

Introduction

AN OUTLINE OF THE PROJECT

This book is a study of the *Sullam al-‘ulūm* (*The Ladder of the Sciences*) of Muḥibballāh al-Bihārī (d. 1119/1707), long considered to be the most advanced logic textbook in the Indian¹ Nizāmī curriculum.² It also engages the vast commentarial tradition that its composition elicited and offers a theory of commentaries. The culminating South Asian articulation of discourses on logic issuing after the close of the classical period (ca. 200/800–600/1200), the *Sullam* is uniquely positioned to give scholars of Arabic logic a vantage point from which to reflect on the postclassical (ca. 600/1200–1300/1900) career of the discipline: as we will witness below, it was the South Asian heir to a continuous tradition that passed sequentially from Avicenna to Marāgha to Shīrāz to North India. The *Sullam* also allows one to reflect on the development of logic in the local Indian environment: its commentarial tradition was either internally self-referential or it reverted to the prehistory of the hypotext; contemporary developments outside the Subcontinent are practically never cited by the *Sullam*’s hypertexts. In other words, although the *Sullam* was the product of a protracted transregional affair, its commentarial tradition was locally responsive.

This project was initiated more than a decade ago. In the intervening years, elements of its objectives were reformulated in response to the rapid growth of our knowledge about postclassical Islamic intellectual history; the work, therefore, was rewritten in various incarnations to accommodate such transformations. At the moment of its inception, the field was just beginning to test the longstanding conviction that, during the postclassical period, the rationalist disciplines in Islam succumbed decisively to the onslaught of the traditionalists and literalists, to the juristic obsessions of the madrasa, the repetitions of droning commentaries, the nondiscursive epistemologies of the Sufis, and so much else. By now, such

notions have been falsified so frequently that neither the hackneyed narrative nor a report on its demise requires a restatement.³ Yet, although we have been disabused of old assumptions and have realized that our paths were misleading, the vast postclassical territory remains largely unknown. In this regard, then, I believe my proposal from a decade ago is still valid: the new narrative of postclassical rationalist disciplines in Islam must be written with an eye to three matters—the technical details of texts; theories of textual traditions, *extracted from, not grafted on*, the texts; and the contextual frameworks for the production of the texts.⁴ These three angles of research allowed the project to retain its identity despite the various shapes it donned; and they are reflected in its three parts.

Part I has two chapters. Chapter 1 introduces the *Sullam* and its author; it then charts in detail the development of commentarial writing from its initial bursts through the contemporary period. The investigation lays out how the dense networks of scholars and locations facilitated the commentarial endeavor over the course of three hundred years. It also demonstrates how the practice of commentary was deeply entrenched in pedagogical systems and institutions and how its fortunes were determined by possibilities of patronage. The chapter is divided into several parts that correspond to communities, clusters, and periods of composition, and it is interlaced with summary conclusions on the basis of a mass of historical and prosopographical details.

Chapter 2 is devoted to a general study of the structure, contents, and orientations of the *Sullam*. It briefly compares the structure of the *Sullam* to earlier logic texts, explores the content, composition, and nature of its lemmata on the basis of representative cases, offers examples of the reception of its problemata in the commentarial space, and reflects on its general thrust. The details presented in this chapter also begin to offer a theoretical glimpse into the workings of the commentarial tradition as a genre of scholarly production. In its last section, the chapter also includes an extended analysis of the key concepts of *naḥs al-amr* and *i'tibār* as they appear in the commentarial tradition of the *Sullam*. These concepts were instrumental in tackling puzzles of propositional semantics.

Part II also comprises two chapters, both of which are concerned with developing a theory of commentaries. Chapter 3 investigates commentarial practices on the basis of archives from perhaps the last rationalist public debate in India. It allows us to witness how the live dialectical session oscillated between the oral and the textual, how authorial agency was diachronically sustained, how scholarly networks perpetuated topics of debate, how the master, as hypotext, compelled the student to speak/write as hypertext, how independent verification was traditionalist, and how the past and future of commentarial traditions stood in a recursive relationship.

These ideas are confirmed and extended in chapter 4 by appeal to certain lemmata of the *Sullam* and its commentaries. A key idea developed in this chapter is that the hypertext—whether the *matn* or the *sharḥ*—was deliberately elusive and

allusive, and that it called to its future hypertexts to actualize it. This it accomplished by way of a curated economy of implicit and explicit hints. The hypotext was thus the inner word of a broader discourse that was diachronically rendered visible by the hypertext. The commentary's prime mode of being, therefore, was to be *written*, not to be read. Each text within the commentarial cycle occupied a liminal space, an actualization of its hypotexts—as *their* hypertext—and a guidance for its own writing out in *its* future hypertexts. As such, the practice of commenting was grounded in an authority vested in the past and a real authorial agency in the present. Therefore, it is properly analyzed neither in terms of traditional theories of intertextuality nor in those of the anxieties of influence.⁵

Part III, chapter 5, is a translation of the *Sullam*, along with a detailed study. The purpose of this chapter is to explain and analyze the lemmata of the *Sullam* on the basis of its own commentarial tradition. It does not aim to historicize the claims and contributions of the *Sullam* in relation to the texts that preceded it. In other words, the study gazes in the direction of the *Sullam*'s reception, and, unless guided by the commentaries themselves, it does not track the influences that led to its formation. Such comparative approaches should be facilitated for historians of Arabic logic now that the initial task of understanding the text itself has been attempted.

A final methodological note about chapters 2 to 4 is in order. In developing an understanding of commentarial writing and functions over the years, I have remained committed to the idea that theories are specific to the sample and are not universal. Insofar as they are localized *disruptions*, they reveal the shaky grounds on which our generalizing tendencies are erected. By the same token, it has been my position that theories comprise propositions that lay bare the assumptions undergirding our broad and confident historical and critical judgments about the local. For the purposes of this book, therefore, I have taken it to be the prerogative of theory to investigate the very concepts of commentaries, authorship, originality, textuality, tradition, and so on—as delivered by the sample—before questions about the sources and reception or about dynamism and stagnancy can even be meaningfully posed.⁶

I have also been keenly cognizant of the fact that most available and relevant theoretical frameworks are Eurocentric and that they reflect an interconnected intellectual history of European letters;⁷ their application to other textual traditions has often forced the inflection of the latter in artificial manners and, at times, has even been the source of textual violence. Given this position, I have been consistent and uncompromising in the methodology of *first* extracting theories of commentaries from the raw material of the texts I engaged. Such theories, therefore, are internal to the textual traditions in question. It is only in the late and mature phases of the investigation that I put my own developed theories in conversation with the existing theoretical material; for this reason, my engagement with the latter is largely embedded in the footnotes and it generally does not pervade

the main body of this book. However, as I found this approach to be beneficial to the exercise, I do invite the reader to turn to these footnotes for theoretical comparison, reflection, refinement, and deconstruction.

A BRIEF HISTORICAL INTRODUCTION

The study of Arabic logic has witnessed considerable growth in the past two decades. The course of development has also been suitable, in that the earliest investigations committed themselves to detailed technical studies, ultimately paving the way for broader narratives. Equally appropriate has been the initial focus on the classical period (ca. 200/800–600/1200), followed by the more recent investment in the postclassical period (ca. 600/1200–1300/1900). These studies and narratives are easily accessible to readers, so I will not consider them in detail here. Rather, the purpose of the remaining pages of this introduction is to write just enough to situate the *Sullam* in its proper environment and to orient the reader.⁸

The origins of the sustained study of logic in the Arabic tradition are dated to the monumental translation activity that was ushered in by the ‘Abbāsids (r. 132/750–656/1258). In the earliest phases, Arabic scholarship in the discipline was mediated by Syriac works or by the second layer of Pahlavi. However, rather swiftly—by the second half of the second/eighth century—direct attention to Aristotelian texts had overtaken this earlier trend. During the next century, the pace of translation activity quickened, so that already before the end of that century’s first half, the entire *Organon* of Aristotle was available in Arabic. The body of this work was also studied carefully, so that epitomes and overviews were also produced during this period. This activity intensified further in the second half of the third/ninth in the circle of Ḥunayn b. Ishāq (d. 260/873) and his son, Ishāq b. Ḥunayn (d. 289/910 or 911), where a number of translations were produced, often via the intermediary of Syriac. The works of these scholars, however, were not Aristotelian; indeed their proclivity toward Galen was more pronounced.

Aristotelian logic, which became the main point of reference for the classical tradition of Arabic logic, was the heritage of the fourth/tenth century. This was understood as a continuation of the commentarial practices of late antiquity, revived after a historical hiatus, by Abū Naṣr al-Fārābī (d. 339/950), whose main effort was to harmonize Aristotelian doctrine against its own internal contradictions. It was his work, mostly in the form of commentaries on the Aristotelian logical corpus, in relation to which Arabic logic developed in the century after his death. And this development—a critical reaction to Fārābīan Aristotelianism—was accomplished by Avicenna (d. 428/1037) as the logic of the East. In the ensuing centuries, Aristotelianism continued to flourish in North Africa and Iberia, while elsewhere the progress of logic in the Arabic tradition became mostly a response to Avicenna’s contributions and new syntheses that were not bound by the task of producing harmony in the Aristotelian logical corpus. It was this latter

tradition—not the North African and Iberian one—that exercised influence through most of the Islamic world, including India.

Thus Avicenna came to loom large in the tradition of Arabic logic, almost entirely replacing Aristotle as a point of contact. But the reception was not passive—just as Avicennian logic was not the logic of Aristotle or even Fārābīan Aristotelianism, so logic after Avicenna was not Avicenna's, but Avicennian. Its growth can be attributed to the dialectic with Avicenna's positions, using Avicenna's methods—not Aristotle's—but its doctrine was not imitative or repetitive. Thus the immediately following period was one of reactions and reevaluations, especially to the areas where Avicenna had introduced innovations—to his modal logic, the propositional semantics under the descriptive reading of subject terms, and hypothetical syllogisms.

In the sixth/twelfth century, the most penetrating and independent analyses of Avicenna's logic were offered by Fakhr al-Dīn al-Rāzī (d. 606/1209); after him, the most damaging disruptions to both Avicenna's and al-Rāzī's contributions came from the pen of Afḍal al-Dīn al-Khūnajī (d. 646/1248). It was the complex set of reactions to the works of both these scholars that culminated in the production of some of the most important logic books of the seventh/thirteenth century. A number of these were written by scholars who belonged to the same scholarly network: Athīr al-Dīn al-Abharī (d. between 660/1263 and 663/1265) (*Īsāghūjī*), Najm al-Dīn al-Kātibī (d. 675/1276) (*Shamsiyya*), Naṣīr al-Dīn al-Ṭūsī (d. 672/1274) (*Commentary on the Ishārāt* of Avicenna), and Sirāj al-Dīn al-Urmawī (d. 682/1283) (*Maṭāli' al-anwār*). Subsequently, it was in the institution of the madrasa—though not exclusively so—that their books were read and where most of the commentarial activity on them was sustained; in many cases, such focus on logic in the madrasa was informal, though substantial.⁹ Increasingly, the direct contact with Avicenna also dissipated owing to the proliferation of the complex commentarial traditions on these madrasa texts and the disputation culture encouraged in that setting. In the next phase, these texts themselves came to be read via gateway commentaries: for example, the *Shamsiyya*, the *Maṭāli'*, and al-Ṭūsī's commentary on the *Ishārāt* were all studied along with the commentary and arbitration of the eighth/fourteenth century scholar, Quṭb al-Dīn al-Taḥṭānī (d. 766/1365).

In the next phase of development in the eighth/fourteenth century, these texts-cum-commentaries and the sustained tradition of dialectic around them resulted in the production of further textbooks and commentaries on logic. Prime among these were written by scholars who ultimately belonged in the aforementioned network—Sa'd al-Dīn al-Taftāzānī (d. 793/1390) (*Tahdhīb al-mantiq*) and al-Sayyid al-Sharif al-Jurjānī (d. 816/1413) (*Kubrā, Ṣughrā*)—and whose influence was initially concentrated in Samarqand and Shīrāz. And it is directly out of the ninth-/fifteenth-century scholarship from the latter city that the tradition of logic in India ultimately sprang.

In India, the study of logic appears to have progressed in three phases. Until the ninth/fifteenth century, al-Taḥṭānī's commentary on the *Shamsiyya* was the most widely read text in the region. In the following stage, scholars descending from the line of Jalāl al-Dīn al-Dawānī (d. 908/1502–3) and Ghiyāth al-Dīn al-Dashtakī (d. 949/1542) popularized the study of the former's commentary on the *Tahdhīb*; the latter text was also studied via the lens provided by the commentary by 'Abdallāh al-Yazdī (d. 982/1574, 989/1581, 1015/1606, or 1050/1640—all dates have been recorded in the sources), who also belonged in the intellectual lineage of al-Dawānī.¹⁰ At around the same time, the *Maṭāli* and its commentary by al-Taḥṭānī also began to be read in India. Thus, in the tenth/sixteenth century, the commentaries on the *Shamsiyya*, *Maṭāli*, and *Tahdhīb* constituted the core of logical training in India. In the next phase, the eleventh-/seventeenth-century commentaries and glosses by a number of contemporary scholars, ultimately tracing their lineage back to Shīrāz, began to have an impact. Among these, the commentaries written by Mīr Zāhid al-Harawī (d. 1101/1689) (commentary on the *Risāla fī t-taṣawwur wa-t-taṣdīq* of al-Taḥṭānī and partial gloss on al-Jurjānī on parts of the *umūr 'amma* of the *Mawāqif* of al-Ījī) and by 'Abd al-Ḥakīm al-Siyālkūtī (d. 1067/1656 or 1657) (glosses on the *Shamsiyya* and *Maṭāli*) were quite significant. Strictly speaking, some of these texts were not in the discipline of logic, but the discussions they contained were relevant for resolving its aporiae. These were the texts and contexts in relation to which the composition, nature, and orientations of the *Sullam* must be understood. Its own pervasiveness in the subsequent period owed not a little to the rise of the so-called Nizāmī curriculum of Farangī Maḥall, which prescribed a heavy dose of logic in the training of the scholar.

From the time of the Avicennian synthesis of the fifth/eleventh century to the appearance of the *Sullam* in the eleventh/seventeenth, the contents and foci of logic works had undergone considerable transformations. The logic textbooks of the seventh/thirteenth century, for example, devoted little space to several parts of the *Organon*, such as the *Categories*, *Posterior Analytics*, *Rhetoric*, *Topics*, *Dialectics*, and *Poetics*. As noted above, these textbooks concentrated more on certain specific innovations in Avicenna, such as modals and hypothetical syllogisms. Indeed, part of the motivation for this turn may well have come ultimately from the level of attention some of these topics received in Avicenna's shorter works, such as the *Najāt* and the *Ishārāt*. For the authors of these textbooks that shaped the subsequent tradition, the purpose of logic was to arrive from known conceptions and assents to unknown conceptions and assents, generally leaving aside matters that pertained to metaphysics, utterances, and metalogical theory. Although these topics were generally relegated to just a few lines and pages within the textbooks, they did thrive independently in other Muslim disciplines, such as *ādāb al-baḥth* (methods of debate), *'ilm al-ma'ānī wa-l-bayān* (the science of rhetoric, including semantics and elucidation), and *uṣūl al-fiqh* (legal theory), where they emerged in the postclassical period in hybrid forms. For example, methods of debate involved

elements from the discipline of logic proper, legal theory, and from protojuristic and theological argumentation, and semantic and rhetoric absorbed both relevant parts of the *Organon* and the continuous tradition of poetic criticism. In many ways, the disciplines noted above could only have emerged as they did in the post-classical phase, when training in the madrasa facilitated such cross-pollination.¹¹

Further innovations in the defining seventh-/thirteenth-century textbooks are also noteworthy: necessity and perpetuity propositions were distinguished from each other, so as to yield an extended system and nomenclature of modalities; general rules for the productivity of syllogisms were highlighted; implication rules among modalities of various strengths were articulated; rules of contradictory conversion were challenged; the fourth figure of the syllogism was accepted; and because the subject terms of propositions must pick out their substrates actually, various conversion rules, and in turn, certain modally mixed syllogisms were reassessed. These topics were all related to propositional semantics and syllogistics.

This trend began to change, starting with the aforementioned commentaries of the eighth/fourteenth century. One begins to observe, for example, that a number of these works paid greater attention to theological elements, semiotics, and semantics than their base texts. In many cases, these discussions were tied to more specific issues of logic and often served to bring attention to particular philosophical and logical points that interested the commentator. Further, although the commentaries did engage those aforementioned elements of Avicennian innovation that had elicited focused responses from the seventh-/thirteenth-century logic textbooks, their emphasis began to shift to other topics. Generally, the commentaries were more invested in the conception-assent division, the nature of knowledge, the circularity of proofs, the ontological status of universals, the semantics of the subject terms of propositions, and the nature of predication. Conversion and contradiction rules and the productivity and sterility of syllogisms were more briefly discussed and were often reduced to handy rules. Beyond the commentaries on the textbooks, specific issues and difficulties posed by the neglected parts were sometimes discussed in briefer treatises: one occasionally finds, for example, such shorter works devoted to modal propositions, syllogisms, and the fourth figure from no later than the late tenth/sixteenth century.

The aforementioned commentarial trends crystallized rather quickly, as can be evinced in the superglosses of al-Jurjānī on the *Shamsiyya* and *Maṭāliʿ*. The same is true for the partial later commentary by al-Dawānī on the *Tahdhīb* that was subjected to supercommentarial attention: normally, supercommentaries on this work in India, for example, did not proceed beyond the section on the five universals. Given the importance of these commentaries as gateways to their hypotexts, their subsequent commentarial traditions also generally restricted themselves to the topics that had attracted their attention.

Such developments, however, only point to shifting emphases within a living dialectical tradition; they did not dictate exclusivity. In India, for example,

al-Jurjānī's commentaries on al-Taḥṭānī on the *Shamsiyya* and *Maṭāli*⁶ did not impose restrictions that could not be breached. In both cases, the Indian scholars also studied the entirety of al-Taḥṭānī directly. Al-Taḥṭānī on the *Shamsiyya* continues to be part of the curriculum in various *madāris* in contemporary South Asia, and commentaries on the entirety of the text, along with complete Urdu translations, have been published throughout the fourteenth/twentieth century. Similarly, although the commentary by al-Dawānī, along with its supercommentary by al-Harawī, on the *Tahdhīb* was a rather important text in the Indian curriculum, it also included the complete commentary by 'Abdallāh al-Yazdī. It is such complexities that explain the structure and the proportionality in the treatment of various subjects in the *Sullam* and the variations in its commentarial tradition. These matters will be discussed briefly in chapter 2 below.