for discipline as well as reasonable leniency in the quest for knowledge. The tension is tellingly if only partially resolved by his reliance on *ādāb*’s medical idiom, which permits imagining the scholar’s struggle with the rigors of study in terms of an illness whose cure is to be found in the measured application of otherwise dangerous treatments. Ibn Jamā‘ah advises, for example, that resting the mind and having licit, regular sex is beneficial for the brain in that it evacuates ill humors from the body. In a similar yet less literal vein Ibn Jamā‘ah informs his readers that while many have been discouraged from the task of learning by its unrelenting hardships, “there are some who, not turning away from their studies due to some light illness or mild pain, find healing in knowledge and studying to the extent they are able.” Ibn Jamā‘ah offers a series of statements reinforcing the sentiment that the pursuit of knowledge is a balm for the ill scholar. In a clear echo of al-Ghazālī, he includes a poem here declaring to God that when scholars “fall ill, they treat themselves [*tadāwaynā*] with remembrance of you / and when they turn away from doing so they suffer a relapse [*fa-nantakis*]!” Ibn Jamā‘ah states that this is so because the seekers of knowledge are truly “the heirs of the Prophets,” who attained their nobility by denying the whims of their vegetal and concupiscent spirits in favor of knowledge’s nourishment.⁴⁰³

403 Ibid. 92-3, 49-57 and 72. Also echoing al-Ghazālī, Ibn Jamā‘ah cites Mālik as once having reminded Hārūn al-Rashīd that God designated scholars as “the heirs of the prophets,” and therefore expects that they lead the entire Muslim community by unimpeachably moral example. Thus the scholar “should not debase himself any more than is necessary by walking the path of those who belong to this world and are not of his ilk,” though peerless scholars of the past like al-Zuhrī and al-Shāfi‘ī were able to deliver knowledge to such persons without succumbing to their worldliness. Moreover, the lack of moral excellence in any one scholar threatens the entirety of the profession to which he belongs: “let [the scholar] not do anything amounting to the diminution of his virtue, or which is outwardly contemptible—even if it is intrinsically permissible—for it exposes his spirit to ill thought and his reputation to slander, and causes others to make detestable assumptions and become morally culpable for such backbiting.”

5.3 Conclusions

Between the tenth and fourteenth centuries, authors of *ādāb* consistently described the lifestyle of the ulema as unrelenting in the hardships it posed students of knowledge. When the genre emerged as a discourse of scholarly ethics in the tenth century, these hardships were considered virtues of the profession that served to alienate students from earthly concerns and prepare for the arduous tasks of learning. *Ādāb* of subsequent generations paired a considerably tempered presentation of this argument with advice that students proceed gently in their studies and take careful stock of their own abilities as they progress through their education. Suggesting that they set realistic goals for themselves and acknowledge their legitimate need for rest and nourishment, these authors offered specific scheduling, dietary, and other lifestyle advice that possessed medical and devotional resonances. Considered the principal seat of passion and intellection by both literary genres, the heart's centrality to this discussion of emotional health allowed writers to account for varied scholarly outcomes with comparably few references to inborn natures. In passages on how individuals can accommodate their uniquely sensitive and accumulative hearts during the harsh circumstances of their education, these authors instructed their readers to evaluate their own affective capacities and plan their studies accordingly.

The vociferously renunciant and mystical inflection given to the genre by al-Ghazālī's *Iḥyā'* had its own basis in this longer-lived theme of *ādāb* writing. But while the strong emphasis he laid on denying oneself even licit earthly pleasures in the name of intellectual and devotional rigor left an indelible mark on Islamic intellectual society, subsequent *ādāb* authors mined the genre's earlier veins to formulate a less strident and more gently-stated program for scholarly emotional health. Belonging to a later era where the more thoroughly professionalized ulema had

access to an intertextual range of information on the subject, these texts were certainly more summary than their predecessors. But their making such ample provision for advice on limiting anxiety and maximizing calm reveals the medieval ulema's abiding interest in emotional states and their effect on the intellect. When viewed together with the considerable material they marshaled on medical questions related to natural capacities and the possibility of their enhancement, it is clear that by the end of the medieval era this cadre of intellectuals had come to believe that varied discourses of knowledge on the human body and what constitutes its ultimate health were a matter of profound relevance to their professional lives.

6. Epilogue

I regard the body as an aspect of the human imagination that shifts its parameters through human beings' phenomenological and social experience during a lifetime....All bodies are constantly enmeshed in processes of growth, decay, and movement so that the idea that one has a single body through a lifetime is a kind of illusion. This illusion is necessary for producing a sense of self that allows one to think of oneself as a coherent being moving through the world. Through the working of these various processes, the body is found thoroughly interlaced in discursive domains [such as] literature and art.

—Shahzad Bashir. *Sufi Bodies*⁴⁰⁴

6.1 A late body of knowledge

The practice of ethics among the medieval Islamic intellectual elite, or ulema, encompassed discourses concerned with promoting the health, wellness, and mental fitness of scholars. In this dissertation I have examined one such discourse articulated through *ādāb*, an ethical genre written by ulema living in the urban centers of the medieval Middle East. As an arena in which the ulema proposed their own identity as scholars over the centuries, debated the practices constituting that identity, and addressed any tensions detected within it, *ādāb* offers consistent insight into the ethical and professional ideals developed by these individuals across the medieval era. Coming on the heels of the Abbasid era's translation movement, *ādāb* from the tenth century onward documents the ulema's attempts to construct an ethical mode of living with these discourses in mind. Historians of the earlier twentieth century contended that mainstream medical discourse was thereby compromised by the ulema's religious sensibilities, forcing the universalist practice of medicine to the margins of Islamic intellectual society. In line with much more recent and compelling scholarship, I have argued that historians are better served by

404 Bashir *Sufi Bodies*, 14.

understanding these aspects of medieval Islamic medicine as part and parcel of its specific intellectual production in the period and societies under study.

Moreover, I have argued that within *ādāb* certain medical discourses held a more privileged place in this regard than did others. Such favored discourses included pathologies and pharmacologies of the brain and heart, whose ubiquitous invocation in these texts indicates their special importance to scholars at every stage of career. Authors of *ādāb* were particularly keen to learn whether certain medicines and surgical procedures drawn from these discourses might augment intellectual capacities essential to scholarly pursuits, such as concentration, memorization, and recollection. In arguing for or against these interventions, the ulema engaged in philosophical, psychological, and physiological discussions of the safety of medicine, the intellectual consequences of ill health, and the professional implications of approximating endowments otherwise understood as accidents of birth. Only rarely did they cite religious views of these practices; if they did, it was to argue that the Prophet and his Companions had engaged in them or, at the very least, had not condemned them.

To date historians have not deeply investigated the place of medicine within *ādāb*, particularly in the understudied postclassical era following the Abbasid period. I have therefore sought to explore how such texts composed before, during, and after this era evince a desire both to state the importance of medical erudition to the ulema's scholarly identity and to advocate a lifestyle designed to foster their intellectual development. The flowering of this medical idiom in medieval *ādāb* is testament to the importance the ulema laid by their embodied experience of learning in the period as well as to their enthusiasm in applying useful forms of knowledge to their professional lives. In the same manner that the rational sciences came to influence Islamic

theology and legal reasoning in this highly synthetic period, so too did medical knowledge suffuse scholarly life to inform the ulema's efforts to shape their bodies around their identity as the arbiters of human knowledge. In addition to exploring this aspect of the ulema's socialization, documenting the impact of this discourse on the conceptualization of human growth and learning in the period calls for further study of the body's place in medieval Islamic devotional and intellectual society.⁴⁰⁵

This raises an important caveat. It should be borne in mind that the medieval societies that produced these texts were strongly hierarchical in nature. Certain bodies populating these societies were, as a consequence, held in higher esteem than others. Authors of *ādāb* who articulated the medicine studied in this dissertation sat firmly atop their societies' hierarchy as free men in possession of masculine and, from their own point of view, superior, autonomous, and eminently improvable bodies. It was to these specific bodies that the ulema attuned their medicine of enhancement, to the exclusion of others. This medicine and the genre that produced it was, in other words, responding almost exclusively to the needs and anxieties of the largely male, free, and able ulema. With some exception, subsidiary categories of body—such as female, intersexed, and enslaved—were not thought capable of ideal scholarly humoral temperaments, and therefore could not reliably share in the mission enjoined by God to retain and transmit all licit knowledge. Scholarship produced in past few decades has drawn increasing attention to how the ulema used idioms like medicine to express the sexual and racial suppositions at the heart of their scholarly identity. Continuing the study of such conspicuously physiological explanations

⁴⁰⁵ For studies already completed in this vein, see Richardson, Kristina. *Difference and Disability in the Medieval Islamic World*. Edinburgh University Press, 2014, Richardson, Kristina. "Drug overdose, disability and male friendship in fifteenth-century Mamluk Cairo." *Postmedieval: a journal of medieval cultural studies*. 3.2 (2012): 168-181, Bashir, Shahzad. *Sufi Bodies: Religion and Society in Medieval Islam*. Columbia University Press, 2011, Scalenghe, Sara. *Disability in the Ottoman Arab World, 1500-1800*. Cambridge Studies in Islamic Civilization. New York: Cambridge University Press, 2014, and also the next footnote.

of human capacity and potential promises us a still greater understanding of the influence medical discourses decisively wielded over medieval Islamic intellectual society.⁴⁰⁶

As one approaches the early modern period, however, interest in questions of scholarly natures, capacities, and the means of enhancing them begins to wane. These changes, I would argue, reflect the shifting professional circumstances of the ulema of the scholarly centers examined in this dissertation by this later era. After the educational reforms implemented by the Ottoman Empire during the sixteenth century, *ādāb* from these quarters does document a shift in emphasis away from the scholar's memory and manner of personal intercourse as the primary means of self-advancement and moral development. The rise of print culture over manuscript culture in the nineteenth-century Middle East is thought to have suppressed oral and mnemonic technologies of learning. In these instances, authors of *ādāb* turned toward justifying newer forms of intellectual, political, and religious authority instead, like the systems of certification and accreditation that had come to define higher learning in the period. This involved elevating the individual study and perusal of texts (*muṭāla'ah*) to a preeminent technology of learning, which steadily surpassed memorization and communal recitation in its intellectual respectability. Alternatively, this shift in *ādāb* may have been occasioned by a related rise in the stature of the rational and instrumental sciences, which were soon argued to grant students the ability to study texts in the absence of an instructor. As hours "spent poring over dense scholastic handbooks on syntax" dominated the curricula of this new educational landscape, the "ideal depicted by classical educational manuals had by the seventeenth century ceased to do justice to the role of

406 See Ragab, Ahmed. "One, Two, or Many Sexes: Sex Differentiation in Medieval Islamic Medical Thought." *Journal of the History of Sexuality* 24, no. 3 (2015): 428–51. See also Roded, Ruth. *Women in Islamic Biographical Collections: From Ibn Sa'd to Who's Who*. Lynne Rienner Publishers, 1994. Sanders, Paula. "Gendering the Ungendered Body: Hermaphrodites in Medieval Islamic Law." *Women in Middle Eastern History*, 1991, 74–95.

careful reading in the acquisition of knowledge.” As progressively less time and prestige were accorded to pursuits that demanded a capacious memory from students, authors of scholarly *ādāb* in the Ottoman territories turned to matters of greater consequence to the professional realities of their readers.⁴⁰⁷ Interest in the rational and instrumental sciences had already begun to mount by the thirteenth century; in the centuries hence, both the institutional and intellectual circumstances in which the bodies of the bureaucratized ulema were located changed, more or less in step with the social and political transformations of Ottoman early modernity. But as had been the case across the medieval period, it was the experience of these bodies that remained a centrally important point of reference in the ulema’s continuing self-formation as a class of learned Muslims.

⁴⁰⁷ For a summary of these arguments, see El-Rouayheb, Khaled. *Islamic Intellectual History in the Seventeenth Century: Scholarly Currents in the Ottoman Empire and the Maghreb*. Cambridge University Press, 2015, especially pages 97-130. The quoted portion here appears at 126. Further research is needed to test the validity of the above claims in the scholarly contexts of the early-modern Indian Ocean and Sub-Saharan Africa.

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