

## To Shīrāz and Mughal India

### *A “Semantic Turn”*

Drawing to a close, I would like to give a sense of the intricacy of the operative plot to which the developments of 7th/13th- and early 8th/14th-century Arabic logic were an overture. With Ḥilli and especially Taḥṭānī, the new logic handbooks by Kātibī and Urmawī, containing many of the logical innovations made in the 7th/13th century, found their way into monumental dialectical commentaries that became the staple of advanced logical studies in large parts of the Islamic realm. In some sense, this was the end of an era, because after Taḥṭānī Arabic logic became once again largely tied to textual commentary, not least on his own works.<sup>1</sup> But as suggested in the last chapter, this did not mean that original research in logic subsided—quite the contrary. It appears to have become more intense.

More importantly, however, developments in other disciplines—especially in semantics/rhetoric and in the emerging science of imposition (*‘ilm al-waḍ’*)—had a palpable influence on theories of the copula and on the development of logic more generally. The late 8th/14th century may be described as a “semantic turn” in the rational sciences, where the most intensely examined philosophical questions became questions in philosophy of language.<sup>2</sup>

Couched in the evermore complex intertextual web of layered commentaries, authors developed their own thoughts in conversation with their predecessors within the discursive framework dictated by the rules of *ādāb al-baḥṡ* that had been codified by Samarqandī. In the late 8th/14th and throughout the 9th/15th century philosophers both reflected on the earlier tradition and forged something new. It is noteworthy, for example, that scholars rediscovered Fārābī’s theory of predication, and that they independently—though much in the spirit of Fārābī’s discussions of the semantics of particles—developed a new formal approach to the

semantics of the three Arabic word-classes, with a marked focus on explaining the semantics of particles and the copula.

TAFTĀZĀNĪ, BALĀGHĀ, AND THE DEVELOPMENT  
OF 'ILM AL-WAḌ'

There are several strands along which discussions on the copula continued. Many of the texts containing them have yet to be discovered. But even the available sources are too numerous to be taken into account in any representative manner.<sup>3</sup> So let us pick only one strand of the tradition. Pursuing further the same line of transmission, there was another scholar—reportedly a student of Taḥṭānī and Ījī, though the sources are late and there is no internal evidence of a personal relation<sup>4</sup>—by the name of Sa'd al-Dīn al-Taftāzānī (d. 792/1390). He wrote one further enormously influential handbook on logic titled *Tahdhīb al-manṭiq* (The Revision of Logic).<sup>5</sup> Three commentaries on this work were particularly influential as teaching texts well into the 14th/20th century across the Eastern Islamic world: the first in Ottoman Turkey and Mughal India (by Dawānī), the second at the al-Azhar College in Cairo (by 'Ubaydullāh Khabīṣī [fl. 950s/1540s?]), and the third in Safavid and Qajar Iran (by Mullā 'Abdullāh Yazdī [d. 981/1573]).<sup>6</sup> We shall focus on the first strand here, in Shīrāz and then in Mughal India.

Ījī, who is best known for his seminal *kalām* work titled *al-Mawāqif fī 'ilm al-kalām* (Stations in Rational Theology), wrote not only a treatise on *ādāb al-baḥṭh* that was to replace Samarqandī's *al-Risāla al-Samarqandiyya*. In the new methodological sciences, he also redacted a short epistle on semantics (*al-Risāla al-waḍ' iyya*) of no more than a folio, which inaugurated a new formal discipline called 'ilm al-waḍ'.<sup>7</sup> We shall see that this new science provided the tools for a new conceptualization of the semantic role of particles and the copula. It was masterfully employed for that purpose by al-Sayyid al-Sharīf al-Jurjānī.

*Taftāzānī and the Influence of balāgha*

Before that, however, there was already in Taftāzānī's discussion of the copula a discernible influence from the tradition of Arabic semantics/rhetoric ('ilm al-balāgha). It is perhaps no coincidence that Ījī also wrote two important works in that discipline, namely, *al-Fawā'id al-ghiyāthiyya* (The Useful Points for Ghiyāth [al-Dīn Muḥammad]) and *al-Madkhal fī 'ilm al-ma'ānī wa l-bayān wa l-badā'i* (Introduction to the Science of Semantics, Clear Exposition, and Stylistic Figures of New Poetry).<sup>8</sup> This discipline had first been codified in Abū Ya'qūb al-Sakkākī's (d. 626/1229) *Miftāḥ al-'ulūm* (Key to the Sciences) and was then widely disseminated through Jalāl al-Dīn al-Qazwīnī al-Khaṭīb's (d. 739/1338) more accessible summary of it, the *Talkhīṣ al-Miftāḥ* (Epitome of the Key).<sup>9</sup>

Taftāzānī, a central figure linking Taḥṭānī and Ījī to the later tradition, wrote—besides his *Tahdhib al-manṭiq*—an influential commentary on Kātibī’s *Shamsiyya*. Like Ījī, he wrote several influential works in the tradition of ‘ilm al-balāgha, most importantly *al-Sharḥ al-Muṭawwal ‘alā Talkhīṣ al-Miftāḥ* (The Long Commentary on [Qazwīnī’s] Epitome of the Key).<sup>10</sup> But unlike Ījī, he was at the same time an influential logician. The confluence of the different semantic disciplines—‘ilm al-ma‘ānī, ‘ilm al-waḍ‘, and logic—can be discerned in Taftāzānī’s treatment of the copula.

While Taftāzānī agrees with Taḥṭānī that there are four distinct parts of the proposition and that the copula may be employed to signify both the nexus between subject and predicate and the judgment-nexus, he uses the grammatical terminology also typically used in *balāgha* works to explain that the nexus is in fact a single entity that primarily attaches to the predicate. One of the constituting elements of ‘ilm al-balāgha was semantics (‘ilm al-ma‘ānī), and it consisted of discussions on the multiple ways in which a grammatical predicate (*musnad*) may connect to a grammatical subject (*musnad ilayhi*).<sup>11</sup> This is the terminology Taftāzānī employed in his commentary on Kātibī’s *Shamsiyya*:

TEXT 73: SA‘D AL-DĪN AL-TAFTĀZĀNĪ, *SHARḤ AL-RISĀLA AL-SHAMSIYYA* (ṢĀLIḤ 2011), 204.3–205.02

This is why they limited the utterances to three, for the copula signifying the judgment [also] signifies this nexus. When the judgment obtains, then the property of being a subject applies to the term on which judgment is passed (I mean: because it is being judged and made the grammatical subject [*musnad ilayhi*]), and the property of being a predicate applies to the term by which judgment is passed (I mean: because it is being predicated and made the grammatical predicate [*musnad*]). [...] The true answer is that the nexus between two terms is a single entity that exists whenever [they] are joined. When the predicate is considered, it may be called the “ascription” (*isnād*) because it is being ascribed [to something]; when the subject is considered, it may be called the “ascribed-to” (*al-isnād ilayhi*) because [something] is being ascribed to it. The distinction between the “ascription” and the “ascribed-to” is realized by the fact that the former is an expression of the nexus insofar as it attaches to the predicate.

The asymmetry of the subject-predicate relation is here explained in terms of the asymmetry evident in the grammatical terminology of *isnād*. Just like Samarqandī, Taftāzānī argues that being a subject and being a predicate are facts that only obtain once a judgment is made. Picking up on the discussions about whether the nexus that is a property of the subject and the nexus that is a property of the predicate are to be conceptually distinguished, he argues that this is just a pseudo-distinction, because it is simply a matter of perspective parallel to the grammatical distinction between *musnad* and *musnad ilayhi*. Further, he thinks that that was Rāzī’s position:

TEXT 74: SA‘D AL-DĪN AL-TAFTĀZĀNĪ, *SHARḤ AL-RISĀLA AL-SHAMSIYYA* (ŞĀLIḤ 2011), 205.3–11

What the Imām [Rāzī] said in the *Mulakhkhaṣ*, namely that the nexus that is part of the proposition is that of the subject being a subject, does not contradict—as most of the later logicians have falsely assumed—what he says in the commentary on the *Ishārāt*, namely that the copula expresses the nexus of the predicate to the subject and hence the modality of the proposition is the same as the quality of that nexus. But it is obvious that the nexus of the predicate is a property of the predicate, i.e., being-a-predicate, that is: an ascription. [What Rāzī said is correct] because the nexus of the predicate to the subject is [also] a property of the subject, that is, its being such that the predicate is connected to it, I mean: an ascribed-to. Just as the predicate may be described by its nexus to the subject, so may the subject be described by the nexus of the predicate to it. If we now make the nexus to the subject part of the property [qualifying the subject], then it is a property of the subject. Otherwise, it will be a property of the predicate. This is just like when there is an image of a thing in the mind; this is a property of the mind, as we said before. Remember this!

Taftāzānī reads Rāzī as claiming what in fact is his own position: the nexus is a relational property. Depending on whether the subject or the predicate is in focus, it will be a relational property of the subject, or of the predicate. The parallel to be drawn from the comparison with a mental image being a property of the mind is presumably this: Suppose you have an image of a red apple before your mind. The relation between the image and your mind is now similar to the relation between subject and predicate. While you may say that it is a property of the image that it is produced by your mind, the more natural way to think about it is to say that the mental image is a property of your mind. Likewise, you may say that it is a property of the subject that the predicate is ascribed to it, but the more natural way to put it is that the predicate’s disposition to be ascribable to the subject is a property of the predicate. This idea is however difficult to square with Rāzī’s insistence that the nexus that is part of a proposition is a property of the subject.

Raising the question whether the copula is in fact an auxiliary (*adā*) or a pronoun (*damīr*), Taftāzānī uses terminology that is otherwise used in *‘ilm al waḍ‘*. Instead of calling the meaning of an auxiliary “incomplete” (*ghayr tāmm* or *nāqis*), he uses “dependent” (*ghayr mustaqill*).<sup>12</sup> He objects to both options, and questions the idea that hyparctic verbs are copulae, eventually proposing a version of Taftānī’s account:

TEXT 75: SA‘D AL-DĪN AL-TAFTĀZĀNĪ, *SHARḤ AL-RISĀLA AL-SHAMSIYYA* (ŞĀLIḤ 2011), 206.1–207.4

The first [objection] is that if what is understood from an utterance determined that such utterance is an auxiliary, then all nouns that signify connections or relations would have to be auxiliaries.

The second is that if the utterance “was” (*kāna*) were a copula, then “Every old man was a youngster” would convert to “Some youngster was an old man” according to the conversion rules. But since the converse of this proposition is “Some of what was young is an old man” we know that the utterance “was” (*kāna*) is part of the predicate and signifies the specification of time.

The third is that the utterance “he” (*huwa*) in “Zayd is knowing” (*Zayd huwa ‘ālim*) is a pronoun referring back to Zayd as an expression of him, which is what the grammarians call a subject (*mubtada’*), and as such has no signification of a nexus whatsoever. If I mean by this what they call the partitive or adjuvative pronoun, then why is it not [needed] in “Zayd [is] knowing” (*Zayd ‘ālim*)? If it is assumed that it is in there, then [mentioning] it only serves to disambiguate and emphasize.

The true answer is that what comes after it is a report (*khbar*) and not an adjective (*na‘t*), and that it has no signification of the nexus whatsoever. What should be understood from this is that the copula in the Arabic language consists in the vocalizations that mark the declension. But the nominative vocalization must be real or assumed, otherwise it does not work. For if we say “Zayd, knowing” (*Zayd, ‘ālim*) in the sense of a list and without case-marking vocalization, no copula is understood from it, or any ascription. But if we say “Zayd is knowing” (*Zaydun ‘ālimun*) with nominative markers, then it is understood. Hence, the copula is the case-marker [in Arabic]. [[This is amply clear, and I don’t know how this could have escaped the notice of anyone. How could anyone think otherwise?

Based on what we said, if the subject and the predicate are both indeclinable (*mabniyyin*), then the proposition is binary. If they are both declinable, then it is a complete ternary [proposition], and if only one of them is declinable, then it is a deficient ternary [proposition]. I said: If the copula is expressed as a case-marking vocalization, then the binary proposition is one in which the case-marking vocalization is assumed, not one in which it is realized. The ternary one is [a proposition] in which it is realized. The completeness or deficiency of the ternary [proposition] depends on the completeness of the realization [of the vocalization] or lack thereof. All of this is because what is clearly observable when a proposition is being understood, is the existence of a copula, by which I mean that one cannot say about a proposition that it is true or false except if there exists a copula (and a nexus).]]<sup>13</sup> And in general, the utterance “he” (*huwa*) is not employed in the Arabic language as a copula, as can be seen by the fact that none of the serious scholars use it, except the verifying philosophers.

Taftāzānī rejects the use of “*huwa*” as a copula and states that in Arabic the vocalizations play the same role as the copula plays in other languages. From the following remarks it is clear that he was puzzled by the questions concerning the role of the copula and that he set out to do research, both historical and empirical, to find answers to these questions.

TEXT 76: SA‘D AL-DĪN AL-TAFTĀZĀNĪ, *SHARḤ AL-RISĀLA AL-SHAMSIYYA* (ṢĀLIḤ 2011), 207.5–209.2

I was immediately wondering how to solve these problems and began inquiring into the truth of the matter until I found in *The Book of Utterances and Letters*<sup>14</sup> by the

verifying philosopher Abū Naṣr al-Fārābī something indicating the following. They [i.e., the philosophers] never meant that the utterance “*huwa*” in Arabic is established for the copula, and they did not use it in this way. Rather, what they meant is that the philosophers translated it (*naqalūhā*) like that. He said that when Aristotle’s philosophy was translated into Arabic, the philosophers—who spoke Arabic and forged their own Arabic expressions for the meanings [they found in] Aristotle’s philosophy and logic—needed an utterance they could use instead of the Persian *hast* and the Greek *estin*. Those are the words that signify the a-temporal copulation of a predicate-name to a subject. But they did not find any expression in Arabic that was originally coined for that [meaning]—as opposed to the temporal copula. For there are the hyparctic verbs like “was” (*kāna*), “is” (*yakūnu*), and “will be” (*sayakūnu*) signifying that. So they used those instead of the Persian *hast* and the Greek *estin*. But some then preferred the expression “*huwa*” because it had already been in use metonymically (*kināyatan*), as in “This, he’s Zayd” (*hadhā huwa Zayd*) or “This, he’s the poet” (*hadhā huwa al-shā’ir*). The utterance “*huwa*” is distant enough [in its meaning] to be used here metonymically. So they came to use “*huwa*” in Arabic instead of *hast* in Persian and they [even] formed a *maṣḍar* from it, “*huwiyya*,” just like “humanity” (*insāniyya*) from “human” (*insān*). Some also chose to exchange “*huwa*” for “*mawjūd*” and they replaced “*huwiyya*” by “*wujūd*” and “*kāna*” “*yakūnu*,” and “*sayakūnu*” by “*wujida*,” “*yūjadu*,” and “*sayūjadu*.” These were [Fārābī’s] words.

Based on the above: If the utterance “*huwa*” is expressed, as in “Zayd, he’s knowing” (*Zayd huwa ‘ālim*), then the proposition is called ternary on account of its having three parts on the level of utterances. If it is omitted because the mind perceives its meaning, then it is called binary on account of its being shortened to two [utterances]. The distinction is based on the mind’s distinguishing the use of two copulae together, or using only the temporal one, or only the a-temporal one, either [as being] necessary or possible or impossible, so that there are nine (combinations).

It is remarkable that Taftāzānī went back to Fārābī’s discussions in the *KH* (and perhaps *AM*?) and studied them in detail. Leaving aside the Andalusian philosophers, no one in the tradition surveyed here showed awareness of Fārābī’s linguistic theory to this extent. Noteworthy is also that he uses the term “*kināya*” (roughly, metonymy) for the metonymical use of “*huwa*” that predisposed it to be transferred to a copulative use by the early philosophers: *kināya*, the use of a word to signify something that is logically related to its original meaning, is one of the *balāgha* notions central to ‘*ilm al-bayān*.<sup>15</sup>

Taftāzānī went further:

TEXT 77: SA‘D AL-DĪN AL-TAFTĀZĀNĪ, *SHARḤ AL-RISĀLA AL-SHAMSIYYA* (ŠĀLIḤ 2011), 209.2–10

But [Kātibī] said only “in some languages,” for we don’t know if it is possible to omit the copula in all languages. Regarding what has been said about the Persian language, namely that it is always required to mention a copula, either as a simple utterance or as part of the vocalization, this is only the case when the predicate is not a verb, as in “Zayd came” or “Zayd comes” (*Zayd mī āmad va āyad*). We thoroughly investigated the matter and found that in all languages that we had access to and

that do not require the use of a copula (based on what people explained to me), the predicate statement-word by itself signifies the nexus. Know that it is evident that the rules of logic do not comprise propositions whose predicate is a verb, i.e., sentences that the grammarians call verbal sentences (*jumla fi 'liyya*), like “Zayd stands” (*qāma Zayd*). But [this sentence] may be reinterpreted as “Zayd is a person to whom ‘standing’ applies.”

In the end, Taftāzānī sees himself corroborated by his historical and empirical research. The discussions on the use of “*huwa*” as a copula all have been misdirected, simply because such use was never meant to be more than a rendering of the Greek. In Arabic, vocalizations are enough for that purpose. Many languages need not express a copula-word, not even Persian when the predicate is a verb. In general, verbal predicates always include the signification of the copula, and even though verbal sentences are not used in syllogistic premises, all verbal sentences can be suitably paraphrased. Some *balāgha* notions central to ‘*ilm al-ma‘ānī*’ (*isnād*) and ‘*ilm al-bayān*’ (*kināya*) clearly had an influence on Taftāzānī’s approach to the question of the semantic role of the copula. Even though he also uses terminology associated with ‘*ilm al-waḍ‘*’ literature (e.g., *mustaqill*), it is difficult to determine how far the influence went here.

### *The Influence of ‘ilm al-waḍ‘*

When compared to *balāgha*, which deals with applied semantics, ‘*ilm al-waḍ‘*’ may be said to deal with theoretical or foundational semantics. The discipline of *balāgha* developed out of the long tradition of Arabic literary criticism, out of the tradition of writings on the inimitability of the Qur’ān (*i jāz*), and out of legal theory (*uṣūl al-fiqh*), arguably subsuming influences from Aristotelian Poetics, Rhetoric, and Logic. But ‘*ilm al-waḍ‘*’ was entirely new and its genealogical story remains less clear, as, in fact, much else about this strange new science.

Other than an unpublished dissertation and three short articles by Bernhard Weiss, no substantial scholarship on this new science exists in any Western language, and the vast majority of the over forty commentaries on the short foundational and eponymous work for this new science remains unedited.<sup>16</sup> An indication of the significance of this new science, besides the sheer number of commentaries on Ījī’s *al-Risāla al-waḍ‘iyya*, is the fact that the foundational principles of Ījī’s short treatise on semantics came to be included in a number of pivotal works from different disciplines, ranging from jurisprudence (*uṣūl al-fiqh*), morphology (*al-ṣarf*), and theology (*kalām*), to semantics/rhetoric (*balāgha*) and logic (*manṭiq*).<sup>17</sup>

If Taftāzānī was aware of and perhaps influenced by Ījī’s *Risāla*, it was al-Sayyid al-Sharīf al-Jurjānī who visibly tied together *balāgha*, ‘*ilm al-waḍ‘*’, and logic. Before we turn to his works that repeatedly make reference to ideas developed in Ījī’s *Risāla*, a brief outline of some general ideas formulated there is in order. Roughly, ‘*ilm al-waḍ‘*’ is the science of the founding of language—except that it

does not ask who founded it or how it came into being.<sup>18</sup> The term *waḍʿ* is used in the tradition for the imposition or assignment of utterances (*alfāz*) to ideas or concepts (*maʿānī*). It was widely accepted that it was Allah who made the assignments for all utterances and meanings when he taught Adam the names of all things, as is stated in the Qurʾān (al-Baqara, Q2:31). After some initial discussions about the origin of language that were inherited from the Greek tradition, the Arabic tradition mustered little opposition to the idea that language was conventional (i.e., established by *thesis*), and not natural (i.e., established by *physis*).<sup>19</sup>

Hence, the science of imposition was not out to find answers to the question of the origin of language. Rather, Ījī's *al-Risāla al-waḍʿiyya* sought to categorize different types of meaning assignments and thus to lay bare the underlying semantic structure of all the different bits of the Arabic language. The question of the founder of language (*wāḍiʿ al-lughā*) was eventually irrelevant to *ilm al-waḍʿ*. Even though it may rightly be called an "Islamic" science, it was a study of the semantics of natural language that could be carried out in any language and cultural context. It was in a sense the study of the constraints on linguistic meaning by asking how the founder of language must have conceived of language so that it could work as well as it does.

Ījī distinguishes three different sets of ways in which the founder of language imposed linguistic items for meanings. The first is a distinction between general (*ʿamm*) and particular (*khāṣṣ*) imposition.<sup>20</sup> He argues that particles and pronouns, even though they can be applied to many referents, always fix a particular referent in a speech-situation. Second, he distinguishes between the imposition of morphological generality and particularity. Structural features of word formations can be understood as a type of morphological generality, in the sense that for example *fāʾ il* structures will always signify an agent under normal conditions, even though the referent can be anything whatsoever. And third, he distinguishes between impositions of linguistic items that need something additional to refer to their metaphorical meaning, and impositions that directly refer to their referents.

One radically novel aspect of Ījī's theory was his description of how the reference of pronouns is determined.<sup>21</sup> Pronouns are established as a general imposition for a specific reference (*waḍʿ ʿamm li-khāṣṣ*). Against the ideas of his predecessors who assumed that meanings were ideas arising in the mind of the founder of language for which utterances were imposed like tags for artifacts in a museum, Ījī noted that this account was inadequate for certain indexical expressions like personal, demonstrative, and relative pronouns—and, by extension, to particles of all kinds.

Take our pronoun "*huwa*," which logicians have been using as a copula. On the old account it is inexplicable how "he" can refer now to Zayd and then to ʿAmr. If "he" referred to a universal or a class, say the class of "absent male persons" (*ghāʾib*), it remains unexplained how it can refer to particulars. So we have to assume, according to Ījī, that the founder of language had this general idea arising



in his mind, but then established “*huwa*” as referring not to the class of “absent male persons,” but to every single particular member of that class individually. The specific reference is then fixed in any given context or speech-situation (*qarīna mu‘ayyana*).

For Ījī, particles semantically function in a similar way: they are established as a general imposition for a specific reference (*waḍ‘ ‘āmm li-khāṣṣ*). Particles all signify relations. They are established—on the basis of a universal idea—as referring to each particular instance of whatever relation they signify. However, in contrast to pronouns, their reference is fixed for each given context by supplying the *relata* of that relation. This novel semantic theory for indexical pronouns and for particles was taken up by Jurjānī and employed in his discussion of the copula.

#### AL-SAYYID AL-SHARĪF AL-JURJĀNĪ AND THE “SEMANTIC TURN”

Zayn al-Dīn Abū l-Hassān al-Jurjānī (d. 818/1413), who because of his noble lineage is called al-Sayyid al-Sharīf al-Jurjānī in the sources, was an important figure in the development of Arabic logic, linking Taftāzānī to Dawānī.<sup>22</sup> For a while he enjoyed the same patronage as Taftāzānī, who was twenty years older, at Timur’s court in Samarqand. In the years between 789/1387 and Taftāzānī’s death in 792/1390 the two scholars reportedly became intellectual rivals engaging in public court debates. Earlier in his life, after some time spent in Anatolia, Jurjānī studied with a mysterious Mubārakshāh in Cairo. Mubārakshāh had read the *Mawāqif* under Ījī himself and read it with Jurjānī, who would later write the definitive commentary on it. He likely also redacted his glosses on Taḥṭānī’s logic under Mubārakshāh’s guidance and might have been sent to Cairo for this reason by Taḥṭānī himself.<sup>23</sup> Eventually Jurjānī settled as a teacher in Shīrāz, where Dawānī’s father was among his students. After his stay in Samarqand, he returned to Shīrāz in 807/1405 and stayed there until his death.<sup>24</sup>

Jurjānī wrote a set of influential glosses on Taḥṭānī’s commentaries on the *Shamsiyya* and the *Maṭāli‘* as well as a short (“*Sughrā*”) and long (“*Kubrā*”) introduction to logic in Persian.<sup>25</sup> The glosses on the *Lawāmi‘* only cover material from the first part, on the acquisition of concepts, heavily focusing on semantic questions, and never even reach the part on the acquisition of assent, where the parts of the proposition are discussed. Nevertheless, Jurjānī has much to say about the copula and the nexus. For example, he treats at length the question about third-person inflected verbs that Avicenna had raised, which Taḥṭānī had discussed extensively.<sup>26</sup>

As El-Rouayheb has pointed out, Jurjānī’s logical œuvre exemplifies a larger trend of moving away from the technicalities of the syllogistic and toward a focus on issues pertaining to semantics and what we today call “philosophy of language.”<sup>27</sup> For example, in his glosses on the *Lawāmi‘*, Jurjānī spends a good third just on Taḥṭānī’s poem, raising philosophical questions as he considers the *matn*

lemma by lemma. The lemmatic comments, however, do not serve a primarily exegetical purpose. Rather, they are often taken as prompts for independent philosophical arguments.

Jurjānī seems to have also played an instrumental role in the ascendancy of Shīrāz as a major center of philosophy in the 9th/15th and 10th/16th centuries.<sup>28</sup> His glosses came to be read alongside Taḥṭānī's commentaries in Shīrāz and far beyond, and his emphasis on semantic matters certainly influenced the later tradition. His immediate influence is reflected in the works of Dawānī, who wrote his own super-glosses on Jurjānī's glosses on the *Lawāmi*.<sup>29</sup>

While the glosses on the *Lawāmi* end before the sections where the parts of the proposition are discussed, Jurjānī's shorter gloss on Taḥṭānī's *Shamsiyya* commentary treats the issue, showing awareness of Taftazānī's commentary:

TEXT 78: AL-SAYYID AL-SHARĪF AL-JURJĀNĪ, ḤĀSHIYA 'ALĀ TAḤ RĪR  
AL-QAWĀ'ID AL-MANṬIḤIYYA (BĪDĀRFAR), 233.7 (INFRA)–234.13 (INFRA)

*His words: The utterance that signifies the occurrence of the nexus also signifies the nexus itself. I say: [That is, it has a] clear and regular signification, but also an implicational (iltizāmiyya) signification.*

*His words: And [the nexus] is not distinct from its consisting of that on which and that by which judgment is passed. I say: He means that the nexus which connects that on which judgment is passed with that by which judgment is passed by means of a judgment is conceived insofar as it is a state obtaining between the two, and it is a tool (alā) that helps to understand their state. But this meaning is not distinct [from the two]. This is correct, because [the meaning] is something on which judgment is passed or by which judgment is passed, so the utterance signifying this is an auxiliary (adā).*

*His words: But it may be in the form of a noun, like "huwa" in the example mentioned. I say: This issue has been debated. The utterance "huwa" in "Zayd, he (huwa) is knowing" signifies Zayd, because the suffix pronoun refers back to him and in this case is not a copula. It has been said that in this proposition it is the nominative vocalization ('ālim-un) because it signifies the connection (irtibāṭ) and the [grammatical] relation (isnād). The proof for this is that when simple [utterances] are spoken and the [vocalized] endings are muted, like with "Zayd," [instead of the nominative Zaydun] then no composition obtains, nor is any [grammatical] relation signified.*

Or it is in the form of a statement-word, like the defective "kāna" and its conjugations, and then it is called a temporal [copula], because in contrast to "huwa" and its sisters it signifies time. For those do not signify time at all. This issue has been debated as well. For what is signified by "kāna" is something additional to what is signified by the copula, because "kāna" signifies a time that is not part of what the copula signifies.

*His words: This points to the fact that languages are different with regard to how the copula is used. I say: It is said that the point is precisely that there are three things to consider. Necessity, impossibility, and possibility, and to multiply those by three further things. These are the joint presence of two copulae together, of the temporal copula alone, and of the non-temporal copula alone, resulting in the obvious number [i.e., nine].*

Like Taftāzānī, Jurjānī agrees with Taḥṭānī that there are four distinct parts of a proposition. And like Taftāzānī, he explains the nexus, expressed by the vocalization in Arabic, as being the relation of *isnād*. The number of the possible combinations, depending on whether both temporal and atemporal copulae are used together, or each of them separately, for each of the modalities, is the same as Taftāzānī's. But the explanation of why the nexus is a single entity is different.

This explanation (underlined in the text) is based on ideas Jurjānī has elaborated more fully elsewhere, notably in his glosses on Taftāzānī's *Muṭawwal*.<sup>30</sup> Jurjānī considered these ideas important enough to redact them as independent short treatises titled *Risāla 'alā Taḥqīq ma'nā al-ḥarf* (Epistle on the Verification of the Meaning of Particles) and *al-Risāla al-Mir'ātiyya* (Mirror Epistle).<sup>31</sup> A closer look at the *Risāla 'alā Taḥqīq ma'nā al-ḥarf* will suffice to demonstrate how Jurjānī incorporated developments in *balāgha* and *'ilm al-waḍ'* to reconceptualize the semantic role of the copula.

A short treatise of a mere two folios, the mirror epistle is a fascinating testimony that has however not yet received a satisfactory interpretation.<sup>32</sup> To appreciate the text fully, it needs to be read in connection with the discussions on the copula. The treatise consists of four parts: an introductory simile in which a mirror is likened to the object of mental perception, a discussion of the semantics of particles and names, a discussion of the semantics of verbs, and a section containing three objections and replies. The introductory mirror simile is key to understanding the discussion of the semantics of names, particles, and verbs.

Jurjānī explicitly relates the mirror analogy to the predicative nexus in propositions in such a way that the mirror is to eyesight what the nexus is to mental perception:

TEXT 79: AL-SAYYID AL-SHARĪF AL-JURJĀNĪ, *RISĀLA 'ALĀ TAḤQĪQ MA'NĀ AL-ḤARF* (AKTAŞ 2018), 83.3–18

Know that the relation (*nisba*) between mental perception and its perceptible objects is like the relation between eyesight and its visible objects. If you look into a mirror, you see an image in it. Now there are two possible situations for you. First: You are paying attention to that image, intentionally observing it, and thus turning the mirror into a tool for seeing [the image]. It will not escape your notice that it is a mirror, even if you are seeing it in this way. But it is not [a mirror] inasmuch as you believe that you judge it to be [so] and turn your attention to its properties. Second: You turn your attention to the mirror itself and you intentionally look at it, such that it is appropriate for you to make a judgment concerning it. In this case you observe the image only in a secondary way because your attention is not directed toward it.

It is clear that visible objects are sometimes seen by themselves, and sometimes as a tool to see something else. Now, draw the analogy for these meanings perceived by mental perception—I mean, the internal faculty—and clearly bring it out for the following sentences: “Zayd is standing” (*Zayd qā'im*), and “The nexus of standing to Zayd” (*nisbat al-qiyām ilā Zayd*). Again, there are two situations for the way in which you perceive the nexus of standing to [Zayd]. But the nexus in the first situation is perceived inasmuch as it is a state of affairs obtaining between Zayd and

standing, so it is a tool for getting to know the state of affairs both are involved in. It is as if [the nexus] was a mirror for seeing the two. That is why it is impossible to pass judgment on [the nexus] or use it for passing judgment [on something else]. In the second situation, [the nexus] is regarded by itself and intentionally perceived as such. Now you can pass a judgment on it. Whereas, in the first situation, the nexus is a concept that cannot be independently understood, in the second situation, it is a concept that can be understood independently. Just as there is a need to express concepts that are seen by themselves and that are independently understood, so there is a need to express meanings that are seen for something else, and that cannot be independently understood.

To clarify the nature of the predicative nexus and to give an account of why it is that the nexus can be an object of both conception and assent, Jurjānī distinguishes between two distinct ways in which the nexus as a mental object can be perceived. The first is like a mirror, in that the object is not really perceived in itself, but only as a tool to perceive a state of affairs, like an image seen in the mirror. On this view, the nexus is no more a part of the state of affairs than the mirror is a part of the image it reflects. The analogy stops, presumably, at the point where our minds cannot directly perceive a state of affairs without the tool of the nexus, whereas our eyes can very well see the image that the mirror reflects, directly and without the help of the mirror.

The advantage of this account is that Jurjānī need not postulate more than one nexus, as logicians from Rāzī onward have done, and thus avoids all theoretical complications that come with it. The account also forestalls any regress arguments because the nexus is not a real relation connecting two items to form a state of affairs. It just is the tool necessary for us to be able to conceptualize that state of affairs. As such it is the object of conception, but only accidentally, and it can only be conceptualized once the constituents of that state of affairs are conceptualized with it. It cannot (yet) be the object of assent. It is, as Taftāzānī in the terminology of *‘ilm al-waḍ’* had also characterized auxiliaries, semantically dependent (*ghayr mustaqill*) because it cannot be understood independently from its *relata*.

The second way the mind can perceive the nexus is in the way that one can look at a mirror itself, as for example, to use Weiss’s formulation, “when cleaning it.”<sup>33</sup> On that view the nexus is a concept that can be independently understood and thus can fill the subject or predicate place of a proposition. Presumably you can, for example, judge that the nexus is possible or necessary, or that it is true or false, or even, as Jurjānī does, judge that the nexus is the tool necessary for getting to know a state of affairs.

On this account, the reason that there is only one entity that is the nexus between subject and predicate is not simply that it is the relation of *isnād* that may be considered from the perspective of the *musnad* or the *musnad ilayhi*, as Taftāzānī claimed earlier. Jurjānī here gives more fundamental grounds. What he said in his glosses on Taḥṭānī’s *Shamsiyya* commentary given earlier has to be understood in the context of the mirror analogy. The nexus is merely the tool,

like a mirror, for conceiving a state of affairs *in such a way that eventually it can be judged to be true or false*. It is nothing over and above the constituting elements of the state of affairs itself. But it can be conceptually isolated and made a mental object that can then be judged, just as a mirror can be regarded by itself and judged (to be clean or dirty, or whatever). This does not mean, however, that there is more than one nexus. What logicians have called the judgment-nexus is only distinct in the sense that the nexus needs to be viewed in the second way to pass a judgment.

Based on the mirror analogy, Jurjānī next gives a summary account of the semantics of particles—under which copulae presumably also fall—that is largely lifted out of the *‘ilm al-waḍ’* tradition. Particles as essentially relational in meaning semantically behave exactly like the copulae—or whichever signs there are that signify a nexus.

TEXT 80: AL-SAYYID AL-SHARĪF AL-JURJĀNĪ, *RISĀLA ‘ALĀ TAḤQĪQ MA ‘NĀ AL-ḤARF* (AKTAŞ 2018), 84.1–8

Now that this is settled, we say: “Beginning” (*al-ibtidā*) has the following meaning. It is a state for something other than it, that is however still attached to it. When the mind intentionally regards [this concept] by itself, it is a concept that is independent by itself as long as it is regarded by itself. It is appropriate to be judged or to be used to judge [another concept]. What is attached to it is necessarily perceived in a secondary way and generally speaking accidental. In this sense, it is signified by the utterance “beginning” (*ibtidā*). After regarding it in this way you can supply a specific attachment to it. So we say for example: “The beginning of my trip to Başra” and here the independence of the concept is retained.

When, however, the mind regards it insofar as it is a state of affairs obtaining between the trip and Başra, [the mind] turns it into a tool to get to know the state of affairs they are involved in, and the concept is no longer independent by itself. It is no longer appropriate to judge it or use it to judge [another concept]. In this sense it is signified by the expression “from” (*min*).

Jurjānī extends the mirror analogy further to the semantics of particles. Just as the nexus may be perceived by itself as a mirror may be seen by itself, so the meaning of particles may be seen in the same way. As such it is independently understood and can fill the subject- or predicate-place of a proposition. When we want to refer to this independent meaning, naturally we cannot use a particle, but must use a noun, just as we have to use a noun (*‘nisba*) to refer to what the copula signifies. The isolated meaning of the particle “from” (*min*) is “beginning.” That isolated meaning is universal because it is applicable to many things. It can be independently understood, and it can be in the subject- or predicate-place of a proposition.

It is this general idea the founder of language has before the mind when establishing the particular reference to every instance of “beginning” for the particle “from” (*min*), as Ījī laid out in *al-Risāla al-Waḍ‘iyya*.<sup>34</sup> Similar to the reference of pronouns, the reference of particles like “from” (*min*) needs to be fixed by

context. Since the meaning of particles is like the nexus and the mirror a tool for getting to know a relational state, the meaning becomes fixed only once the *relata* are supplied.

Nouns and particles are counterparts in that nouns express the isolated and independent idea that particles express as a function of the *relata* that fix the specific particular reference. Verbs, which Jurjānī discusses next, combine both aspects in their semantic structure:

TEXT 81: AL-SAYYID AL-SHARĪF AL-JURJĀNĪ, *RISĀLA ‘ALĀ TAḤQĪQ MA ‘NĀ AL-ḤARF* (AKTAŞ 2018), 85.3–9

Now that you have learned the meaning of “name” and “particle,” know that a verb (*fi ‘l*), like “hit” (*daraba*), signifies a concept that can be independently understood—which is that of “event”—and a meaning that cannot be independently understood, but that is a tool for seeing something else. I mean the particular judgment-nexus in the earlier example. It is regarded insofar as it is a state of affairs between two terms and a tool for getting to know the state of affairs they are involved in. But one of them is determined by the signification of the utterance, whereas the other—even if it is determined in itself in some way—is regarded in just this way. Otherwise it would not be possible for that nexus to obtain. But the utterance signifies it, even though the nexus that is a part of what the verb signifies does not obtain except when the agent (*fā‘il*) is also considered. Hence, [the agent] inevitably needs to be mentioned, too, just as in the case with what is attached to the particle.

Verbs are mixed creatures for Jurjānī. Their semantic content consists of two elements. One element functions like a name, signifying a concept that can be independently understood, i.e., “hitting” or whatever event a given verb signifies. The other element functions like a particle, signifying a nexus that at first serves as a tool for conceptualizing a state of affairs, just like the mirror image. However, there is a difference:

TEXT 82: AL-SAYYID AL-SHARĪF AL-JURJĀNĪ, *RISĀLA ‘ALĀ TAḤQĪQ MA ‘NĀ AL-ḤARF* (AKTAŞ 2018), 85.10–86.11

When one considers that the verb includes [the signification] of a concept that is independent in itself, it becomes distinct from the particle. Now, when it is considered further that it includes [the signification of] a complete nexus to the effect that that independent concept [i.e., “event”] is connected to something else by this nexus, then a judgment comes to pass, namely, with regard to this independent concept. And this does not apply to the class of particles, or to the class of names.

In general, then, when a particle is instituted for specific relational (*nisbiyya*) concepts—which are tools for seeing other concepts and for getting to know the states of affairs they are involved in—by a general imposition (*waḍ‘an ‘āmma*), then it is impossible that [such a concept] be judged or used to pass judgment. It is inevitable that each of the two concepts [i.e., those signified by the two terms] be regarded by themselves, for it to be possible that the nexus between one and the other can be

considered, and what attaches to [the nexus] needs to be mentioned and considered in parallel between the utterances and the mental images.

When a name is instituted for concepts that are regarded by themselves and can be independently understood, then no complete nexus is expressed alongside them, neither in the sense that they are connected to something else, nor in the sense that it is possible to connect to them a judgment or use them for a judgment.

As for the verb, when one considers [the notion of] “event” in it (which is the independent concept), its connection to something else is joined to it as a complete nexus (which is the tool for seeing its two [related] terms); [in that case] it is necessary that it be [also] connected [*musnad*] to the event (for that had been considered part of the concept at [the original] imposition), and that its agent be mentioned so that this nexus obtains. As for the totality of [the verb’s] meaning, it is not appropriate to pass judgment on it or use it to pass judgment. This is evident from deliberating on the truth.

Particles signify a particular relation that is only grasped when the *relata* are in view. That relation is not yet amenable to judgment. For example: “my trip from (*min*) Baṣra” signifies a specific relation but it is not a proposition—it becomes one if the whole phrase is put in the subject- or predicate-place of a proposition, as in “My trip from Baṣra was strenuous.” In contrast, verbs signify already by default a complete nexus that is amenable to judgment. That is, once the agent is supplied, so that the *relata* and the nexus as a tool for conceptualizing the state of affairs are in view, the nexus can be conceptually isolated and judged.

The point where the perspective switches from the state in which the nexus is considered only as a tool to the state in which it can be considered as an object is precisely when its other *relatum*, the agent (*fā’il*), is supplied. This is reminiscent of what Taḥṭānī stated. And, as Taḥṭānī argued as well, Jurjānī points out—after “deliberating on the truth”—that a verb alone cannot be judged or used to judge something as long as the agent is not made explicit. That implies that third-person inflected verbs by themselves are not propositions. It would, however, also imply that first- and second-person inflected verbs are not propositions. Presumably, Jurjānī would say that this is true so long as they are considered outside of a concrete speech-situation in which the hidden pronouns would have their reference fixed.<sup>35</sup>

Jurjānī’s novel account of the semantics of particles, names, and verbs, and of the nature of the predicative nexus, has greater explanatory power than those of his predecessors, because it connects semantic observations with claims about the mind. It is also more economical, because it avoids the multiplication of nexus needed to explain conversion, and the regress arguments that arise from postulating a real relation between the referents of subject and predicate. But the account has its own problems, and Jurjānī anticipates possible objections at the end of the treatise:



TEXT 83: AL-SAYYID AL-SHARĪF AL-JURJĀNĪ, *RISĀLA ‘ALĀ TAḤQĪQ MA ‘NĀ AL-ḤARF* (AKTAŞ 2018), 86.12–18

If you were to say: Why is the complete nexus made to join the predicate (*mansūb*), and together they are made that which is signified by a [single] utterance, namely, the verb, but it is not joined to the subject (*mansūb ilayhi*) in the same way? And why, even though [this nexus] is the state of affairs between the two, is it specified only in relation to one of them?

Then I would say: Perhaps the reason for this is that the nexus that exists for the predicate is attached to the subject in the same way that fatherhood that exists for the father is attached to the son. Or don't you see that you say: Standing is predicated of Zayd, and don't say: Zayd is predicated of standing? And you say: Standing is connected to Zayd, and Zayd is connected to it. As the attributes [i.e., “standing”] are based on transitivity, I say: Standing is the predicate and Zayd the subject. All this leads you on the right path to what we have already said.

The first objection lies at the heart of the whole issue: What is the difference between subject and predicate, noun and verb, particular reference and general characterization?<sup>36</sup> If, on Jurjānī's account, the verb includes the signification of a complete nexus, it is not only semantically distinct, but also syntactically. Why should this be so? That is just what the nexus is like, Jurjānī counters. It is an asymmetric relation like the relation of fatherhood as it obtains between father and son. The father is a father to the son, but the son is not a father to the father. The reason for this is that attributes are transitive because by definition they always are attributes of something. Jurjānī continues:

TEXT 84: AL-SAYYID AL-SHARĪF AL-JURJĀNĪ, *RISĀLA ‘ALĀ TAḤQĪQ MA ‘NĀ AL-ḤARF* (AKTAŞ 2018), 86.18–87.10

And if you were to say: If, just as the combination of verb and agent as in “Zayd (is) standing” (*qāma Zayd*) prompts you to understand a nexus that is not understood independently, and the two terms become the nexus as a tool for getting to know the state of affairs the two [terms] are involved in, and in the same way the attribute “standing” (*qā'im*) prompts you to understand a certain thing in itself, namely, *standing* (*al-qiyām*), and the nexus between them, which is the tool for seeing the two [as related]—then why is it possible that the attribute be judged or used to judge something else, but not the verb?

Then I respond: The nexus in the verb is a complete nexus isolated by itself and it does not connect to anything else at all. The primary intention of the expression is to signify that nexus. It is not possible that it is derived from one of the two terms at all. As for the attribute, the nexus that is expressed in it is a specifying nexus that is however not complete, and it does not require the isolation of a concept from another or the lack of its connection to it. Nor is it the nexus primarily intended by the expression. Sometimes it is a description, and then it is turned into something by which judgment is passed. As for the nexus expressed in [the attribute], it is not



appropriate for it to be judged or to be used to judge something else, not by itself alone or together with something else, because it is not an independent [concept].

The second objection turns on the question of how, on Jurjānī's account, we are to decide which types of nexus signified by which types of utterances are amenable to judgment. Verbs alone cannot go in the subject-place, and verbs together with their agents can go neither in the subject- nor the predicate-place. This is because verbs contain a complete nexus that relates its independent meaning to a subject. The last objection Jurjānī considers is this:

TEXT 85: AL-SAYYID AL-SHARĪF AL-JURJĀNĪ, *RISĀLA 'ALĀ TAḤQĪQ MA 'NĀ AL-ḤARF* (AKTAŞ 2018), 87.11–88.4

If you were to say: You said that the combination of the verb and its agent is not such that it can be used to make a judgment. But this contradicts what the grammarians said, namely that the *relatum* in “Zayd's father is standing” (*Zayd qāma abūhu*) is the [entire] verbal sentence [i.e., “his father's standing” (*qāma abūhu*)].

Then I respond: What is intended here are in fact two judgments. The first is the judgment that the father of Zayd is standing, and the second is that Zayd [is such] that [his] father is standing. No doubt these two judgments are not clearly and distinctly understood from the sentence. But one of them is the primary intention [of the sentence] and the other is understood by implication. If what is intended is the first, then in this sentence Zayd is considered as a clear and distinct concept and in reality no judgment is made about him or by means of him. But he is a determination that attaches to that on which judgment is passed [i.e., the father as being *his* father]. If what is intended is the second, as is obvious, no distinct judgment is passed between standing and the father, but the father is a determination for a *relatum*, i.e., *standing* (*qiyām*), for with it the attribution to Zayd is completed. Don't you see that if you say “Standing the father of Zayd” (*qā'im abū Zayd*) and the nexus between them disappears, nothing is being connected to anything at all. If the meaning of “his father is standing” (*qāma abūhu*) is also that, then it does not connect to Zayd, and no declarative sentence (*khavar*) results from it. And then you hear the grammarians say that “his father is standing” (*qāma abūhu*) is a sentence, but not proper discourse, because it is stripped of the occurrence of the nexus between the two terms as the context requires the mention of Zayd and the mention of the pronoun signifying the mentioning of the connection, which is however impossible to exist when it falls apart.

In the third objection Jurjānī turns to an interesting borderline case that is supposed to bring out an important point: the grammarians' example “Zayd, his father is standing” (*Zayd qāma abūhu*). This is a perfectly correct Arabic sentence, with the syntactic peculiarity—which is however ubiquitous in Arabic—that the verbal sentence grammatically acts as the predicate of the overall nominal sentence. Logically, this is not how Jurjānī sees the matter. The problem for him is that there are two nexus, one between *standing* and Zayd's father, which is the

one naturally understood from the sentence, and the one between Zayd and *his-father's-standing*, which is the nexus that one would have to understand from the grammarians' parsing. Logically, the latter does however not really connect. It seems that, here, grammar goes against logic. Dāwānī should likewise engage the grammarians on the issue.

#### JALĀL AL-DĪN AL-DAWĀNĪ: THE PROPOSITION AS A PICTURE

Jalāl al-Dīn al-Dawānī was born around 830/1426.<sup>37</sup> He studied with his father and a local scholar of his hometown, Dawān, both of whom were students of Jurjānī. Measured against the number of commentaries and glosses written on his logical works, he was arguably the most influential logician in the Eastern Islamic world of the 9th/15th century. Much of his output remains in manuscript form. An edition or study especially of his two glosses on Jurjānī's gloss on Taḥṭānī's *Lawāmi* ' is a major *desideratum*. One of the glosses is a counter-gloss responding to an earlier counter-gloss by his intellectual rival in Shīrāz, Ṣadr al-Dīn al-Dashtakī (killed in 903/1498). All three glosses discuss issues raised by Jurjānī in the early parts of the *Maṭāli* ' , again focusing on philosophical issues in semantics.<sup>38</sup>

Dawānī's critical engagement with Taḥṭānī's, Taftāzānī's, and Jurjānī's positions on the copula, the nexus, and the parts of the proposition is felt across his works. Dawānī argued against Taḥṭānī that the parts of the proposition are really only three, because the nexus can be the object of both conception and assent. This position is closely connected to a number of other novel views defended by Dawānī, like his solution to the liar paradox, or his doctrines on negative existential predication.<sup>39</sup>

In his commentary on Taftāzānī's *Tahdhīb*, Dawānī likens the proposition to a picture. His point is that we only say that a picture is true to what it depicts if the painter actually wants to represent something. This is what the predicative nexus is like. A picture in which the painter does not want to represent anything is like the nexus present in sentences expressing, for example, wishes.<sup>40</sup> A little later in the commentary, when the terms "nexus" and "copula" are introduced, he cites Avicenna's position from *al- 'Ibāra* in the *Shifā* ' and then comments:

TEXT 86: JALĀL AL-DĪN AL-DAWĀNĪ, *SHARḤ TAHDHĪB AL-MANṬIḤ*  
(AL-MALĪBĀRĪ), 176.6–178.3

These are [Avicenna's] words, and they make clear that the parts of the intelligible proposition are three, and this is what the old [logicians] thought. For them the grasping of the nexus that subsists between the subject and the predicate [simply] was the judgment, and [the judgment] was not preceded by the conception of a nexus that then became the object of the judgment. The subsistence of that [latter] nexus belongs to the subtle [innovations] of the later [logicians]. They believed that in the case of doubt, the nexus is conceived without judgment, since as long as no

nexus is conceived, doubt cannot occur either. From the arising of doubt they added to the things [already] grasped another thing, as is attested by introspection, because one thing grasped cedes and another takes its place.

There is room for discussion here. For introspection does not require that the thing grasped in the case of doubt not be the same thing as that which is grasped in the case of a judgment, I mean the actual occurrence or not [of the nexus], and which is considered in the act of grasping. In the first case, the thing grasped is grasped without acknowledging, and in the second it is grasped with acknowledging [its occurrence]. In what preceded you may have called attention to the consideration [in the mind] of the acts of grasping in themselves, and not of the thing grasped, and this is not contradicted by introspection. Think about it!

[Having said] this, you learned from it that there must be something in propositions that is the meaning of the copula, whether it is mentioned by means of an expression or whether it is omitted, or else has its meaning contained in the expression that signifies the predicate, as what has been said about statement-words. [Taftāzānī, by saying] *and for it “huwa” may be used*, indicates that “*huwa*” is a pronoun referring back to the subject, and that it is in reality not a copula, because a copula is an auxiliary, and a pronoun is a noun, as its meaning is the same as that to which it refers back. People came to represent the copula by “*huwa*,” because they found that in Arabic speech there was no expression signifying a non-temporal copula like “*ast*” in Persian or “*estin*” in Greek, so they metaphorically used the expression “*huwa*” for this meaning, and their way of representing [the copula] is correct. This is what the author [Taftāzānī] said.

After rejecting the “subtle [innovation] of the later [logicians]” that the proposition has four distinct parts, Dawānī moves on to the copula. That which the copula signifies must no doubt be a part of the proposition if it is to have a truth value. How that meaning is expressed on the level of language and how to classify the linguistic sign doing the job is the question that Dawānī seeks to answer in the remainder of the comment on this lemma. From the quotation given earlier it is clear that Dawānī had read Taftāzānī’s elaborations on the Graeco-Arabic history of the copula in the commentary on the *Shamsiyya*. As so often, Dawānī cites the authority of Avicenna stating that the copulative “*huwa*” is an auxiliary, because it has no complete meaning by itself. But even some grammarians considered “*huwa*” a particle and not a noun, which is of course what Jurjānī’s mirror analogy was supposed to bring out:

TEXT 87: JALĀL AL-DĪN AL-DAWĀNĪ, *SHARḤ TAHDHĪB AL-MANṬIQ*  
(AL-MALĪBĀRĪ), 179.1–9

These are his words, even though some of the foremost grammarians considered [“*huwa*”] a particle. Raḍī [al-Dīn Muḥammad b. al-Ḥasan al-Astarābādī (d. 686/1287 or 688/1289)] transmitted this position from some Baṣrian [grammarians] and adopted it, when he said: “Then, since the goal of the partitive pronoun’s [*scil.* ‘*huwa*’] function is as we said, i.e., to prevent the ambiguity of the grammatical predicate that

is mentioned after it and an attribute [of the grammatical subject]. And this is the meaning of the particle, I mean: in communicating the meaning in something other than itself [i.e., by disambiguating the word following it], it turned into a particle, and hence was stripped of its cloak of being a noun. But it must have a determinate morphological form, I mean: the form of a nominative pronoun, even if what comes after it changes from nominative to accusative, as we mentioned. This is because particles are indeclinable; but in this case there remains one feature of declension characteristic of nouns, by which I mean its being singular, dual, or plural, masculine or feminine, first-person, or second- or third-, on account of the lack of declinability when it is a particle. This is alike to the second-person marker ‘*k*,’ since it sheds its meaning as a noun and becomes a particle. End of quote.”

Dawānī insists that the copulative “*huwa*” is neither a noun nor a partitive pronoun in the grammarians’ terminology, because its technical usage established by logicians has nothing to do with the phenomenon of its use in natural language that grammarians are describing. For Dawānī, it is in fact a particle performing the role of a copula, and as such an auxiliary:

TEXT 88: JALĀL AL-DĪN AL-DAWĀNĪ, *SHARḤ TAHDHĪB AL-MANṬIQ*  
(*AL-MALĪBĀRĪ*), 179.10–180.12

Now then, even if we suppose all grammarians agree that it is a noun, it does not follow that it is not an auxiliary for all logicians. What the author [Taftāzānī] mentioned apropos its referring back to the subject, this is the same in terms of the meaning only being complete if it is granted that it is a noun. But if we say it is a particle performing the role of a copula, then it is not [a noun], but an auxiliary in the form of a noun, as is the case with the markers for the second- and third-person “*k*” and “*h*” in “*īyyāka*” and “*īyyāha*” [you, beware of . . . ; he, beware of . . . ].

It is evident that what the author [Taftāzānī] mentioned, elliptical though it may be, is an allusion to the arguments of the logicians who do not agree with this. They make clear that it is an auxiliary and do not stipulate about its proper role what the grammarians stipulate with regard to the grammatical predicate being disambiguated from adjectives and so forth, but they examine [sentences] like “Zayd, [he] is a writer” where there is no ambiguity [between taking “writer” as a predicate or] as an attribute, as the [grammarians] had laid out.

If you were to say: It is evident that the copula in the language of the Arabs is [represented by] the inflectional signs. For if simple expressions are uttered with no inflectional signs pronounced at the end, they do not signify a connection. But when they are uttered with their inflections, they do signify that. Therefore, the inflectional signs signify the copulation.

I respond: The logicians made clear that the copula is the expression “*huwa*” or “*hiya*” and so forth, and the inflectional signs are not a copula for them, but they signify [a word’s] being a subject, or an object, and so forth, just as the Arabic grammarians think, and the meaning of the copula is understood—even if it is omitted—from those signs by way of implication. For those signs signify these conceptualized meanings that are not without a copula.

Dawānī in this passage shows awareness of the earlier discussions as well as familiarity with the opinions of grammarians on the issue. Noteworthy is not only that he argues against the idea that there is a judgment-nexus, but also that he rejects the argument that the meaning of the copula may be expressed by signs of inflection. Both are positions Samarqāndī and Taḥṭānī developed. That a comment of this length (further multiplied by super-commentaries) was deemed adequate to explain the phrase “and for it ‘*huwa*’ may be used” suggests that the discussions on the copula became even more extensive. Dawānī’s work enjoyed a lively reception not only in his native Persia and the Ottoman Empire, but also, and especially, in Mughal India.

#### A LOOK AHEAD TO THE INDO-MUSLIM TRADITION

One strand for following the subsequent development of discussions on the copula is the Indo-Muslim tradition of glossing the major commentaries by Taḥṭānī and Dawānī, and later that on Muḥibb Allāh al-Bihārī’s (d. 1119/1707) 12th/17th-century handbook on logic, titled *Sullam al-‘ulūm*. Up to the 12th/18th century, the study of logic had become a prominent part of madrasa curricula across the Indian sub-continent.<sup>41</sup> One important figure was the logician ‘Abd al-Ḥakīm al-Siyālkūtī (d. 1067/1657), who glossed both of Taḥṭānī’s commentaries. His *Ḥāshiya ‘alā Tahrīr al-qawā‘id al-mantiqiyya* (Glosses on Taḥṭānī’s *Shamsiyya* Commentary, completed 1053/1643) had such a lasting influence that it was—between 1870 and 1905—lithographed in Delhi and Lakhnaw, and printed in movable type multiple times in Istanbul and Cairo. It perpetuated the Shīrāzī tradition and widely disseminated it in Mughal India and beyond, especially in the Ottoman Empire.<sup>42</sup> Typically, it focused on the earlier parts of the base text centering on semantics, and it engaged with both Jurjānī and Dawānī.<sup>43</sup>

Another central text was Bihārī’s *Sullam al-‘ulūm*, whose commentary tradition has now been carefully studied and presented by Asad Ahmed.<sup>44</sup> A late-12th/18th-century commentary by Mullā Mubīn Lakhnawī (d. 1225/1810) titled *Mir‘āt al-shurūḥ sharḥ Sullam al-‘ulūm* (The Mirror of Commentaries Commenting on the Ladder of the Sciences) gives a good impression of the continuity and further stratification of discussions on the problem of predication.<sup>45</sup>

Mubīn’s commentary is both exceptionally clear and unusually extensive (over 420 pages in the 1909/1910 Cairo edition), routinely engaging with several of his predecessors.<sup>46</sup> As Mubīn himself states in the proem, this was his express goal in redacting the commentary, and the reason why he gave it the title *Mirror of Commentaries*. He wanted it to be as clear and lucid as a mirror, and he wanted it to be comprehensive and conclusive, in the sense that it reflects like a mirror all the other commentaries on the *Sullam*.<sup>47</sup>

It is tempting to read the title and Mubīn’s methodological remarks in light of Jurjānī’s mirror simile: Mubīn may have played with the idea that the truth of

Bihārī's impenetrable (*mughlaqan ghāyat al-ighlāq*)<sup>48</sup> base text is only rendered intelligible when his own commentary is first used as a tool—like a mirror—to see all the other commentaries, and to then focus the attention on his commentary as an object of clarity to which the reader is prompted to give her assent. That the mirror simile was well known to both Bihārī and Mubīn is clear from the following passage.

TEXT 89: MULLĀ MUBĪN LAKHNAWĪ, *MIR'ĀT AL-SHURŪḤSHARḤ SULLAM AL-'ULŪM* (ANONYMOUS, CAIRO 1910), II 4.18–5.5

*The nexus, that is, the complete predicative nexus, is only part of what attaches to the judgment, that is, the assent, in a secondary way, that is, by means of something else, not by means of itself. The assent attaches primarily and by itself to the subject and predicate, and secondarily and accidentally to the nexus between them. This is the account of what the judgment attaches to. But there are different [opinions] on this. For some it is the same as the meaning of a proposition composed of subject and predicate regarded as being [semantically] independent (istiqlālī), whereas the copulative nexus is regarded as not [semantically] independent. Some said that [the judgment] attaches in its general sense primarily to [the nexus?] and what obtains after the analysis [of the proposition]. For others the subject and the predicate just are the state of being a copulative nexus. This option is also attributed to the Master [Avicenna]. But the majority position is that the judgment attaches to the copulative nexus, and it is possible [for the judgment] to attach to the nexus [only] after it is regarded independently. He [Bihārī] said in [his auto-]gloss: There is a difference between [the idea that] the judgment attaches to the occurrence or non-occurrence [of the nexus] that is part of the proposition and [the idea that] it attaches to the proposition itself [and as a whole]. The majority position is the first, but the true position is the second, and it is the one chosen by Mir Bāqir Dāmād [d. 1041/1631–1632] and the Eminent Maḥmūd al-Jawnpūrī [d. 1062/1652]. The author [Bihārī] rejects this, even though it is the majority position, and proves it by saying: because it, that is, the nexus, is one of the concepts that are semantically dependent particle-meanings, which are not considered independently. Inevitably, there must be [such a nexus] for the assent to attach to it. But it attaches not the nexus [alone], for it, that is, the nexus, is only a mirror, that is, a means, for seeing the two terms, that is, the subject and the predicate. This is the proof for the claim that the nexus is not semantically independent.*

This passage amounts to less than half a page taken from a discussion that runs over more than seventeen pages. In fact, the first twenty or so pages of the second volume that contains the section on assents (*taṣḍīqāt*) are devoted to a thorough discussion of the nature of judgment, the logical form of a proposition, and how the two relate to each other. The way Mubīn structures his commentary is no more pedagogical or doxographic than the great 8th/14th-century commentaries. And it was not the end, either. Such multilayered commentaries in logic continued to be produced in the 13th/19th century.<sup>49</sup>