

# The *Ladder of the Sciences*

## *Contents and Orientations*

Sobre la sombra que yo soy gravita  
la carga del pasado. Es infinita.

—JORGE LUIS BORGES, “TODOS NUESTROS AYERES”

This chapter offers a general introduction to the structure and contents of the *Sullam* and parts of its commentarial tradition. Although it is not my concern per se to habilitate the *Sullam* tradition within a preceding history, I will resort to a comparative approach that will shed light on some aspects of its prehistory.

In the first section of this chapter, I will briefly comment on the structure of the *Sullam* in relation to three textbooks on logic that held considerable sway in India. This exercise will give us a sense of the continuities and transformations to logic studies that the *Sullam* aspired to facilitate. In the second section, I will offer a broad citation analysis of the text and determine to which authorities the *Sullam* implicitly and explicitly refers. In general terms, the details presented in this section will allow us to situate the specific contents of the lemmata within the framework of the text. In the third section, I will analyze how the *Sullam* and its commentarial tradition advanced their positions by crafting lemmata from a combination of their personal expressions and embedded quotations from earlier texts. The hypotext and hypertexts were diachronic modulations of a historically continuous voice, such that, even within the space of disciplinary advancements, the lemmata were patchworks of the old and the new. In the fourth section, I will offer a representative example of the commentarial reception of a problema discussed in the *Sullam*. As a logic textbook, the *Sullam* covered a broad set of topics, ranging from semantic theory and semiotics to propositions and syllogistics. Nevertheless, its investment in the discipline appears to be driven by an identifiable set of concerns; its attempts at finding solutions to the latter point to a general orientation and project of the text. This is the subject of the fifth section of this chapter.

THE STRUCTURE OF THE *SULLAM*

Before the publication of the *Sullam*, the three most widely read logic textbooks in India were the *Shamsiyya* of al-Kātibī (d. 675/1276),<sup>1</sup> the *Tahdhīb* of al-Taftāzānī (d. 793/1390),<sup>2</sup> and the *Maṭāli* ' of al-Urmawī (d. 682/1283).<sup>3</sup> The first was read via the lens of al-Taḥṭānī (d. 766/1365) and al-Jurjānī (d. 816/1413) on al-Taḥṭānī;<sup>4</sup> the second via that of ' Abdallāh Yazdī,<sup>5</sup> al-Dawānī (d. 908/1502–3), and al-Harawī (1101/1689) on al-Dawānī; and the third via that of al-Taḥṭānī. It is on the commentaries of these three works that the Indian logicians wrote supercommentaries—often in the context of the madrasa.<sup>6</sup>

Other important textbooks included in the logic curriculum were the *Risāla fi t-taṣawwur wa-t-taṣdīq* of al-Taḥṭānī, read via the commentary of al-Harawī. Although this work is concerned primarily with the nature of knowledge and is not a complete logic textbook, it was included in the logic curriculum, because its subject matter overlaps with the opening sections of the aforementioned logic textbooks. It was also the logic text that received the greatest number of commentaries and supercommentaries—especially via the commentary of al-Harawī—after the *Sullam*.<sup>7</sup> Another logic text was the *Mizān al-manṭiq*, engaged through the intermediary of its commentary, the *Badī ' al- mizān* of ' Abdallāh al-Tulanbī (922/1516–17).<sup>8</sup> Shorter logic works included a commentary on al-Abhari's (d. 660–663/1263–65)<sup>9</sup> *Īsāghūjī*, attributed in India to al-Jurjānī, as well as the latter's *Ṣuḡhrā* and *Kubrā*.<sup>10</sup> These works also attracted Indian supercommentaries. The sources and manuscript witnesses also suggest familiarity with the *Shifā* ' of Avicenna,<sup>11</sup> but commentarial attention to the logic of this work is virtually nonexistent and its citation usually occurs via the intermediary of other texts.

As the logic textbooks that were most familiar to Indian scholars were the *Shamsiyya*, *Maṭāli* ' , and *Tahdhīb*, it should not be surprising, especially in the context of madrasa training, that the *Sullam*'s structure maps onto them rather well. Indeed, it is not only the arrangement of the *Sullam* but also the space expended on each topic that is proportionately identical to that of the three earlier textbooks.<sup>12</sup> For example, all four works devote extended discussions to sections on modals, conditionals, contradiction and conversion rules, modal syllogisms, and conditional syllogisms.<sup>13</sup> There are, however, a few differences as well. In terms of structure, the discussion of the contradictories of universals is delayed in the *Shamsiyya* until after the logical, natural, and mental universals have been mentioned; on the other hand, the five universals are discussed at great length in the *Maṭāli* '—significantly more than in any of the other three textbooks—but only after the logical, natural, and mental universals. In contrast to the *Shamsiyya* and the *Maṭāli* ' , the structure and topical foci of the *Tahdhīb* map onto those of the *Sullam* precisely. And this makes eminent sense, as the *Tahdhīb* was the most widely studied textbook on logic in the period immediately before the publication

of the *Sullam*. Its growth may be explained partly by the fact that its most famous commentary—by al-Dawānī—reverted back to the intellectual lineage of Shīrāz that was shared by Farangī Maḥall and partly by the later legacy of al-Harāwī in India. Indeed, after the *Sullam*, the complete logic textbook to garner the most commentarial attention in India was the *Tahdhīb*, either via the vantage point of al-Dawānī or al-Harawī; manuscript evidence also bears witness to its wide circulation.<sup>14</sup>

Now, what is rather intriguing about the *Sullam* is that, within the familiar terrain of these aforementioned textbooks, it encapsulated the earlier tradition in two distinct manners, so as to drive the hypertextual writing practices on itself. First, generally speaking, the *Sullam* embraced key dialectical histories—often from the commentaries on the logic texts the Indian tradition engaged—within its lemmata; and it implicitly indicated these histories by means of allusive gestures in the course of establishing its own stance. And second, it patched together verbatim quotations from other texts to produce its own lemmata and positions, forcing the hypertexts into textual archaeologies that became sites of further dialectics. In other words, brief and traditionally grounded as it was, the *Sullam* was deceptively heavy-laden, and its contribution as an original text was borne out as a patchwork of the past. The text was, therefore, a prompt that agitated the future hypertext. Examples from each of the two cases above might suffice as explanations.

#### DIALECTICS

For the first case—namely, of allusive dialectical histories within the recognizable structure of the *Sullam*—one may turn to the section on propositions. Here al-Bihārī writes,

[The complete compound utterance is called] a statement and a proposition if a report about something actual is intended by it. And so it is necessarily described by truth and falsity.<sup>15</sup>

The basic position al-Bihārī is promoting is a familiar one: a complete compound utterance, one with respect to which no further information is required for it to be meaningful, is a statement if it reports about what is actual and if, in view of the latter, it is susceptible to being true or false. This definition is also asserted by the *Tahdhīb*: “A proposition is a statement that is susceptible to truth and falsity.”<sup>16</sup> The same position is expressed by the *Shamsiyya*: “A proposition is a statement about whose speaker it is suitable to say that he is truthful or a liar with respect to it.”<sup>17</sup> Likewise, one finds the following in the *Maṭāli*: “As for compound [utterance] . . . if it supplies to the listener a meaning [on hearing which] he may retain silence [because the meaning is complete] and if it is capable of being true or false, it is called a proposition and a sentence.”<sup>18</sup>

Thus, an essential aspect of a proposition is its truth aptness. At this juncture, al-Bihārī introduces a conundrum that does not appear in any of these aforementioned predecessor texts. He states,

One [may] say that “This speech of mine is false” is not a statement because a report [that reports] about itself is nonsensical. The truth is that, [when this statement] is taken, along with all its parts, on the side of the subject term, then the relation [within the subject term] is considered in a compressed form [*malḥūza ijmālan*], so that [the relation] is that about which there is a report. And insofar [as the matter] pertains to generating [a statement] by means of [the relation,] the latter is considered in an expressed form [*malḥūza tafṣīlan*]; so it is a report [about its own self]. So the difficulty is resolved in all its manifestations.<sup>19</sup>

This is of course a discussion of the famous Liar Paradox, and its aim is to resolve the difficulty that the assumption of its truth entails its falsity and vice versa. For if “This statement of mine is false,” is true, then it falls within the set of statements that are true; and this, in turn, means that it is indeed true that it is false. Alternatively, if the statement is false, it falls within the category of false statements; this entails that its assertion of being false is false, so that it is true. Al-Bihārī’s motivation for including this discussion at this juncture rests not on the hypotexts that are his models but on their commentarial history. In fact, as I will briefly outline below, his resolution is guided by one of them and targets another, serving as a prompt that thrusts his hypertexts into a dialectical space.<sup>20</sup>

The argument that al-Bihārī offers above is predicated on the key distinction between a compressed (*mujmal*) and expressed (*mufaṣṣal*) proposition. In the former case, the whole proposition itself is taken as a subject of another proposition, so that its truth-value is determined with a view to whether the assertion of the relation between the propositional subject and predicate “false” accurately captures the state of affairs. Since it is being claimed that a given false statement is false, the proposition is true; it reports truthfully about that regarding which it is a report. In the latter case, the assertion of the predicate “false” generates the statement, “This statement is false.” In this case, the assertion produces the very statement about which it reports. As such, it is a report about its very self.

Put differently, the solution being offered may be summarized as follows. A compressed reading of the proposition takes  $p$  as the subject “ $p$  is false,” and the expressed reading takes  $p$  as  $p$  is false. In the former case, the relation, subject, and predicate are all parts of the subject “ $p$ ,” so that the report is about the relation compressed within the subject term “ $p$ .” The report is asserting the predicate “false” of “ $p$ ,” and this is a truthful reporting of the state of affairs. In the latter case, “falsity” is being predicated of  $p$  and a statement,  $p$  itself, is generated by means of the relation between the two. However, in this case, the report is nothing other than the relation that it itself generated; hence, it is a report about its own self. The compressed consideration allows for the paradox to be avoided; the expressed form does not.<sup>21</sup>

One can easily determine why this discussion has found its way within a traditionally recognizable lemma on the claim that statements, by definition, are truth-apt. Surely, since the statement, “This statement is false,” is a report, it must be either true or false. Yet, as the argument makes plain, a statement of this sort results in a paradox where the truth-value oscillates perpetually. The Liar Paradox, therefore, constitutes a challenge to the standard claim that statements are truth-apt. In al-Bihārī’s solution, two elements are noteworthy. First, the solution appeals to the distinction between compressed and expressed considerations of statements; and second, it begins with an implicit rejection of the possibility that the statement in question is not a statement at all, since it is self-referential.

Let me take up the first matter. If we turn to the same section in al-Taḥṭānī’s commentary on the *Shamsiyya*, we find an engaging discussion about the hypotext’s assertion that a proposition is predicative—not conditional—if its two extremes resolve into simple utterances.<sup>22</sup> For example, “Man is an animal” is predicative because, when the copula is removed, one is left with two simple utterances—“man” and “animal.” On the other hand, when the proposition, “If the sun rises, morning would exist” is resolved, the two extremes would be compound utterances—“The sun rises” and “The morning exists.” Al-Taḥṭānī points out that this way of distinguishing the two types of statements is not sufficiently accurate. For example, one may have a predicative statement—“Every rational animal moves by putting one foot before the other”—that does not resolve into two simple utterances. Worse, one could even make statements about statements: “The contradictory of ‘Zayd is knowledgeable’ is ‘Zayd is not knowledgeable’” and “‘Morning exists’ is entailed by ‘The sun rises’” are examples.<sup>23</sup> Both these latter statements resolve into two other compound statements; yet both are predicative. Thus, a key element in the definition of predicative statements—namely, that they resolve into simple utterances—is violated. Al-Taḥṭānī offers the following response:

By a simple utterance is meant either that which is simple in actuality or in potentiality. The latter is that which may be expressed by means of a simple utterance. In the aforementioned propositions, although the extremes are not simple utterances in actuality, they may be expressed by means of simple utterances. The least of these would be for one to say, “This is that” and “This is this” . . . This is not the case with conditionals. For their extremes cannot be expressed by means of simple utterances. For in them, one cannot say, “This proposition is that proposition” . . .<sup>24</sup>

Al-Taḥṭānī’s account thus veers toward the resolution of compound utterances into simple ones. In other words, “‘Morning exists’ is entailed by ‘The sun rises’” is a predicative proposition because its extremes are potentially, “This proposition” and “That proposition,” which can be expressed as “This proposition is entailed by that proposition.” Any proposition whose extremes may be expressed in this manner and may be brought in a relation is predicative. In this context, al-Taḥṭānī’s commentator, al-Jurjānī, explains the notion of the potential resolution of compound utterances to simple ones in the following manner:

When [a relation in a proposition] is considered in a compressed form [*malḥūza ijmalān*], [this proposition] is also predicative . . . When [the relation] is considered as expressed [*malḥūza tafṣīlan*], the proposition is a conditional . . . Thus it is apparent that the extremes of the predicative [proposition] are either simple [utterances] in actuality or in potentiality . . . Likewise, that which consists of a predicative relation is among such [propositions] in whose place a simple [utterance] may be posited when [the predicative relation] is considered as compressed.<sup>25</sup>

Therefore, the kernel of the argument is that two types of considerations may be advanced in relation to propositions—the relation between their extremes may be taken to be expressed or compressed. In the latter case, one may simply replace the predicative proposition with a simple utterance; as such, it would be the subject of a proposition and that about which something is reported. This argument is further elaborated by al-Siyālkūtī in his commentary on al-Jurjānī. I render it here, since this work was also an important point of contact with the *Shamsiyya* in the Indian milieu:

His statement, “[The relation between the subject and predicate] is considered as compressed” means that one does not intend to turn to the relation, but to the totality [of the proposition] insofar as the totality is also predicative, given that judgment [in a proposition] may be taken with respect to the unity [of the subject and the predicate]. His statement, “[The relation] is considered as expressed” means that one does intend to turn to the relation—this requires taking the two extremes into consideration as expressed—so that the judgment may not be taken with respect to the unity [of the subject and the predicate].<sup>26</sup>

Although the point of issue in this context is not the Liar Paradox—rather, it is a definition of predicative and conditional propositions that would sufficiently distinguish one from the other—the solution offered here turns on the same distinction as one finds in al-Bihārī’s *Sullam*. For we recall that, in the latter case, the same notions and expressions were deployed to overcome the conundrum: the Liar statement is not problematic if we take the statement, on the one hand, in a compressed form—that is to say, as that about which something is reported—and, on the other, in an expressed form, as that which reports. The two considerations accomplish two related tasks. First, that about which something is reported is under a different consideration than that which reports; they are not one and the same. And second, that which is false (the compressed) is under a different consideration than that which is true (the expressed). It is this latter that is either self-referential or what oscillates between truth and falsity.

We recall, however, that al-Bihārī also implicitly rejected another solution to the conundrum—namely, that the paradox is actually unproblematic since the Liar statement is self-referential, so that it is nonsensical. The distinctions between the compressed and expressed forms are meant to overcome this problem of self-reference.<sup>27</sup> Here again, the history of al-Bihārī’s lemma stretches back into the commentarial tradition. In the same section in his commentary on the *Tahdhīb*,

al-Dawānī explains that by the truth-aptness of propositions, al-Taftāzānī means that the intellect allows either truth or falsity to apply to propositions simply by virtue of what they mean, without regard to what is actual. In other words, propositions whose truth cannot be granted by the intellect and those whose falsity cannot be accepted are still propositions because their mere sense allows for this possibility, even if in fact this possibility does not actualize. This reduces to the position that the truth-aptness of propositions relates to the possibility of the presence or absence of a correspondence between that which the proposition reports and that about which it is a report. He then writes,

An equivalent scenario is that, when a sketcher embarks upon sketching a picture, such that it is a report [*ḥikāya*] about Zayd, one may level an objection against him that it lacks correspondence [with Zayd]. And if he undertakes the mere task of sketching without the claim that it is a sketch of a certain thing, then no error can befall him at all. For every sketch is a sketch with respect to its given self [*fī ḥaddi dhātihi*]. From this detail, perhaps you would understand that someone's statement, "This statement of mine is true," which refers to this very speech, is not a statement at all, even though it has the form of a statement. This is so because a report requires a distinction between itself and that about which it is a report. And this is lacking in this case.<sup>28</sup>

Al-Dawānī further explains that, if the sketcher were to begin to draw a sketch, claiming that it is a sketch of the very sketch being drawn (*'alā annahā ḥikāya 'an nafsihā*), then such a sketch would not be susceptible to error. It would only correspond with itself, thereby vitiating the mere possibility of a lack of correspondence by virtue of its very self. As such, since it lacks the mere possibility both of being true and false, it is not a report.<sup>29</sup> The *Sitz im Leben* of al-Bihārī's insertion of the Liar Paradox at this juncture, his cryptic rejection of the solution by appeal to self-reference, and the ultimate inspiration of his own solution are now apparent. The content and structural position of the lemma of the *Sullam* are practically identical to those of the *Shamsiyya* and the *Tahdhīb*; its appeal to the Liar Paradox at this locus is meant to engage a challenge to the definition of propositions as truth-apt; its initial dismissal of the solution by appeal to self-reference—that the Liar statement is self-referential and, therefore, nonsensical and unproblematic—is an allusion to al-Dawānī's discussion of self-reference in the same section; and his solution in view of the difference between the compressed and expressed considerations of proposition ultimately reverts to the commentaries on the *Shamsiyya*. Put differently, even as the lemmata of the *Sullam* fit within recognizable molds, they complicated traditional positions within the ambit of an apparently simple curricular hypertext that belied complexity; and they accomplished this task by means of brief, yet loaded, engagements with earlier commentarial concerns and disputes. For its own hypertexts, these lemmata served as sites and prompts for continued dialectic, often compelling the authors to engage in excavating the textual pre-history of the *Sullam*.

One may mention examples of the reception of this lemma and how, without being explicit, it guided the hypertexts. For example, in engaging the next statement of the *Sullam*—namely, that the Liar Paradox is like the statement, “Every praise belongs to God”—Mubīn writes,

Our statement, “Every praise” belongs in the totality of all praise [*kullu ḥamdin min jumlati kulli ḥamdin*]. This is so because it is also a praise. So it is an instance of itself. Thus, the report in it is the very thing about which there is a report. As such, it becomes like “This statement of mine is false” in that the report and that about which it is a report are one and the same. So, in [bringing this case forward,] the author indicated [*ashāra ilā*] the error of what the Verifier [al-Dawānī] said—namely, that there is no doubt in this [statement’s] being a truth apt-statement (*khābar*)—although there is no report in this case; otherwise, it would follow that there would be a report about its very self, which is nonsensical. Thus, there is no way out of this [conundrum] except by appeal to [a statement’s] being compressed and expressed. So this statement [of the *Sullam*] aids in [determining] that “This statement of mine is false” is a truth-apt statement. The difference between [the report and that about which it is a report] is by appeal to their being compressed and expressed.<sup>30</sup>

It is in a rather subtle manner that this section on propositions reveals itself as a dialectical space. By means of their textual archaeology, the commentators had come to realize that the target was al-Dawānī’s commentary on the *Tahdhīb*. They also came to understand that the latter had granted that “Every praise belongs to God” may be a statement, and that it was, nevertheless, self-referential and therefore also nonsensical.<sup>31</sup> Thus, if al-Dawānī were to remain committed to his position on the latter statement, he had no choice but to accept the *Sullam*’s solution. For his own solution could be used to compromise a position that he was known to hold.<sup>32</sup> Having laid out the details of this final turn of the argument against al-Dawānī, one that forces a concession by virtue of a position he would hold, Mubīn comes to his defense. He explains that if the praise expressed in, “Every praise belongs to God” includes the very praise itself, then it is indeed nonsensical. However, if it includes praises other than this very one, then it is a report. What is required, then, is a distinction between a report and that about which it is a report; and this is precisely what the *Sullam*’s distinction between the compressed and expressed reports was attempting to deliver.<sup>33</sup>

The archeology of the text also explains why al-Bihārī offered this specific solution. As we observed in the quotations above, one of al-Dawānī’s main concerns was with self-reference—a report and that about which it reports must be two distinct things;<sup>34</sup> otherwise, the report would be nonsensical. Alternatively, as we observed in the analogy he offered, such an utterance is not a report, because its mere sense does not allow for the possibility both of its truth and falsity. And this is precisely what the *Sullam*’s solution tried to deliver by appeal to the distinction between compressed and expressed statements. The former are those about which something is reported, whereas the latter are the reports themselves.<sup>35</sup> As

I have stated elsewhere, the lemma was a prompt for a dialectical engagement in the future hypertext, containing within itself determined and compact stances in relation to earlier commentarial traditions.<sup>36</sup> But I will elaborate on this theory and its mechanics in the next two chapters.

The foregoing lemma—like many other similar ones—brought the hypertext back to a textual past. It did so by reviving a debate with an implicit rival, whose identity and text were unfolded by the hypertextual activity. In crafting its solution, the hypotext also ultimately and creatively relied on comparable lemmata in earlier madrasa texts. But the solution the hypotext offered also galvanized the field. A number of commentaries on this lemma of the *Sullam* analyzed its solution, and in so doing, they also began to introduce further distinctions in the debate, some on the basis of further textual excavations and others of their own effort. Let me give examples from two of the earliest commentaries on this lemma.

In his commentary, al-Sā'inpūrī lays out three different ways in which “This speech” in “This speech of mine is false” may be understood.<sup>37</sup> It may refer to the utterance itself or to its meaning or to its instance. In the first two cases, if it is false that “This speech of mine is false,” then “This speech of mine is true” would be true only if the two were reports. As they are not, the predicate of falsity is parsed as a denial of its status as an utterance; or to say that it is false is to deny that its meaning is true. The problem of the Liar, then, rests squarely on the third interpretation—namely, that the predicate “false” applies to the instances of “This speech.” In this case, what one is asserting is that the truth-apt statement, “This statement is false,” is false. The affirmation of falsity, therefore, must be false. As a result, the contradictory, “This statement is true,” must be true. However, since this truth is on the assumption of falsity, it results in the aforementioned paradox. Like al-Bihārī, al-Sā'inpūrī now alerts the reader that what produces the paradox is not the compressed reading of the proposition but the expressed, where the predicate and its relation to the subject are affirmed. And he points out that the distinction between the compressed and expressed interpretations overcomes the difficulty that the report and that about which it is a report must be distinct. This is simply because it is the compressed report that is reported about and the expressed report that is actually the report.

The two related gains outlined above—namely, that the paradox is the result of two different readings of propositions and that the two different readings introduce the necessary distinctions between a report and that about which it is a report—are simply an elaboration of al-Bihārī's lemma. But the author also explains the argument by means of the following parallel case mentioned in a number of other sources. Let us imagine that one states on Thursday that “My statement on Friday is true” and that, on Friday, he states that “My statement on Thursday was false”; and let us also grant that no other statements were issued on these two days. Thus, on the assumption of the truth of the statement on Friday, the statement on Thursday would be false; and its falsity, in turn, would mean that the statement on Friday was false. This means that on the assumption of the truth of the statement on Friday, its own falsity is asserted.

Al-Sā'inpūrī points out that this conundrum may be overcome if we realize that the truth exists for the instance—the only instance—of the subject of the Friday statement, namely, “My statement on Thursday was false.” In this regard, what the statement really asserts is “My statement on Thursday was false’ is true” in the sense that its falsity corresponds to a given state of affairs. This state of affairs is the claim on Thursday that the statement on Friday is true. In other words, on Thursday, the speaker posited an instance for the subject tag “My statement on Friday” such that it would be qualified by the attribute of truth. And this statement on Friday, “My statement on Thursday was false” is true in the sense that it corresponds to the *given and actual posit* on Thursday. The thing about which the report exists, therefore, is the actual posit—an instance, *given as such*—and it is said to be true in the sense that it corresponds to the posit. This is precisely what the distinction between the compressed and expressed readings delivers. In this regard, al-Sā'inpūrī alerts the reader to another important underlying aspect of the solution, namely, that it is operative under the *ḥaqīqī*, not the *khārijī*, parsing of the proposition.<sup>38</sup> The former is such as to allow the mind to posit an instance determined by it with certain qualifications under a tag and for the predicate to apply to it—as such a given—with respect to what is actually the case. He writes, “If the instances of the possible were to exist and were described by this tag, then on the determination of their existence, they would be described by falsity.” Put differently, if the instances of “This statement on Friday” were determined mentally to exist as true on Thursday and were described by the tag “This statement on Friday” then, *in view of this given state of affairs*, these instances would be true by virtue of their correspondence with the given claim on Thursday.

Having introduced these distinctions in the discourse, al-Sā'inpūrī now lays out a potential problem. Truth and falsity, he asserts, are attributes of a relation that reports something;<sup>39</sup> so they must be posterior to such a relation. Therefore, if either of them is made a predicate, it must *precede* the relation. He claims, however, that this challenge is not effective in the case at hand. Although he does not elaborate on the reasons, it is obvious that the refutation would fall by the wayside, since the claims of truth or falsity in the given compressed forms of the report are simply mentally posited qualities, not attributes that relate to correspondence with the extramental; and the same claims in the expressed form are indeed posterior to the correspondence between the thing about which the report exists and the given state of affairs. As such, they are not predicates. Nevertheless, the criterion of posteriority is retained in view of two abiding challenges that continued to be reconsidered in other commentaries—the report must be posterior to that about which it is a report; and the report and that about which it is a report must be distinct from each other.<sup>40</sup>

As we will observe below, the approach al-Sā'inpūrī adopted in his elaboration of the *Sullam's* solution—namely, that the subject of the proposition may be conceptualized in a certain sense and that truth and falsity may be determined in view of this given conceptualization with respect to the actual state of affairs—was one of its major leitmotifs. A fundamentally important aspect in deploying this

move was to recognize that a particular consideration could be taken, in virtue of its very self, as an actual state of affairs, such that propositional claims about it, with respect to itself, would also be true or false with respect to the actual. This is precisely the point made by al-Sā'inpūrī in his recognition that the proposition was unproblematic if parsed as *ḥaqīqī*. This perspective was not granted by all the commentators, so that the solution offered above, along with its underlying machinery, fell on several deaf ears.

We may take another early commentator, Fīrūz, as a representative case. He begins his commentary on this lemma by pointing out that al-Dawānī had resolved the paradox by demonstrating that the sentence at hand is not a report, because there is no distinction between it and that about which it is a report. The gist of the matter, he explains, is that a report is the very sense of the proposition, and that about which it is a report is its verifying criterion. Thus, if the two were one and the same, there would be no possibility for a report, in virtue of its sense, to be either true or false. Since it is self-referential, it would only be true. Given this, the following elements must hold. (1) The criterion of verification—that about which there is a report—must also precede the report; it must exist independently of the report. (2) The relation between the subject and the predicate must be valid only in the report, not in that about which it is a report. And finally, (3) the distinction between the two must be with respect to their very selves (*bi-dh-dhāt*), not in virtue of some consideration (*bi-l-i'tibār*). The crux of the challenge lay in the third condition, for if it is granted that a distinction on the basis of consideration is sufficiently satisfactory, then one may posit a report with certain mentally determined qualifications. Such an object would both precede the report about it and would also itself be considered a report.

Thus, elaborating on this lemma, Fīrūz writes,

[The lemma] may be rendered as follows. A proposition is of two types. It is compressed—the collection [of the parts of the proposition] insofar as they are compressed; here, the relation is not made a tie between the subject and the predicate. Or it is expressed—the collection [of the parts] insofar as they are expressed; here, the relation is made a tie between them. The first is independent with respect to its sense and the second is not independent with respect to it. Between the two of them there is a unity in virtue of themselves and a distinction in virtue of mental consideration—namely, the observation of the fact of being compressed and expressed. In the case at hand, that about which the judgment is passed is the collection, “This statement of mine is false,” with a view to the first type of consideration; as such, it is that about which there is a report. And the report is with a view to the second type of consideration. *The mentally considered distinction between [that about which there is a report] and the report is sufficient.* Al-Dawānī's statement that “the distinction between the report and that about which it is a report is by virtue of themselves” is an oversight. However, do you not see that our statement, “Every praise belongs to God” is among the totality of all praise. Thus, if the distinction between the two of them had to be in virtue of their very selves, this statement would not be correct. Thus, it is now known that [the distinction in virtue of their very selves] is not necessary.<sup>41</sup>

Firūz thus understands that a mental consideration does not produce an object, which, so posited and given, may be evaluated in virtue of its given self. Rather, the fact of consideration remains perspectival. Therefore, he understands al-Bihārī to be arguing that, since “Every praise belongs to God” is of the same self-referential nature, with no distinction between the report and that about which it is a report, and since such a report is not nonsensical, the distinction between the two in virtue of mental consideration must be sufficient. He concludes the discussion in the following manner:

The gist of what the Verifier al-Dawānī says in his solution to this paradox is that this speech is precluded from being a report . . . For one of two things must obtain for it to be so. Either a real distinction between the report and that about which it is a report must exist in this case or a distinction in virtue of mental consideration must be sufficient. Yet neither of these things is established by what he mentions. This is owing to the limits of his reflection.<sup>42</sup>

The former possibility, as we noted, was not entertained by Firūz; he accepted the latter, but it was dismissed by others as they undercut al-Bihārī’s effort to force a concession in view of the statement, “Every praise belongs to God.” We recall that the latter statement was not granted as a parallel case by al-Sā’ inpūrī, who took the mental posit of the subject term in virtue of its very given self.

#### EMBEDDED TEXTS

In many other cases, the dialectic of the *Sullam*’s lemmata was also provoked by the verbatim incorporation of earlier texts. These lemmata constituted new forms of arguments out of a patchwork of expressions, some al-Bihārī’s and some belonging to his predecessors. The same mode of writing was also used by his commentators, including, as we observed above, in cases where a commentary was compounded of others. Here I offer one example of this pervasive phenomenon.<sup>43</sup>

In the section on the subject terms of propositions, al-Bihārī writes,

[In the proposition “Every *J* is *A*” by *J* we do not mean that whose reality is *J*. Nor [do we mean] that which is described by it. Rather, [we mean] something more general than these two [senses]. [We mean] those individual instances of which *J* is true. These individual instances may be real, such as the particular instances or species instances. Or they may be [instances] that are [a product of mental] consideration, such as animal-genus. For [the latter] is more specific than animal simpliciter. However, customary usage takes [only] the first type [noted above] as relevant.<sup>44</sup>

The history of the growth of this lemma is rather tortuous, so that for the purposes of this section, I will only outline a simple path that is sufficient to undergird my general claims. To begin then: al-Bihārī is arguing for a bipartite interpretive division of the subject term of any proposition. When one states that every *J* is *A*, the *J* is not limited to being a term like “man” that picks out the reality of that which falls under it (John, William, etc.); nor is *J* limited to being a term like “white” that stands as a description of that which falls under it (swans, the Taj Mahal, etc.).

Rather, encompassing both these possibilities, it simply stands for that of which it is true. Now *J* may be said truly of two types of substrates—the real and the considered. It is this division that became the grist of the commentarial mill that ultimately revealed the structural features of the *Sullam*'s lemma.

Take, for example, Mubārak, who writes:

Among particulars, that of which [*J*] is true may be real [*ḥaqīqiyya*]. They are those [cases] whose specific [nature] [*khuṣūṣiyya*] is owing neither to a kind of mere consideration of the intellect nor to the fact of its observation [*mulāḥaza*], such as species and individuals [*anwā' wa-ashkhāṣ*]. And they [i.e., the particulars] may be owing to consideration [*i'tibāriyya*]. These are those whose specific [natures] are owing only to the consideration [of the intellect], such as the animal-genus. [This is so] since it is taken with respect to [a consideration of its] generality [*min ḥaythu l-'umūm*], such that the mode of [consideration] [*al-ḥaythiyya*] brings to the foreground the absoluteness [of the substrate] [*bi-an yakūna al-ḥaythiyya bayānan li-l-iqlāq*]. [The consideration of the mode] does not [serve] as an act of supplying a restriction of generality and absoluteness [*lā taqyīdan bi-l-'umūm wa-l-iqlāq*]. So [animal-genus] is more specific [*akhaṣṣ*] than animal insofar as it is animal.<sup>45</sup>

Thus, the only difference between the two types of substrates, as granted by Mubārak, is that the specific aspect or nature of the former (i.e., the *ḥaqīqī*) that stands in focus is not owing to the observation of the intellect. On the other hand, in the latter type of substrate, the specific aspect or nature is brought to the fore entirely owing to the consideration of the intellect. However, this latter consideration does not restrict the substrate; it merely brings into relief its absolute nature under the fact of its mental consideration. Put differently, when “animal” is considered with respect to the fact of its being a genus, then it is taken as a mentally considered (*i'tibārī*) substrate. The consideration as a genus is not a qualification added onto “animal” that specifies it as a kind of limitation on a general type; it is merely a consideration of “animal” *insofar as* it is a genus. The upshot is that both substrates (animal and animal-genus) can be said to have some specific aspect or nature (*khuṣūṣiyya*), although, again, it is only in the case of the animal-genus that a certain aspect is *highlighted* and made relevant owing to mental consideration. In principle, both types may be suitable as propositional subjects.

In addition to the substance of the argument, certain *terms* are also important to bear in mind: Mubārak has appealed to the notions of *khuṣūṣiyya*, *taqyīd*, and *mulāḥaza* as central to his commentarial exercise. These notions are introduced and deployed by his commentary with as little fanfare and exposition as the statements of the *Sullam* itself. This gives the reader the impression of a kind of completeness in both layers: brief as it is, the hypotext presents a statement that would elicit no protest of incompleteness from its reader; and it is only with the arrival of the hypertext that the former is opened up in a rather casual manner, such that, in *relation* to the latter, the former *now* begins to appear incomplete. From this

point on, the hypotext could no longer be read *without* the hypertext. In turn, features of Mubārak's own lemma were subsumed in the voice of his contemporary, Ḥamdallāh. It is in this commentary that allusive textual retrojection began to take shape, giving speed to the rehabilitation of the lemma of the *Sullam* within its true discursive space. Ḥamdallāh writes:

Let it be known that that which is more specific with respect to reality, I mean, the opposite [*muqābil*] of that which is more specific with respect to consideration, divides into [1] an instance that may be restricted by that which is real [*al-ḥaqīqī wa-l-ḥaqq*] and [2] that which may be called an instance [determined by] consideration [*al-fard al-i'tibārī*]. Thus, if a nature is taken *along with* a certain restriction [*idhā ukhidhat ma'a qaydīn mā*], that which is [so] taken would be an instance [*fard*] of [that] nature. And if [a nature] is observed as related to a certain restriction [*idhā lūhizat muḍāfatan ilā qaydīn mā*], such that the restriction is external [to the nature] and the act of restricting, insofar as it is an act of restricting, is included [in the consideration of the nature, the nature, so taken,] [*wa-t-taqyid min ḥaythu huwa taqyid dākhilan*] would be a part [*ḥiṣṣa*] of [the nature]. So the part would be [a distinct] nature. The difference is owing to the kind of consideration [*al-farq bi-naḥwin mina l-i'tibār*]. However, this kind of consideration is distinct from the *consideration that is under examination* in the case of the specificity [that obtains] according to consideration [*lākinna hādha n-naḥwa mina 'l-i'tibār mubāyinun li-l-i'tibārī 'l-manzūri ilayhi fī 'l-akḥaṣṣiyya bi-ḥasabi 'l-i'tibār*]. [This is so] because the specificity in the former is a real specificity with respect to truth [*bi-ḥasabi ṣ-ṣidq*], in relation to the obtaining [of the instances] in particular substrates; and in the latter, it is a specificity with respect to *the considerations that attach* to the thing itself [*al-i'tibārāt al-lāḥiqa li-naḥsi sh-shay'*]. The real instances of universals that do not obtain positively except by means of the *relation* [of the mental consideration to the absolute]—such as existence, nonexistence, and the rest of the verbal concepts [*ma'ānī maṣdariyya*]—are their parts [*ḥiya ḥiṣaṣuhā*]. The upshot is that these [types] may also be called [instances of] consideration, as it is explained in the *Ufuq mubīn* [of Mīr Bāqir Dāmād]. Since the eminent al-Lāhūrī [al-Siyālkūti] was not aware of this fine point and he [also] opined that the parts were [instances] of consideration, he excluded parts from [the category of] real instances.<sup>46</sup>

The *Sullam* had stressed that subject terms may pick out substrates that are unconditioned or conditioned by mental consideration. We were told, however, that, *in customary usage*, one does not interpret subject terms to pick out mentally considered substrates; this observation had effectively allowed for both types of subject terms to be susceptible to the same universal rules, the distinction between them falling squarely on common usage. This basic discussion in the *Sullam* was then filled out with additional philosophical apparatus by Mubārak, as we noted above.

In the immediately foregoing quotation, Ḥamdallāh builds on and redirects Mubārak's interventions. As a starting point and in implicit agreement with the *Sullam* and Mubārak, he concedes a bipartite division: the substrate of a subject

term may be viewed with respect to reality or with respect to consideration; but the former type of substrate itself has two divisions. The first type has a real restriction. This would be, for example, “man” as a real instance of “animal,” without regard to any kind of mental consideration. The other type that is a subclass of the real universal subject term is mentally conditioned, such that the restriction is external and is brought in relation to the absolute, but the act of restriction, as such, is taken to be internal to its consideration. This type of substrate is a *considered individual instance* (*fard i ‘tibārī*) of the subject term. In this latter case, each instance—say, *existence-as-necessary*, *existence-as-contingent*, *existence-as-Zayd*, and so on—is not an inclusive composite of the absolute and its restriction; rather, each substrate is taken as a *part* of the totality to which the subject term refers.

The difference between the two types of real substrates may become apparent with the following two cases. Man, for example, is a composite of the absolute—namely, animal—and the restriction—namely, rational. The restriction of rationality is internal to the consideration of man, whereas the fact of being so restricted is external to that consideration. By contrast, existence in an absolute sense may be considered by the intellect, but insofar as it is brought into a relation with a restriction that is not internal to the absolute. For example, one may consider existence as the existence of Zayd or as the existence of the contingent or as the existence of the Necessary. Although each of these existences is distinct from the others, the restrictions of Zayd, contingent, and Necessary are not taken to be internal to the consideration of the absolute. Rather, it is the act of restricting that is internal to the consideration. What allows both these types to be real substrates of the universal is the fact that they are grounded in mind-independent reality. This cannot be said of a substrate like animal-genus or risible-property, because the restriction and the act of restriction are both internal to the consideration of the absolute. Animal-genus, as a composite, exists only owing to the consideration of the restriction “genus” as internal to “animal,” and the fact of its being so restricted, as such, is also internal to its consideration—that is, taking “animal” *insofar as it applies to many species*. It is the fact of being *taken as such* that is common to this type of considered instance and the considered instance that is the *ḥiṣṣa*, the difference between the two lying squarely in the fact that the former has no mind-independent reality, whereas the latter does. Barakatallāh very nicely sums up the matter: “That which is taken with respect to a certain aspect, *insofar as it is taken as such*, is a considered thing (*al-muḥayyath min ḥaythu huwa muḥayyath amrun i ‘tibāriyyun*).”<sup>47</sup>

We may now return to Ḥamdallāh, in whose typology two specific types are subsumed under the rubric of the real subject terms: the instance (*fard*) and the part (*ḥiṣṣa*). The former of these is also referred to as *al-fard al-ḥaqīqī* and the latter as *al-fard al-i ‘tibārī*. Figures 9 and 10 sketch the foregoing discussion and illustrate the difference between Mubārak and Ḥamdallāh.

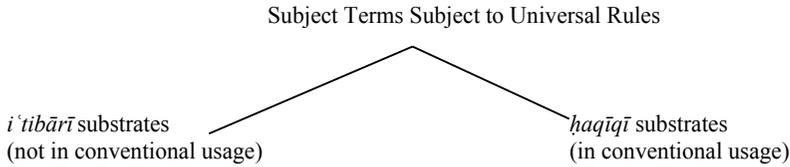
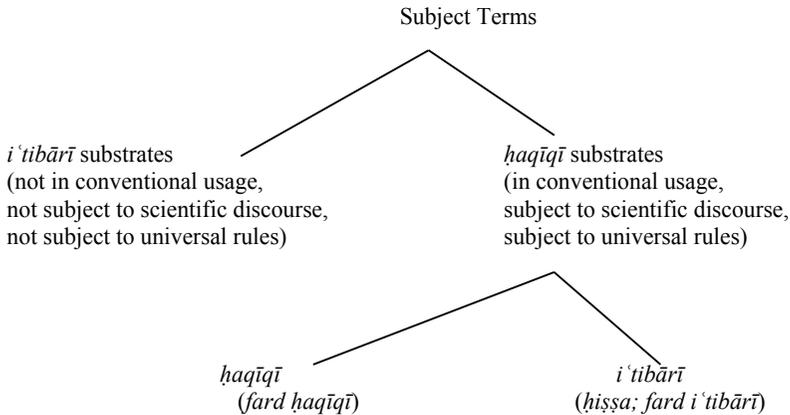
FIGURE 9. The *Sullam*'s/Mubārak's division of the substrates of subject terms.

FIGURE 10. Ḥamdallāh's division of the substrates of subject terms.

Thus far, despite the noticeable and significant difference, Ḥamdallāh's broader classification maps onto that of Mubārak's (and, in turn, onto the *Sullam*'s): both allow for two broad rubrics to encompass (1) real and (2) considered substrates. However, Ḥamdallah further divides *ḥaqīqī* substrates in a manner that establishes a sharp divide between the *ḥaqīqī* and *i'tibārī* substrates of the "animal-genus" sort—that is, the category of the *i'tibārī* substrate that does not obtain *except* owing to mental consideration. To reiterate, this latter *i'tibārī* substrate is distinct from the type he considers in the foregoing passage in its not having subsistence except owing to the very fact of consideration. By contrast, the types of considered substrates discussed in the passage above do have such an existence, except that, insofar as they fall under subject terms, they are absolutes *considered* with a view to the act of restriction—not the restriction itself—as being internal to their consideration. Thus, in both cases, an object is examined *with a view to the restrictions of certain types of consideration*; this is what is common to both types of *i'tibārī* substrates. However, in the *i'tibārī* substrates that are also *ḥaqīqī*, the perspectival aspect of the examination does not render the object as mentally dependent for its positive and specific existence.

The technical details and diagrams above demonstrate the quick transformation in the substance of the lemma. We may now turn to two other significant

points. First, given the shared expressions of Mubārak and Ḥamdallāh—*taqyīd*, *lūhizat/mulāḥaza*, *akhaṣṣiyya/khuṣūṣiyya*—the link between the two horizontally related texts is obvious. The textual contact is direct, with the line of influence issuing from Mubārak, who either was the proximate determinant of Ḥamdallāh's lemma or led him to earlier texts in the *Sullam*'s prehistory that, in turn, helped shape it. Secondly, a hint is received by the commentary tradition that this prehistory may have something to do with Mīr Dāmād and al-Lāhūrī (al-Siyālkūti). These observations may be summarized now in figure 11. As a quick point of reference, it shows that a certain prehistory lay constricted within the lemma of the *Sullam*, that the lemma saw fulfillment in its vertical and horizontal reception in the works of Mubārak and Ḥamdallāh, and that, with the latter, the technical developments of the commentary had moved forward even as the gaze had begun to shift backward to an earlier dialectic.

Further transformations took place—in slow and subtle ways—over two centuries of commentarial activity; increasingly, refinements in the discussion of the *fard* and *hiṣṣa* occupied center stage.<sup>48</sup> The presentation of such details would take us far afield from the primary purpose of this section—namely, the question of how and to what effect the *Sullam* and its commentarial tradition embedded earlier texts. I will, therefore, move forthwith to ‘Abd al-Ḥaqq al-Khayrābādī's commentary on Ḥamdallāh, one of the final stages of the maturation of the discussion and also the site of the most profound textual excavation of the lemma. We recall from just above that, in the course of his commentary, Ḥamdallāh had hinted that a dispute between Mīr Dāmād and al-Siyālkūti underlies the lemma of al-Bihārī. At this precise juncture, then, one reads the following in al-Khayrābādī's commentary:

[Regarding Ḥamdallāh's] statement, *Also with the determination of taking the specification*, etc. Know that the commentator of the *Maṭāli* ‘ [i.e., al-Taḥṭānī] stated, “By *J* we mean neither that whose reality is *J* nor that whose description is *J*. Rather, [we mean] something more encompassing than these two. And it is that of which *J* is true . . .”<sup>49</sup>

The quotation from al-Taḥṭānī should sound familiar, as it was taken up verbatim in al-Bihārī's mission statement on the subject term. To put the textual patchwork into relief, I supply the Arabic below. Italics represent Ḥamdallāh's expressions; boldface represents al-Taḥṭānī's; and underlining represents the *Sullam*. Overlap in these categories means that the text is shared among the authors.

Qawluhū *wa-aydan* ‘*alā taqdir akhdhi t-takhsīs ilā ākhirih i’lam anna shāriḥ al-Maṭāli*’ qāla ***lā na’ni bi-l-jīm mā ḥaqīqatuhu jīm wa-lā mā huwa ṣifatuḥu jīm/*** *mawṣūfun bihi* ***bal a’ammu minhumā wa-huwa mā ṣadaqa yaṣduqu ‘alayhi jīm.***<sup>50</sup>

The commentarial lemma of al-Khayrābādī reverted to that part of Ḥamdallāh's text that had embraced al-Bihārī's; and he revealed that this latter *incorporated* lemma itself *incorporated* a lemma from the commentary of al-Taḥṭānī on the

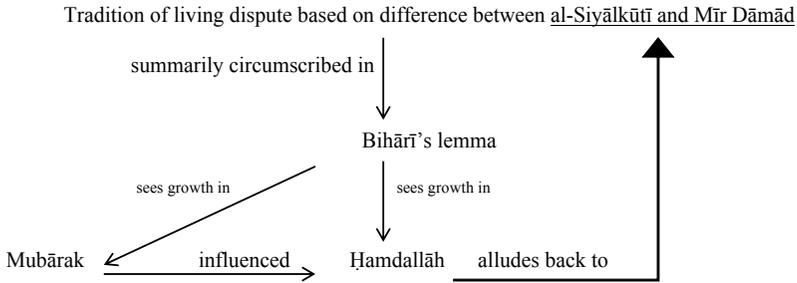


FIGURE 11. The lemma between Mubārak and Ḥamdallāh.

*Maṭāli* ' of al-Urmawī.<sup>51</sup> Following this revelation, al-Khayrābādī's commentary on Ḥamdallāh in fact became a seamless, exacting, and truly innovative engagement with a more extended quotation from al-Taḥṭānī: and all this took place on the terrain of al-Khayrābādī's hypotext—namely, Ḥamdallāh. The critical assessment of the subject matter also drew obvious inspirations from several of al-Siyālkūti's third-order commentarial distinctions found in his work on the *Shamsiyya*.<sup>52</sup>

As the textual dive deepened, the contributions of al-Khayrābādī came to vary increasingly from the original *matn* of the *Sullam*, even as they continued to be dragged closer to the contexts of its composition. This original *matn*, as we now see in full view, was itself responding in tacit ways to debates found partly in the commentarial traditions of the *Shamsiyya* and the *Maṭāli* ' and partly in the *Ufuq* of Dāmād; and it was staking a claim on the basis of a verbatim quotation from a much earlier text—namely, the commentary of al-Taḥṭānī on the *Maṭāli* '. The appropriation and naturalization of the past—near and distant—needed no announcement in the lemma of the *Sullam*: there were sufficient diachronic hints to expose its structure. The commentary on the *Maṭāli* ', which the lemma of the *Sullam* clearly signals, is deeply invested in the question of how a subject term, *under certain considerations*, picks out a substrate and how the predicate applies to it *in virtue of* such considerations.<sup>53</sup> It is precisely this discussion that was critically assessed by al-Siyālkūti, who refers to considered instances (*afrād i 'tibāriyya*) as parts (*ḥiṣaṣ*) in his third-order commentary on the *Shamsiyya* and excludes them from among the relevant types.<sup>54</sup> And I suspect that the reference in al-Siyālkūti to the parts is what led the commentators of the *Sullam* to refer to Mīr Dāmād, who discusses this matter at length.<sup>55</sup> Put in succinct terms, the *Sullam*'s act of embedding a brief quotation from al-Taḥṭānī indicated its dialectical stance with reference to an earlier commentarial tradition. Following some early hints, the commentarial tradition of the *Sullam* began to excavate it, and it was led to Mīr Dāmād, in whose *Ufuq* a central feature of such commentarial work was most highly developed.

What followed from this point on should not be surprising. Having wrestled with the lemma that may now best be deconstructed and disambiguated as a patchwork of voices, al-Khayrābādī penetrated further into the issue of the distinction between universals that are specified with respect to reality and those that are specified with respect to consideration. So he tracked further the aforementioned explicit hints from Ḥamdallāh and earlier commentaries on his work, stating that Ḥamdallāh had crafted his *own* commentary on this lemma of the *Sullam* from parts of Mīr Dāmād's *Ufuq* taken verbatim. He then quoted the latter text at length, revealing in detail, more than a century after Ḥamdallāh, how he had managed to compose his lemma. Thus, as a historical assessment, al-Khayrābādī's own commentarial lemma became a commentary on the patchwork lemma of al-Taḥṭānī/Dāmād/al-Bihārī/Ḥamdallāh. The details may be represented in figure 12.

We may summarize the results as follows. The lemma of the *Sullam* on one of the most significant issues in the history of Arabic logic seamlessly embedded a verbatim quotation from al-Taḥṭānī's commentary on the *Maṭāli'* of al-Urmawī without acknowledgement, while another part spelled out al-Bihārī's position in his own words. The commentarial exercise on this organic patchwork led the tradition back to al-Taḥṭānī—to his commentaries on the *Maṭāli'* and the *Shamsiyya*—in part via the third-order commentary by al-Siyālkūṭī; this latter differed in its position from that of Dāmād. These observations make good sense in view of what we know of the curricular texts on logic in India at the time of the composition of the *Sullam*. With the onset of commentarial production, the tradition also began to inflect the lemma of the *Sullam* with passages from the *Ufuq* of Dāmād that supplied the robust grounds for an investigation of considered substrates of the subject term. And the more profoundly the commentarial exercise invested itself in cycles of textual archaeology, the more detailed and subtle were the logical distinctions it yielded.

There remains, however, one conundrum that still needs explanation—namely, that the commentaries on this lemma of the *Sullam* either implicitly embedded quotations from the *Ufuq* of Dāmād in their own lemmata or explicitly recognized the presence of the latter text in the discourse at hand. That the *Ufuq* should contribute to shaping the tradition of one of the most influential works of Indian logic requires reflection, since it was not a *Dars* text and since its author's intellectual networks in India were relatively thin. One can only speculate that al-Siyālkūṭī's reduction of parts to considered instances and their excision by him from the class of real substrates was an impetus behind this orientation. As I noted above, the *Ufuq* devotes itself at length to the discussion of parts and of considered instances, and it may, therefore, have emerged as the most fertile ground for the discussion in this context. Another path to the *Ufuq* may well have been carved by al-Harawī in his commentary and self-commentary on the *Risāla ma'mūla fī t-taṣawwur wa-t-taṣdīq* of al-Taḥṭānī and his second-order commentary on al-Ījī's *Mawāqif*. These works were extremely popular in the South Asian madrasa tradition; they

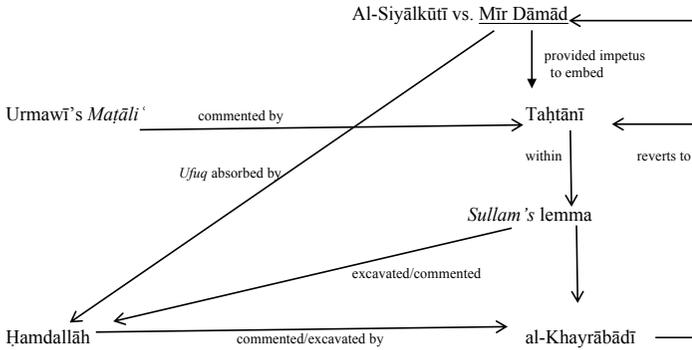


FIGURE 12. The birth and growth of the lemma.

discuss the ontology of parts in some detail.<sup>56</sup> Similar contexts may well have led to the other contacts of the *Sullam* and its tradition with the *Ufuq*.

Much of the *Sullam* exhibits the features we have noted in the two foregoing sections: organized along the structures of a recognizable textbook, its lemmata implicitly participate in living dialectics and debates either by taking a stand for or against unannounced positions or by embedding unacknowledged quotations. This practice beckons the hypertexts to harken back to the fuller prehistory, to the import of its commitments and proofs, and to the significance of its own contributions. Explicit references to earlier authorities are practically nonexistent among the lemmata of the *Sullam*: Avicenna and al-Fārābī are referred to four and two times respectively; al-Dawānī and al-Jurjānī are mentioned a couple of times each and al-Sibawayhi and al-Sakkākī (via the *Miftāḥ*) once each. It is rather the commentaries that unveil the rich internal life of the hypotext. Al-Dāwānī is perhaps the most pervasive scholar in the backdrop of the *Sullam*;<sup>57</sup> following him, there are several implicit references to al-Jurjānī and al-Taḥṭānī (especially the latter's commentary on the *Maṭāli'*);<sup>58</sup> and Avicenna emerges as an ancient authority in some cases.<sup>59</sup> Occasionally, the *Sullam* also implicitly converses with other scholars, such as Fakhr al-Dīn al-Rāzī, al-Ghazālī, al-Taftāzānī, Ibn Ḥabīb, Maḥmūd al-Jawnpūrī, Mīr Dāmād, Mirzā Jān al-Shīrāzī, al-Ījī, al-Siyālkūfī, and al-Khūnajī as its interlocutors.<sup>60</sup> These identities are often revealed by quotations in the commentaries on the *Sullam* culled from al-Bihārī's self-commentary or in the course of the commentaries' exposition of the hypotext. Furthermore, in the course of developing its arguments, the *Sullam* considers various positions expressed not just in logic and philosophical texts but also in texts on rhetoric, lexicography, theology, and legal theories.<sup>61</sup> And via the intermediary of the *Sullam*'s allusions to these texts, the hypertexts are led to a broader set of sources in the background of the hypotext's arguments. Once led along such paths, the direction and point of reference that a particular commentary embraced are often determined by its own philosophical projects and proclivities.<sup>62</sup>

COMMENTARIAL EFFORT AND RECEPTION:  
AN EXAMPLE

With regard to the last set of observations, a few words about Mubārak on the *Sullam* constitute an instructive example. Let me begin with a quotation from Mubārak's commentator, Ḥāfiẓ Darāz, who puts the project and its reception in perspective. He writes,

The lemmata of the treatise called *The Ladder of the Sciences* are like the sun among the stars, and its commentary that the eminent Verifier . . . Mubārak wrote is unique in resolving and unveiling its difficulties. However, its expressions are difficult for the verifying scholars and its hints are obscure for the eminent investigators. This is so, because most of [the expressions] are taken from the *Ufuq Mubīn*. Indeed, he has trodden a novel path in his enduring commentary.<sup>63</sup>

Thus, although Mubārak's commentary engaged the entire text of the *Sullam*, its various perspectives relied on the aforementioned work of Dāmād. As I have noted above, the latter scholar does loom at various loci beneath the surface of the *Sullam*'s arguments; it stands to reason, therefore, that one of the *Sullam*'s earliest commentaries should be attentive to this feature of its dialectics.<sup>64</sup> On the other hand, the *Ufuq* is certainly not a preoccupation of the *Sullam*, so that this choice on Mubārak's part is quite intriguing. Part of the explanation may rest on the fact that, within the context of its discourse on the entire set of concerns of a traditional logic textbook, the *Sullam* focuses consistently on puzzles that pertain to questions of ontology and epistemology, especially regarding the status of mental objects when these produce paradoxes for propositional semantics. For example, when the substrate of a subject term is an impossibility, accepted rules of affirmative predication and conversion are compromised, since the instance of the subject term must be existent; or, as we observed above with reference to the Liar Paradox, when the proposition is self-referential by virtue of the subject term, propositional truth-conditions appear not to satisfy basic assumptions. It is precisely in such cases that Dāmād's contributions in the early parts of the *Ufuq* are most relevant for the *Sullam* and, in turn, that Mubārak's extension of the former as a subtext is justified.

In practically every case, the thrust of the solution is inflected by Dāmād's understanding that an instance of a universal may be a restriction (*qayd*) on the latter, and that such a restriction may be considered either by virtue of its mere nature (*tabī'a*) or by virtue of its particularity (*khuṣūṣiyya*).<sup>65</sup> For example, one is confronted with the following paradox in the *Sullam*.<sup>66</sup> It is given that the Participant with God is impossible. Let us posit a compound notion that consists of two Participants with God. This compound of two Participants with God would also be a Participant with God, just as, for example, the collection of two drops of water is also water. So the compound of two Participants with God would be impossible. However, every compound is possible;<sup>67</sup> indeed, its possibility is demonstrated

by the very fact that the compound was posited in this thought experiment. This means, contrary to what is posited, that the Participant with God is possible. The commentarial wrestling with this conundrum features Dāmād rather prominently. And the solution consists of recognizing that the possibility and impossibility issue from two distinct considerations. Therefore, they do not produce a paradox. It is argued that the compound Participant with God is indeed possible, but by virtue of the *nature* of the restriction of being compounded; it is impossible by virtue of the *specificity* of the restriction—namely, that it is the fact of two *impossibles* being compounded.<sup>68</sup> In the vast majority of cases, it is some iteration of this distinction—one that turns on the broader issue of mental consideration—that compels Mubārak, in particular, and some other commentators, in general, to turn to Dāmād’s *Ufuq*.

The ultimate consequence of this approach for the second-order commentaries on Mubārak was that, over time, they came to attend increasingly to discussions of the semantics of simple utterances. These discussions themselves were predicated on resolving issues of ontology as a prerequisite for epistemology. For example, when a simple utterance signifies grades of the color black, is one committed to an ontology of modulation in essences or is the modulation a product of distinct considerations of certain restrictions on the universal? Does “existent” as a simple utterance refer to a substrate that is generated by means of simple production (*ja’l basīṭ*) or compound production (*ja’l murakkab*)? Can parts (*ḥiṣaṣ*) of existence be suitable substrates of subject terms under certain considerations of the restriction of the universal or are they mere mental concoctions? These are precisely the discussions—all of them tied to subtle analyses of the mental considerations of various restrictions on universals—that occupy Dāmād in the early parts of his *Ufuq*. Therefore, it also stands to reason that these were precisely the parts that attracted commentarial attention in India.

Yet a couple of notes of caution are advisable at this juncture. First, Mubārak’s reliance on Dāmād was neither exclusive nor uncritical. At several places, he categorically disagrees with the earlier scholar, and, at many others, he ignores him altogether.<sup>69</sup> And just as he embeds Dāmād’s expressions within his own—not just from the *Ufuq* but also from the *Īmādāt*—so he also embraces those of other scholars without announcing them. For example, his introductory comments are a combination of this later work by Dāmād and the commentary of al-Taḥṭānī on the *Maṭāli*.<sup>70</sup> In other words, the lemmata of Mubārak, like those of the *Sullam*, are an organic new product comprising his own articulations and those of others; commentaries on Mubārak, therefore, also participate in textual archaeology, much like Mubārak himself does in relation to the *Sullam*.

Second, the reception of Dāmād’s *Ufuq* in India, which was likely precipitated by the *Sullam* and its early commentaries and by the *Shams bāziḡha* of al-Jawnpūrī, was highly critical.<sup>71</sup> In India, only four premodern commentaries were written on the *Ufuq*—one by the aforementioned Bahr al-‘Ulūm of the Farangī Maḥall

family, and one each by Faḍl-i Imām al-Khayrābādī, his son, Faḍl-i Ḥaqq al-Khayrābādī, and his son, ‘Abd al-Ḥaqq al-Khayrābādī. As we saw above, all these scholars were commentators within the *Sullam* tradition, and the latter three were central to the Khayrābādī network that was most intricately immersed in the production of commentaries on Mubārak. Of these four commentaries, I have been able to consult two—that of Baḥr al-‘Ulūm and ‘Abd al-Ḥaqq—and both concentrate precisely on those early parts of the *Ufuq* where ontological questions related to the semantics of simple utterances are most relevant; and both are written in the spirit of refutation.<sup>72</sup> The *Sullam* thus appears to be a key text that, in opening up the dialectical space of its lemmata to a consideration of Dāmād’s contributions, called forth to its own hypertexts to turn to the earlier philosopher. This task was most keenly taken up by Mubārak, whose own proclivities, guided by the *Sullam* and the latter’s textual past, set the stage for future second-order engagements. Many of these works assume a polite, although oppositional, stance toward Dāmād. Insofar as the study of Mubārak was most densely concentrated among the Khayrābādīs, so too was the study of the *Ufuq*; and these Khayrābādī scholars were equally critical in their assessments.

Finally, it is worth mentioning that about a hundred years after Mubārak’s commentary was completed, the questions of ontology and epistemology that occupied it had set its second-order commentators on a distinct path to questions of metaphysics. These questions were most aptly satisfied with reference to the early parts of the work, where issues of the possibility of defining and conceptualizing impossible and transcendent entities segue into discussions of the nature of divine knowledge. Similarly, the issue of the modulation in essences led naturally to discussions of time and the nature of creation. And the problem of subject terms, such as “existent,” led to a devoted focus on the theories of simple and compound production.

There were two consequences of these developments. First, most second-order commentaries on Mubārak that were written after the first quarter of the nineteenth century entirely ignored not only the section on Assents (*taṣḍīqāt*), but also did not fare much farther than some of the earliest sections on Conceptualizations (*taṣawwūrāt*), where the aforementioned topics are most highly developed. The most widely read commentary on Mubārak, for example, was composed by Faḍl-i Ḥaqq al-Khayrābādī. Covering about five hundred pages in the Indian lithograph (Delhi, 1317/1900), it reaches no further than the section on the four inquiries in the *Sullam*. His son ‘Abd al-Ḥaqq al-Khayrābādī’s commentary on Mubārak is a massive tome of about six hundred pages, published in lithograph by the same press in 1324/1906. It covers its hypotext only up until the section on modulated utterances. These works read less like traditional logic books and more like works in metaphysics.

The second consequence of the aforementioned developments was that the investigation of the affiliated metaphysical issues in the second-order commentaries on Mubārak led the authors to consider the contributions of scholars such as

al-Suhrawardī and Ibn al-‘Arabī in their evaluation of the substance of Mubārak’s claims. Such scholars had generally played a minor role in the earlier history of the *Sullam*’s commentarial tradition; in second-order commentaries on Mubārak they were more prominent figures. Part of the explanation for this kind of commentarial growth of course lies with the commentators’ own philosophical interests and commitments.<sup>73</sup> Certainly, they repurposed their hypotextual lemmata in view of their own living dialectical concerns: the Khayrābādīs, for example, had also written independent treatises on the doctrine of the unity of existence (*wahdat al-wujūd*), simple production, and the nature of divine knowledge.

#### THE LADDER’S ORIENTATIONS

The commentaries’ interest in the *Sullam* was guided by the dialectical spaces it had opened up within its traditionally organized lemmata. In an earlier publication, I referred to these lemmata as prompts, whose function was both to offer pithy responses to its discursive prehistory and to call forward to future hypertextual activity.<sup>74</sup> In a later publication, I also pointed out that a determinant feature of the *Sullam* is that it tends to think of problems of logic—and of their solutions—in terms of mental conceptualizations and considerations, whether these be of subject terms, predicates, or propositions. The commentarial tradition took heed of this recurring aspect of the *Sullam* and was consistently motivated by its prompts to pursue this specific angle in the examination of various problemata. Thus, although it would be difficult to argue that the *Sullam* tradition is committed to a single and overarching project within the broad mandates of a traditional logic textbook, it can be shown to prefer a certain orientation in its recognition and handling of diverse issues. Let us briefly take up three representative cases from different parts of the *Sullam* to demonstrate this point.

In the section on conception and assent,<sup>75</sup> al-Bihārī explains that belief in a predication relation between a subject and predicate falls within the category of assent; when there is belief without such a relation, one has a conception; and in the immediately preceding section, he also states that knowledge is conception. Furthermore, he asserts that conception and assent are two different species of apprehension; they are not one and the same thing. He then presents the following doubt. If we grant that knowledge and the thing that is known are one and the same thing, then, since one can conceptualize anything, a conception of assent would mean that the two are one and the same. In other words, if the object of that form of knowledge that is conception is assent itself, then, the two would not be distinct from each other. This goes contrary to al-Bihārī’s doctrine that the two are indeed distinct.

The solution al-Bihārī offers relies on distinctions that emerge when one becomes cognizant of the *manner of one’s consideration* of the object of knowledge. When one considers knowledge as a form that comes to inhere in the mind,

it is an object of knowledge; and insofar as one considers it to subsist in the mind, it is knowledge itself. The following analogy should unravel the argument. When a table is taken as a subsisting entity, its form is constitutive of it and is, therefore, not distinct from it; however, when one considers the form as something that comes to inhere in the wood, it is indeed something distinct. The resolution, therefore, rests on the recognition that the conundrum was generated because two different modes of mental consideration were conflated.

This conundrum and its solution presuppose two doctrines that are explicitly accepted by the *Sullam*: that it is things themselves—not their simulacra—that obtain in the mind<sup>76</sup> and that the intellect can conceptualize anything.<sup>77</sup> The former is justified on the basis of the observation that a simulacrum presupposes the existence of something it represents. However, the mind can certainly conceptualize things that have no mind-independent existence that is represented by the act of conceptualization. Thus, what is known to the mind is the very thing that *it* conceptualizes; this conceptualization can accommodate both extramental and mental entities; knowledge is this known object itself. The second doctrine issues from the observation that the mind may, in some fashion, pass judgments even on absurdities. Thus everything, including that which is impossible, may have a conceptualization in the mind. These two doctrines loom large in the evaluation of various puzzles in the *Sullam*, and they consistently compel the *Sullam* to regard the intellect's *consideration* of its objects—in virtue of their given selves—as central to questions of epistemology.

Let us now turn to the second example that further demonstrates the effects of these convictions. The *Sullam* outlines the conundrum that, since it is things themselves that obtain in the mind, then, if multiple minds have a conception of a specific extramental Zayd, the latter would become a universal. The reason is that this one extramental Zayd would pick out each of the mental instances of Zayd as its substrates and would, therefore, also be predicated of each one. To put it differently, the extramental Zayd would be said of several instances and would, as such, satisfy the basic definition of a universal.<sup>78</sup>

In offering a solution, al-Bihārī points out that the proper definition of a universal is that whose sense may apply to multiple *extramental* instances. Since the extramental Zayd is not such as to allow for multiple extramental instances to be picked out by it, he does not satisfy the posited definition. The definition proposed here, however, poses a potential problem: certain mentally supposed and mentally dependent objects, such as “nothing” and second intentions, cannot have extramental instances, although they are considered to be universals by philosophical consensus. Al-Bihārī explains that the definition would indeed allow one to include such objects among universals, because the *mere consideration of their conceptualization* does not involve a haecceity (*hādhiyya*); the latter has only a part to play in the consideration of such mental objects with respect to their specific natures. Put differently and as explained by the commentaries, insofar as “nothing” is considered

as the contradictory of “thing,” the intellect, *under the restriction of such a consideration*, does not preclude the possibility of its extramental multiplicity. On the other hand, “nothing,” considered as such and absolutely, may not have any instances all. By contrast, the conception “Zayd” as described above always denotes *this* Zayd, the mental one that is no other than the singular extramental one. As such, its consideration, which cannot evade a haecceity, simply does not allow for the possibility of extramental multiplicity; it is always itself—that is, *this very* extramental Zayd.<sup>79</sup>

The two preceding examples put into sharp relief a standard orientation of the *Sullam* and its commentaries. When confronted by a challenge, the immediate recourse was to test whether it was generated owing to distinctions that coincided with restrictions under which concepts were considered by the intellect. All knowledge, as the *Sullam* proclaims in the opening sections, is conception. That which is known is the very thing itself that obtains in the mind, not its simulacrum; and knowledge is the thing known as it subsists in the intellect, in the same way as taste is the thing tasted insofar as it is the very content of the taste itself. These basic principles appear to motivate the *Sullam* and its commentaries to take the mode of mental consideration in relation to its object as the defining feature of knowledge. If knowing is conceptualization, then conceptualizations of the same object under specific restrictions would also be distinct. And it is precisely the acknowledgement of these distinctions in considerations that are marshaled in order to resolve the paradoxes presented by the *Sullam*.

In this regard, three adages that are explicitly mentioned in the commentarial tradition of the *Sullam* ought to be taken seriously: “Were it not for [various] considerations [of a thing], philosophy would be falsified”; and “If not for considerations, philosophy would be false”; and “The status [of things] differs with respect to the difference in [their various] considerations.”<sup>80</sup> They should be interpreted to mean that attention to the precise nature of mental considerations would preserve philosophical doctrine and philosophy as an enterprise. Indeed the claims of philosophy, which correspond to mental considerations, are variegated precisely owing to the variations in such considerations. Paradoxes may be overcome, and philosophy may be maintained as a consistent set of propositions only in view of the fact that such considerations underlie philosophical truth: they are constitutive of the very objects of knowledge, given as such.

This brings me to a final puzzle that takes us to the very heart of the points discussed so far. In the section on the nature of the five universals, al-Bihārī distinguished among three different types of concomitants—the necessary concomitants of a quiddity simpliciter, of mental existents, and separable concomitants. Of necessary concomitants, he further states that they may be obvious to the observer, such that when that which is a concomitant and that of which it is a concomitant are conceptualized, the concomitance between them follows ineluctably.

It is at this juncture that a puzzle presents itself. If the conceptualization of the necessary concomitant (A) and that of which it is a necessary concomitant

(B) generates the conceptualization of the concomitance (1) between them, then this necessary concomitance (1) is itself a necessary concomitant (C) of the necessary concomitance (2) between the necessary concomitant (A) and that of which it is a necessary concomitant (B). This latter necessary concomitance (2) is itself a concomitant (D) of the necessary concomitance (3) between that which is a necessary concomitant (A) and that of which it is a necessary concomitant (B). And so on. Thus, since the conceptualization of the initial necessary concomitance is itself a necessary concomitant within a series of previously embedded relationships of necessary concomitance that proceed ad infinitum, such a conceptualization can never be realized. Al-Bihārī's response is simple and expected: concomitance is a mentally considered meaning that is effected only in the mind insofar as it is secondarily abstracted from the fact of another mental consideration. In other words, it is not grounded in anything other than another mental consideration. Since mental considerations may be brought to a halt by choice, the infinite regress would cease when the mind no longer engages in the consideration.<sup>81</sup>

The paradox, therefore, was once again the result of mental consideration. The object of consideration—concomitance—was the very consideration itself, which was self-generative since it was grounded in yet another mental consideration with identical features. I shall not comment on the merits of this solution. Rather, what is relevant for the purposes of this investigation is to recognize that this example allows the *Sullam* tradition to reflect on the manner in which propositional claims—especially those of a higher order—are meaningful. If knowledge, as conceptualization, is its very object that itself is known, and if that which is conceptualized may be only a mental entity along with certain modes of distinct mental considerations, then how can a discipline whose subject matter is second intentions be concerned with that which is actual? For the subject of its propositional claims would always be a mentally considered entity that has no guaranteed mind-independent correspondence.

This concern was already implied in the foregoing example, where the *Sullam* grappled with the challenge that second intentions would be excluded from the class of universals, given the definition that grounds the latter ultimately in the possibility of extramental instances. In the current example, the difficulties are more severe, as they are spelled out by the commentators. Here is what Mubīn writes:

If [mental] considerations [*i'tibārāt*] do not have an existence with respect to the very given [*wujūd fī naḥs al-amr*], then it is not suitable to pass judgments about them with respect to the given. This is so because the truth of the affirmative proposition requires the existence of the subject. However, they do pass judgments about them. For they say, "Concomitance is a concomitant by virtue of itself" [*al-luzūm lāzim bi-dh-dhāt*], and "Necessity by virtue of itself rules out necessity by virtue of another," and "Possibility is dependent on a cause," and so on. Thus, it is known that

[mental] considerations also have existence and that they must obtain with respect to the very given [*fa-`ulima anna li-l-i`tibāriyyāt ayḍan wujūdan wa-lā budda min taḥaqquqihā fī nafsi l-amr*].<sup>82</sup>

Thus, the basic consequence of the *Sullam*'s solution—namely, that since concomitance is a mental consideration, it can be neutralized simply by halting the consideration—led to a dilemma. If mental considerations have no claims to actuality, then assertions about them are also merely mental considerations because it is not proper to predicate something over a mental consideration outside the mental locus. This would be acceptable were it not the case that one does make such assertions, as the examples from Mubīn demonstrate. On the other hand, since such assertions are indeed made, mental considerations must also exist irrespective of their mental locus.

The solution offered by the *Sullam* is that the source of the mental considerations that are a product of mental abstractions exists with respect to the given. And this fact, in turn, preserves the consequent fact of their also being given (*mansha`u l-i`tibāriyyāt mawjūd fī nafsi l-amr wa-huwa l-ḥāfiẓ li-nafsi amriyyatihā*).<sup>83</sup> It is by virtue of the ultimate grounding in the given that one can make assertions about mental considerations outside the mental locus.<sup>84</sup>

I have chosen to translate the expression “*fī nafsi al-amr*” here and in part III below with the infelicitous “with respect to the given/the very given” because I wish to make room for the polysemy of the term: its multiple meanings relate to each other by participating in a single and essential aspect—namely, a thing or state's being by virtue of its very posited self. It is true, as has been argued in recent literature, that the expression is used in various ways—to refer to the actual (*al-wāqi`*), the extramental (*mā fī l-khārij*), the Active Intellect (*al-`aql al-kull/al-`aql al-fa``āl*), and so on.<sup>85</sup> This variety is a consequence of the basic fact that the ontological scope of the very given is vague enough to allow contraction and expansion. Its most capacious ambit is found within the *Sullam* tradition. For we observe that it is also used to refer to mental considerations (*i`tibārāt*). Indeed, even the claim that the fact of being given can be preserved for the mental considerations provided they are grounded in that which is given does not lead al-Bihārī to reduce the given to the extramental. In his self-commentary, he writes that the source that confers the givenness to the mental consideration may obtain extramentally or, *provided that one does not take into account the fact of the mind's consideration* (*ma`a qaṭ`i n-naẓar `an i`tibāri dh-dhihn*), that it may obtain either in the mind or extramentally.<sup>86</sup> In other words, that which is given may indeed be a mental product; what renders a judgment as true or false about it *fī nafsi al-amr* is that the fact of the mind's consideration of it in a particular manner is not made relevant to the judgment in that act of judgment. If the object or state of affairs is taken with respect to its very self as a given, then what the mind extracts from it or the judgment it passes of it is true *fī nafsi al-amr*. In this regard, Baḥr al-`Ulūm's statement cuts to the heart of the matter:

The meaning of the givenness of those things that are extracted [by the mind] is that their sources are such that—with respect to their very selves, without a consideration of anyone—the [mental] extraction of such things from them may properly obtain [*fa-inna ma'nā nafsī l-amriyya li-l-intizā 'iyyāt kawnu manāshihā fī dhātihā min ghayri i'tibāri l-mu'tabir bi-haythu yaṣihhu intizā 'u tilka l-intizā 'iyyāt minhā*].<sup>87</sup>

Thus, if the mentally extracted notion is such that the particular mental consideration of its source has a part to play in its generation, then it is not *fī nafs al-amr*; otherwise, it retains this feature. What is common to the various usages is that something is taken to be *fī nafs al-amr* if the fact of the mental consideration is itself neglected in its analysis—the object, even if it is a product of mental consideration, is taken as a given, with respect to its very given self (*fī ḥaddi dhātihī*), not by virtue of any consideration (*lā bi ḥasabi l-i'tibār*). This means that an assertion about any mental object, insofar as it is given as such, would be true with respect to its givenness, if the fact of the consideration is neglected in its analysis. The admittedly cumbersome translation “with respect to the given/the very given” has the virtue of being conceptually minimalist and, therefore, expansive enough to accommodate the actual, the concrete, the mind-independent, the Active Intellect, and the mere mental considerations of the intellect (without regard to the fact of mental consideration) as *fī nafs al-amr*.<sup>88</sup> It is in this sense of being grounded as the given that the expression is strictly polysemic.

The upshot of the foregoing is that the *Sullam* tradition is able to make sense of various statements about mentally concocted objects, such as “The Participant with the Creator” where the predicate “impossible” must be taken to be true not just in the mental locus but *fī nafs al-amr*. It also means that the ontological space of logic is potentially expanded to include purely mental objects and considerations, provided they are considered by virtue of themselves, as given. There is a further motivation on the part of the *Sullam* logicians to treat mental considerations in the manner discussed above: since the subject matter of logic is intelligibles insofar as they lead from the known to the unknown, the entire enterprise of logic will be relegated strictly to the mental locus if claims about these intelligibles cannot be taken to be true *fī nafs al-amr*. But I will briefly return to these points below.

In the immediate analysis, let me turn to two episodes in the *Sullam* tradition that can help flesh out my interpretation and lend it further support. In the section on conditional propositions, al-Bihārī contrasts the position of the logicians with that of the grammarians, explaining that, for the former, the judgment applies to the tie between the antecedent and the consequent and that, for the latter, it applies to the predicative apodosis, while the protasis is taken as a restriction under which the former's predicate applies to its subject.<sup>89</sup> This contrast sets the text off on an extended dialectic in which al-Jurjānī and al-Dawānī play prominent roles.

At issue is the status of conditional propositions whose consequent is manifestly false but that are nevertheless recognized to be true. Take, for example, the proposition, “If Zayd were a donkey, he would bray,” which is recognized

by al-Jurjānī to be absolutely true, although the consequent, “Zayd brays” is false. If the judgment in the conditional proposition applied to the consequent, then, since the consequent is false absolutely, it would also be false when it is restricted by the antecedent. This conclusion is based on the general rule that the negation of the absolute entails its negation when it is restricted by a qualification; for example, if man simpliciter is not stone, then he is not stone even when qualified in a certain way. Given this consequence and the fact that the conditional proposition is categorically true, the position of the logicians is accepted by al-Jurjānī to be the correct one—the judgment is simply an assertion of the tie between the antecedent and the consequent.<sup>90</sup>

This conclusion is challenged by al-Dawānī, who points out that al-Jurjānī’s proof is based on the false equivalence between what is the case at all actual times (*jamī’ al-awqāt al-wāqī’iyya*) and what is the case simpliciter (*muṭlaqan*). The correct position is rather that Zayd’s braying is negated with respect to actuality, not with respect to all the mentally determined times (*al-awqāt al-taqdīriyya*). The absolute includes both actual and determined circumstances. Therefore, the consequent, as determined by the antecedent, is not actually false; in turn, the conditional proposition is not so either. This means that the interpretation of the grammarians can be defended. It ought to be noted that, in the course of this discussion, the *Sullam* treats that which is actual (*al-wāqī’*) as a synonym for that which is given (*naḥs al-amr*). In representing al-Dawānī’s argument, for example, al-Bihārī writes, “That which is mentioned [by al-Jurjānī] about entailment is granted [as a principle], but we do not grant that the absolute [*al-muṭlaq*], in the case [at hand], is negated. For [the absolute] is taken in a sense that is more general than that which is with respect to the way things are given [*a’amm mim mā fī naḥsi l-amr*].”<sup>91</sup>

Thus, two competing typologies have been set up. In the first case, that which is actual/given is equivalent to the absolute; the mentally determined cases are its restricted cases, such that if the former is negated, the latter is as well.<sup>92</sup> In the second, the absolute is a larger category within which two distinct types fall—namely, the actual/given and the mentally determined. The second case does not leave any possibility for mentally-determined entities to be included in the class of what is *fī naḥs al-amr*, whereas the former subsumes it as a subclass.

From this point on, the development in the commentarial space emerges as quite instructive. An important point of inflection, for example, is found in Mubīn, who writes,

I say that the intention by “mentally determinative times” (*al-awqāt al-taqdīriyya*) in the discourse of the Verifier al-Dawānī is not [just] the circumstances/contexts that are considered in the antecedent of the conditional [proposition], so that it would be said that they are specific to conditionals. Rather [what he intends] are the times during which the consequent is mentally determined to come about [*al-awqāt allatī quddira wuqū’u t-tālī fihā*]. These do not occur in the actual world [*fī ‘ālam*

*al-wāqi* ]; rather, they are mentally determined to exist *in the latter*. And this sense also exists in the predicative [proposition]. Thus, the gist of the discourse of the Verifier al-Dawānī is that the falsity of the consequent and its nonexistence with respect to the given, owing to a consideration of the denial of the actual sources [of its obtaining,] do not entail that it [i.e., the consequent] should fail to obtain in it [i.e., *with respect to the given*] owing to a consideration of the mentally supposed sources [of its obtaining] [*anna kadhība t-tālī wa-'adama wujūdihi fī nafsi l-amr bi-i 'tibāri intifā 'i l-mawāridi l-wāqi 'iyya lā yalzimu minhu intifā 'uhu fihā bi-i 'tibāri l-mawāridi l-fardiyya*].<sup>93</sup>

Two important points can be culled from the quotation above. First, the commentarial tradition of the *Sullam* recognizes that al-Dawānī's critique of the grammarians on their own terms also allows one to evaluate predicative propositions in the same manner as the conditionals. The argument is simply that, since the judgment applies to the consequent *on the mental determination of the restriction supplied by the antecedent*, so, too, judgment in a predicative proposition (i.e., without an antecedent) can apply in view of the consideration of a mental determination. Second—and this is central to my earlier interpretation—even if a proposition is false with respect to the given owing to the fact that the sources whereby it obtains are not actual, it can still be true *with respect to the given* on the basis of the mentally determined existence of its sources. One can say, therefore, with respect to the given (*fī nafs al-amr*), that Zayd brays on the mental determination of his existence as a donkey. Or, put differently, Zayd brays, with respect to the given, provided the mental determination of his being a donkey. Both these consequences follow in view of the first typology noted above—namely, that *fī nafs al-amr* is the absolute within which the actual and the mentally supposed are both subsumed.

Now, the first typology was that of al-Jurjānī, who challenged the position of the grammarians by noting that if the consequent is false with respect to the given, then it is false under all restrictive determinations. This is so, we recall, because the given is taken to be the equivalent of the absolute, such that, if the absolute is denied, so is that which is qualified. According to the reporting of Mubīn's commentary on the *Sullam*, this same typology was embraced by al-Harawī, who squarely shifted his discussion of the issue to predicative propositions. What the latter convey in the affirmative, he argues, is the existence of a thing for another with respect to the way things are given, whether the proposition is restricted or absolute. The affirmative proposition does not convey such existence simpliciter. This can be proved by the observation that when something is affirmed of something with respect to the given, the mental determination that it is negated of it, with respect to the given, is false; and this is so because negation with respect to the restricted—that which is mentally determined—does not entail negation with respect to the absolute—that which is given. However, when an affirmation is denied with respect to the absolute—that which is given—the affirmation of that

which is restricted is also denied. It appears, therefore, that al-Harawī sided with al-Jurjānī and the logicians on this point.<sup>94</sup>

At this point in the discussion, a challenge from al-Dawānī that was already noted in the *Sullam* is taken up. The response is quite helpful. The problem al-Dawānī points out is that, although it may be false with respect to actuality that “Zayd is standing,” it is still true, with respect to mental determination—namely, when I merely imagine him as standing—that “Zayd is standing.” In other words, if the typology accepted by al-Jurjānī (and al-Harawī) were correct, whereby the given is a broad and absolute category within which the restricted mental determinations of a thing are subsumed, then the falsity of the former statement would also entail the falsity of the latter.<sup>95</sup> Yet this is clearly not the case, since everyone recognizes that it is true to say that “Zayd is standing” on the mental determination of his standing, even when Zayd is not standing. Here is what Mubīn offers, via al-Harawī, as a defense:

It is true that a proposition that is restricted by that which is a report about the given—such as “Zayd is standing in my mind”—because it [i.e., this proposition] is a report about a report about it [i.e., the given], it indicates the existence of a thing for a thing with respect to the given, by virtue of the report about the given [*naʿam al-qaḍiyya al-muqayyada bi-mā huwa ḥikāya ʿan nafsi l-amr ka-Zaydun qāʾimun fī ḡannī li-kawnihā ḥikāyatan ʿammā huwa ḥikāyatun ʿanhā tadullu*<sup>96</sup> *ʿalā thubūti sh-shayʿ li-sh-shayʿ fī nafsi l-amr bi-ḥasabi l-ḥikāya ʿanhā*].<sup>97</sup>

The solution brings into sharp relief the orientation of the *Sullam* tradition that I have discussed in the foregoing pages: one can resolve wrinkles in propositional semantics by taking propositions themselves as conceptualized mental objects about which other propositions report. In such layered, second- and third-order propositions, predication can be true with respect to the given by virtue of the fact that, with respect to the given, a lower-order proposition is true with respect to a mentally determined item. The case that Mubīn (reporting on al-Harawī) is laying out may be clarified in the following fashion. Let us posit that I am thinking that two and two make five; although two and two do not make five with respect to the extramental state of affairs itself, it is true that two and two make five in my mind. Now this is what is given. Therefore, my proposition, “Two and two make five,” is true on the determination of my thinking that two and two make five. And since it is given that two and two make five in my mind, with respect to this determination, it is true, also as a given, that “two and two make five.” This would be the truth of the proposition—let us call it *p*—within the restricted space of my determination, as a given. Next, “Two and two make five” can be taken as a report about *p*. And it is true that, given *p*, with respect to the given, “two and two make five” truly reports about *p*. Yet this report about *p* is true, as a given, insofar as *p* is true, as a given, about a given state of affairs—namely, my mental determination that two and two make five. The upshot is

that the truth of the restricted, with respect to the given, can also be reflected in the truth of the unrestricted, with respect to the given, since the latter reports about the former as given. To put it differently, even when two and two do not make five, it is true, on this reading, that they make five; and this consequence follows even when that which is given (*nafs al-amr*) is a category that subsumes cases of mental determination.<sup>98</sup>

This same position is helpfully articulated by the *Sullam* and its commentaries in a later discussion. In the section on predication, al-Bihārī discusses a conundrum related to an essential principle used for resolving various logical impasses—namely, that an absurdity entails an absurdity. The issue with this assertion is that the absurd, insofar as it is absurd, obviously has no form either in the intellect or extramentally. Yet true affirmations—including, for example, that it entails an absurdity and that it has no form in the intellect—are indeed pronounced of it; and they require explanation. Here the typology we just encountered is brought forth to suitable effect: judgments about the absurd are valid insofar as they relate to a universal notion conceptualized by the mind; and whatever is conceptualized by the mind exists with respect to the given. In other words, although the absurd itself does not have either a form in the intellect that corresponds to it nor instances—so that a predicate may be affirmed of that of which it is true—it can still be conceptualized as a universal, so that affirmations may be true of it as such. For example, one may conceptualize an absurdity—say, the joining of two contradictories—as a notion that may not exist as a form corresponding to something mind-independent; or one may conceptualize the joining of two contradictories as something similar to the joining of blackness and sweetness, which is in fact possible.<sup>99</sup> Since whatever is conceptualized exists as given, claims about the absurd of the sort noted above, as such, are also true with respect to the given. These points are expressed by the *Sullam* in the following terms:

The absurd, *insofar as it is absurd*, has no form in the intellect. It is nonexistent both mentally and extramentally. Given this fact, it becomes clear that everything existent in the mind—as mentally obtained—exists with respect to the way things are given [*kullu mawjūdin fī dh-dhihn ḥaqīqatan mawjūdu fī nafsī l-amr*].<sup>100</sup> Thus no judgment is passed of it [i.e., of the absurd], whether it be, for example, an affirmative [judgment] that it is impossible or a negative [judgment] about its existence. [This is the case] except with respect to something universal, when its conceptualization is among things that are possible. Every object of judgment that has been determined [in the mind] is a conceptualized nature.<sup>101</sup> And everything that is conceptualized exists. So the judgment about it [i.e., the conceptualized nature] that it is impossible and similar [judgments] are not correct *insofar as it is what it is*. However, when [this thing about which the judgment is passed] is considered with a view to all or some of [its individual instances] that are the sources of its positive obtaining, then the judgment of impossibility, for example, is correct. So, impossibility is affirmed of the [conceptualized] nature; and it is true owing to the fact that the [existence of the individual instances] that are the sources of its obtaining is denied.<sup>102</sup>

It appears, therefore, that the mind may conceptualize the absurd as a notion and, insofar as this notion is determined in the mind in some way—even if the notion is not able to capture the specificity of the nature under question—it obviously exists, given as such. In addition, al-Bihārī’s assertion at the beginning of the quotation and expositions in the commentaries make it plain that he understands mental existence—even mentally concocted existence, such as that of the absurd—to be a case of existence with respect to the given.<sup>103</sup> Mubīn, for example, illuminates the *Sullam*’s assertion that everything that is conceptualized exists with the addition, “with respect to the given, because it is described by thingness and being a notion” (*fī naḥsi l-amr li-kawnihi mutṭaṣafan bi-sh-shay’iyya wa-l-mafhūmiyya*).<sup>104</sup> Similarly, he explains that the judgment of impossibility is not correct for such a mentally determined entity because it exists with respect to the given insofar as it is a conceptualized existent (*ath-thābit fī naḥsi l-amr . . . min ḥaythu annahu mutaṣawwar thābit*).<sup>105</sup> Thus, the conceptualized absurdity exists with respect to the given so that, by virtue of what it is as given, it is not impossible, with respect to the given. The assertion of impossibility is actually a claim that denies that the absurd has instances.

That the existent in the mind is existent with respect to the given is another articulation of the typology we encountered above: the mind can conceptualize anything; the absurd, for example, can be conceptualized as that which is impossible, and two can be conceptualized as odd. And whatever the mind conceptualizes, by the mere virtue of this fact, exists with respect to the given. Put differently, absurdities may exist in the mind in view of certain considerations; these considerations can then be posited as the conceptualizations of absurdities *as such*; and, since all conceptualizations exist with respect to the given, so does the conceptualization of absurdities.

At this juncture, the commentaries fill out the details of these claims more explicitly. Let us return to the critical doctrine articulated by the *Sullam*: “Everything that is conceptualized exists.” The earliest extant extended commentary on the *Sullam*, by al-Sā’inpūrī, has the following to say:

*Everything that is conceptualized exists* with respect to the given, although this may be after mental manipulation and invention [*wa-in kāna ba’da t-ta’ammul wa-l-ikhtirā’*]. This is so, because that which is absurd does not exist [as a form] in the mind, as was already explained . . . It has already been apparent from the position of the Shaykh [Avicenna] that the existent in the mind—like the extramental existent—is fully subsumed under that which is existent with respect to the given. Their statement that the existent in the mind overlaps with the existent with respect to the given may be addressed in the following manner. The existent with respect to the given is of two types. One of them is that which does not exist by virtue of the part that someone’s consideration and invention plays. The second is that which exists *after* the consideration and invention of someone. The first is [called] the real given [*al-naḥs al-amrī al-ḥaqīqī*], which is the opposite of the second, the considered given [*al-naḥs al-amrī al-i’tibārī*]. The latter is the opposite of the absurd, meaning that it obtains, in reality, after consideration.<sup>106</sup>

This explanation, much of which is culled from al-Bihārī's self-commentary, makes plain that there are two broad categories in the typology adopted by the *Sullam* and most of its commentaries—that which is with respect to the given and that which is impossible *insofar as it is impossible*. The reader may now fully understand why I have chosen the infelicitous expression “with respect to the very given” to translate *fī naḥs al-amr*. In the context of the *Sullam*, which is inspired ultimately by certain pronouncements of Avicenna, the latter expression does not refer to mind-independent realities. Indeed, the products of mere mental concoctions (*ikhtirā'*) and considerations (*i'tibār*) insofar as they exist in the mind, *once they so exist*, can also be posited as the given. And as such, one may affirm or negate predicates of them, with respect to the given. As we noted above by means of various examples, anything, including the absurd, the nonexistent, second intentions, propositions, and so on, insofar as they can be conceptualized in a certain way, exist as such with respect to the given. *After they have been conceptualized*, they are taken as given posits about which claims may be made with respect to the given. This latter kind of givenness is termed considered givenness (*al-naḥs al-amr al-i'tibārī*), and it is this sense of *naḥs al-amr* that is generally operative in the *Sullam* and its commentaries.

Some further clarification of these points is in order, especially because of certain expressions in the *Sullam* and the commentaries that may fail to convey the intention of the general tradition. We observed above that the *Sullam* claims both that the absurd has neither mental nor extramental existence and that everything can be conceptualized, so as to exist with respect to the given. These two positions may appear to be contradictory. The point that the *Sullam* is making is spelled out, for example, in Mubīn's commentary. He writes that the absurd and other things that exist due to mental manipulation and invention have a mentally supposed existence (*wujūd farḍī*), not a mental existence (*wujūd dhihni*). “Thus,” he explains, “that which is absurd has no existence in the mind. For only that which is possible is in the mind, and this latter exists with respect to the given. So it is apparent that every existent in the mind exists with respect to the given.”<sup>107</sup> The immediate sense of these claims seems to run contrary to the foregoing conclusions, as it appears that Mubīn is claiming that *only* those mental objects that are not mentally invented exist with respect to the given. Yet the point he is making can be made to cohere with earlier statements that were quoted above. What Mubīn is highlighting is that the absurd is something that does not exist in the mind; as such, it does not exist with respect to the given. By the same token, if something does exist in the mind—say, a particular conceptualization of the absurd—then it does exist with respect to the given.

At this precise juncture, an interpretive corrective from his teacher's teacher is offered.<sup>108</sup> The given/the actual (*naḥs al-amr/al-wāqī'*), we are told, is understood in two ways: either it is the mode of the being of that about which something is reported, such that the report about it is correct (*kawnu l-maḥkī 'anhu*

*bi-haythu taṣiḥḥu* ‘*anhu l-hikāya*), or it is something’s being with respect to its very self, although this may be the case after mental abstraction (*kawnu sh-shay’ fī nafsīhi wa-law ba‘da intizā‘i l-‘aql*).<sup>109</sup> The former, therefore, presupposes the possibility of correspondence with a state of affairs; the latter simply requires the self-sameness of an entity. And since correspondence may not come about when false objects populate the mind, the first case is that sense of the given that only overlaps with that which is in the mind; on this reading, not everything in the mind is *fī nafs al-amr*. Thus, with respect to truth-conditions, that which is given only overlaps with that which is in the mind. By contrast, if that which is given is nothing more than the existence of a thing with respect to its self, then everything existent in the mind would also be contained within the given. Of course as noted above, one may always posit a mental object—even a false propositional claim—and, given as such, one may propose a second-order propositional claim about it that corresponds with it.

Returning, then, to the claim of the *Sullam* and the discussion in the preceding paragraph, we recall that the absurd as such does not exist in the mind; so it is not existent as a given. Yet whatever exists as conceptualized in the mind exists with respect to the given, and it may serve to capture that which itself cannot be conceptualized. Mubīn writes quite instructively about the universal that is conceptualized in one’s judgment about the absurd: “The conceptualization of this universal is such that the intellect supposes it as a tag and mirror for that absurdity, so that the judgment passes from the former to the latter.”<sup>110</sup>

The preceding details make it clear that the space of conceptualizations in the *Sullam* is capacious, and that, in some manner, the mind may conceptualize anything, including propositions and its own manipulations and concoctions. When these items are subjects of propositional claims that correspond to some *given* criterion of truth, they are said to be true with respect to the given. And when they are taken with respect to themselves as existents—even when they are mentally concocted—they exist as given. Given the orientations of the *Sullam*, these two ways of interpreting *fī nafs al-amr* may be collapsed when the given criterion of truth is the mentally determined object itself, given as such.

A final quotation from al-Sā’inpūrī should help us put much of the preceding in perspective. He writes, with reference to the mind’s consideration of the evenness of the number five (*thubūt zawjiyyati l-khamsa fī dh-dhihn*):

Everything that exists in the mind in accordance with the [mind’s] extraction—whether it corresponds or does not correspond [to something]—exists with respect to the given [*thābit fī nafsī l-amr*]. This is the case whether this given existence [*al-thubūt al-nafs al-amrī*] is so owing to the part that mere mental concoction and manipulation play or not owing to it. The secret [to understanding this] is as follows. If a sketcher sketches a sketch without intending from this act that [the sketch] should correspond to something or that it should be a sketch of something—regardless of whether it corresponds to something or not—[this sketch] exists with respect to

itself [*thābita fī naṣīhā*] after the sketcher has invented it [*ba‘da ikhtirā‘i n-naqqāsh*]. Thus, it makes no sense to say that this sketch corresponds or does not correspond to something, because neither correspondence nor its absence is intended by the act. However, if he sketches it with the intention that it is a sketch of something, and it turns out that [the sketch] fails to correspond to it—whether this failure is intentional or is owing to an error—it would be said that [the sketch] fails to correspond to it. The error, in this case, is not in the sketch *itself* insofar as it is something sketched [by the sketcher]. Rather, it is in the correspondence of the [sketch] with that of which it is a sketch. [Likewise,] the error is not in the fact of the imprinting of the form of the evenness of the number five in the mind *after* mental concoction and manipulation, because [this form] is imprinted in [the mind] *afterward, as an actual imprinting* [*li-annahā munṭabi‘a fīhi ba‘dahu inṭibā‘an wāqī‘iyyan*]. Rather, the error is only in the report, in that it does not correspond to that about which it is a report. But this is not what was intended [by the act of the sketcher].<sup>111</sup>

The gist of the matter, expressed by means of a truly apt analogy, is that any item can be made to exist as conceptualized by the mind. And this, in turn, means that it exists as a given (*fī naṣī l-amr*) in terms of its very given self (*fī naṣīhā*).<sup>112</sup> Thereafter, one may make certain propositional claims about this given. These would be true or false depending on whether the scope of the given is the thing itself as posited or is some broader given ontological space.<sup>113</sup> For example, after mental concoction, it would be given that five is even, so that the claim that all multiples of five are even would be true with respect to the given (*fī naṣī l-amr*). On the other hand, this statement would be false if the scope of the given extends beyond the mental manipulation—say, to the extramental given—and it is taken to serve as the proposition’s verifying criterion.

## CONCLUSIONS

The aim of this chapter was to present an overview of the structure, contents, and orientations of the *Sullam* and its commentarial tradition. Set in the form of a traditional logic textbook, with parts corresponding to the three most popular full-length works in the discipline in the Indian landscape, the *Sullam*’s broader enterprise was dialectical. The lemmata took into account existing and recent debates in various texts—among various disciplines and authors—and often concentrated on puzzles, even as they committed themselves to specific philosophical and logical stances. These lemmata were almost always pithy prompts that both responded to a prehistory and, in their allusiveness, called out to future hypertextual activity. At some times, the impulse for the latter was initiated via the implicit participation of the *Sullam*’s lemmata in the resolution of an issue and, at other times, by means of its act of embedding verbatim quotations from earlier works. Both these practices led the commentators to textual archaeology in the course of their own investigations; and often, in the pursuit of their own projects, they adopted the same genre-techniques as the *Sullam*—as a means to perpetuate the discursive space.

The examples of technical issues and arguments presented in this chapter are representative of the *Sullam* and its commentarial tradition. As we noted above, almost all the conundrums the hypotext highlights—ranging from the Liar Paradox to the judgments in conditional propositions to the subject terms of propositions—are related to the matter of mental considerations (*i' tibārāt*). If there is a broad leitmotif and orientation of the tradition of the *Sullam*, it is that it presses in favor of the argument that everything—including propositions, second intentions, and absurdities—can be conceptualized and that, as such, everything that is can be posited as a given (*fī nafs al-amr*) without regard to a consideration of the fact of the mental manipulation that led to its production. In principle, there are at least three related consequences of this position: all mental considerations can be treated as propositional objects by virtue of themselves; propositional claims, with respect to the given, can be made about these given objects as such; and logic can cover a capacious ontological domain.<sup>114</sup>

Yet these consequences were local reverberations in the broader system. They generally remained buried within the lemmata and independent treatises as logical and philosophical items meant to resolve difficulties; they do not appear to have led to paradigm shifts. There is an explanation for this fact that is often announced in the texts themselves. For in a number of cases, on the heels of extended investments in metalogical and second- and third-order considerations, the *institution* of the text tugs the discourse back to its origins with a sobering call: logic, one is reminded, is a tool of the sciences, and such discussions do not serve the purpose for which logic was invented.<sup>115</sup> With such pronouncements, the text reverts to the traditional discourse, even as the finer distinctions continue to be debated within the many interstices of the commentary. The machinery of the latter is the subject of the next two chapters.