What is a Kalima, What is a Definition: The Relationship between Logic and Grammar in the Later Arabic Linguistic Tradition Muhammed Volkan Yildiran Stodolsky

The purpose of the discipline of *naḥw* (Arabic syntax) has been defined as making one familiar with the endings of the *kalima*, meaning the case endings of nouns and moods of verbs.¹ Hence, defining what a *kalima* is constitutes one of the most fundamental subjects of *naḥw*. This study will discuss and compare three explicit definitions of *kalima* by al-Zamakhsharī (d. 538/1144), Ibn al-Ḥājib (d. 646/1249), and Ibn Hishām al-Anṣārī (d. 761/1360), in light of 'Abd al-Raḥmān al-Jāmī's (d. 898/1492) analysis and evaluation of the definitions of al-Zamakhsharī and Ibn al-Ḫājib in his commentary on the latter's *al-Kāfiya*. The articulation and evaluation of different definitions of *kalima* depend on selecting the criteria through which one definition becomes preferable to another.² This article will also study the different criteria Muslim grammarians and logicians have used in their conceptualization of the best definition in the context of Ibn Hishām's attempt to fully use the criteria of logic in his grammatical definition of *kalima*.

Previous research on the *kalima* in Western languages has primarily focused on comparing the conception of *kalima* in Arabic and Western linguistics based mostly on the writings of Sībawayhi (d. 180/796) and Radī al-Dīn al-Astarābādī (d. c. 688/1289). In a series of articles, Aryeh Levin has shown, through a textual analysis of Sībawayhi's *al-Kitāb*, as well as works of other grammarians such as al-Mubarrad (d. 296/900), Ibn Jinnī (d. 392/1002), and Ibn Ya'īsh (d. 643/1245), that the *kalima*, unlike the concept of word in Western linguistics, encompasses some bound forms of morphemes, which are the smallest meaningful units in a language that do not occur in isolation. For example, *pre* in "preschool" in English is a bound

morpheme and not a word, whereas *tu* in *katab-tu* despite being a bound morpheme is still considered a *kalima* in Arabic. However, as Owens points out, unlike the concept of morpheme, *kalima* does not encompass all bound forms, because the corresponding imperfect prefixes such as *a* in *a-ktub* is not considered a *kalima*. Hence, *kalima* does not directly correspond either to the modern linguistic concepts of word or morpheme, referring to each in different utterances.³ Based on al-Astarābādī's original critique of Ibn al-Ḥājib's definition of *kalima*, Larcher has further discussed its morphemic nature, or the lack there of, while Guillaume has analyzed the internal consistency of the definition.⁴ These studies have shed light on the nature of the *kalima* and its distinctive aspects.

This article considers the role of the concept of definition in the articulation of different definitions of *kalima* in the later Arabic linguistic tradition. What is intended is not a general discussion of *kalima*, but rather an analysis of the definitions of al-Zamakhsharī, Ibn al-Ḥājib, and Ibn Hishām from within the Arabic linguistic tradition based on Jāmī's writings. These authors were chosen in particular because unlike the earlier grammarians studied by Levin, they explicitly state their definitions of *kalima*, and one can see implicitly, as in the case of al-Zamakhsharī and Ibn al-Ḥājib, or explicitly, as in the case of Ibn Hishām, how their conceptions of definition determine their definitions of *kalima*. Studying the relationship between the definition of *kalima* and the different views on how a definition should be constructed allows one to witness the historical convergence and divergence of syntax, semantics, and logic within the Arabic linguistic tradition.

As is well known, al-Zamakhsharī, was a leading scholar in Arabic linguistic sciences from Central Eurasia who lived in Mecca. His *al-Mufaṣṣal* is an influential work in Arabic syntax. Ibn

al-Hājib was an Egyptian-born Mālikī jurist, jurisprudent, and grammarian who taught both in Egypt and Syria. Ibn al-Hājib's deep interest in al-Zamakhsharī's scholarship is evident in that he wrote a commentary on *al-Mufassal* called *al-Idāh*. Ibn al-Hājib also wrote an important grammatical treatise in Arabic syntax called *al-Kāfiya*. Like Ibn Mālik's *al-Alfiyya* and al-Birgiwī's al-Izhār, al-Kāfiya, with numerous commentaries and supercommentaries, became an institution that has continued to be studied until today.⁵ Ibn Hishām al-Anṣārī, who also lived in Egypt, was an influential grammarian. As will be seen below, in his justification of his new definition of *kalima*, Ibn Hishām also quotes Ibn al-Ḥājib's definition verbatim and criticizes it. Naturally, Ibn Hishām was also familiar with al-Zamakhsharī, mentioning his opinions.⁶ It is clear that Ibn al-Hājib and Ibn Hishām were intimately familiar with the works of their predecessors and carefully and deliberately formulated their own definitions in contradistinction with theirs.⁷ 'Abd al-Rahmān al-Jāmī was the author of *al-Fawā'id al-diyā'iyya* (written for his son Diyā' al-Dīn), which is an influential commentary on Ibn al-Hājib's al-Kāfiya.⁸ Although al-Fawā'id al*diyā'iyya* is a commentary, it itself has become a text with numerous commentaries and supercommentaries.⁹ In his commentary, al-Jāmī makes use of both *al-Mufassal* and *al-Īdāḥ* to bring out the subtle meanings of *al-Kāfiya*, evaluating Ibn al-Hājib's opinions by comparing them with al-Zamakhsharī's.

The Grammarians: al-Zamakhsharī, Ibn al-Hājib, and al-Jāmī

Before analyzing the individual definitions, a brief look at different types of definitions in Islamicate civilization and their historical development will provide a frame of reference for what follows. For this purpose, Saçaklızâde (Sājaqlīzādah) Mehmed Efendī's (d. 1145/1732) treatise *al-Waladiyya* on the discipline of dialectic (*'ilm al-munāẓara*) and 'Abd al-Wahhāb al-

Āmidī's (d. c. 1190/1776) commentary on it are useful as a starting point, since they briefly and systematically discuss the concept of definition. Al-Āmidī observes that there are three types of definition: *lafzī* (verbal), *tanbīhī* (alerting), and *haqīqī* (real). The first is similar to a dictionary definition in that it explains the meaning of a word with a word that is clearer to the listener, as for example if one were to define the rarer ghadanfar with asad (lion) in Arabic. The second is when one reminds the listener of a meaning he already knows. The third type comprises an initial collective inclusive general term (*al-jāmi*[°]) with an extensive scope, and a prohibitive exclusive part (*al-māni*) that narrows the extensive scope to the intended meaning, distinguishing what is defined (the definiendum) from other elements of the collective inclusive general term.¹⁰ Saçaklızâde notes a difference between the $qudam\bar{a}$ (the earlier) and *muta'akhkhirūn* (the later scholars) concerning the *haqīqī* definition. Although Saçaklızâde does not explain whom he means by the $qudam\bar{a}$ and $muta akhkhir\bar{u}n$, these designations have been used elsewhere to differentiate the period in which Islamicate thought was significantly influenced by Greek philosophy from what preceded it.¹¹ The *qudamā*' allowed a definition to be broader or more specific than the definiendum depending on their intention: the former when they wanted to distinguish it from something with which it can be confused, such as defining a triangle as a shape that has sides to distinguish it from a circle, and the latter when they wanted to clarify its well-known instantiations, such as defining a living being with what moves its lower jaw. The latter scholars, however, required that the set of the definition be equal to the set of the definiendum, having the same number of elements.¹² In other words, the later scholars adopted the principle explicitly stated by Aristotle that the definition must be

coextensive with the definiendum.¹³ As will be seen below, all three grammarians in their definitions and al-Jāmī in his critique accept this criterion.

Here are the definitions of *kalima* in chronological order to facilitate comparison. Al-Zamakhsharī's definition of *kalima* is "one utterance indicating a simple meaning by designation (*al-kalima hiya al-lafẓa al-dālla ʿalā maʿnan mufrad bi-l-waḍʿ*)."¹⁴ Ibn al-Ḥājib defines *kalima* as "an utterance that is designated for a simple meaning (*lafẓ wuḍiʿa li-maʿnan mufrad*)."¹⁵ Ibn Hishām argues that *kalima* is "a simple saying (*qawl mufrad*)."¹⁶ To understand and evaluate these definitions, it is necessary to understand the meaning of each of these terms.

The first significant difference between the three definitions is that each one begins with a different general term. Al-Zamakhsharī starts with "one utterance" combining the word *lafz* with the *tā* ['] *al-waḥda*, an Arabic suffix illustrating oneness, whereas Ibn al-Ḥājib has "an utterance," deliberately without the *tā* ['] *al-waḥda*, and Ibn Hishām has "a saying." In Arabic, the verbal noun *lafz*, translated here as "utterance," literally means "throwing." Al-Jāmī relates that the Arabs say "I ate the date and threw (*lafaztu*) the pit." Al-Jāmī adds,

Then in the custom of the grammarians it was transferred, initially or after it was made into the meaning of "that which is thrown," like "creation" with the meaning of "created," to "that which the human being utters," whether it is actual (*haqīqatan*) or ruled as such (*hukman*), ignored (*muhmalan*) or designated (*mawdūʿan*), simple (*mufradan*) or compound (*murakkaban*). The actual utterance is like "Zayd" and *daraba* (he struck) and the ruled as such is like what is intended in *Zayd daraba* and *idrib*, since it [what is intended] is not from the set of letters and sounds in origin, and no utterance has been designated to it. They [the grammarians] only expressed it with the metaphor of a separate utterance such as "he" and "you" and applied to it the rules of the utterance.¹⁷

Al-Jāmī relates that in the technical language of the grammarians, the verbal noun "throwing" came to mean "that which is uttered" either directly or after being understood as a verbal noun with the meaning of a passive participle (i.e., that which is thrown), just as one can say "Allāh's

creation" and mean "all things Allāh has created," or say "utterance" and mean not the act of utterance but "what is uttered." Al-Jāmī then lists the different types of referents of the utterance. His list refers to actual utterances or to those things which are not uttered but ruled as utterances, such as when one says "Strike!" and intends the second person singular pronoun with the imperative. The other example only works in Arabic, since in Arabic when one says *Zayd daraba*, this literally means "Zayd hit (he)" where "he" refers back to Zayd, as the Arabic verb must have a *fā il* (literally, a doer) that has to come after the verb. The grammarians analyze the hidden pronoun of the verb like other syntactic units even though it is not uttered, by borrowing the uttered pronoun "he" for the hidden meaning; hence, it is not an actual utterance but ruled as such.

The second binary al-Jāmī lists among the instantiations of utterance comprises the ignored (*muhmal*) and the designated (*mawdū*[']). This binary is significant since designation is also explicitly mentioned in the definitions of al-Zamakhsharī and Ibn al-Ḥājib. Al-Jāmī defines *wad*['] (literally, placing), translated here as designation, as "the specification of something [i.e. an indicator] to something [i.e. a meaning indicated] so that whenever the first thing is pronounced or sensed, the second is understood from it."¹⁸ The study of *wad*['], the process by which utterances are designated for meanings, occasioned the birth of a new Muslim science, namely *'ilm al-waq'*, in which the first of many independent works, *al-Risāla al-waq'iyya* of 'Adud al-Dīn al-Ījī (d. 756/1355), was already composed by the time of al-Jāmī.¹⁹ In fact, a commentary on this treatise has been attributed to al-Jāmī, and one of the factors that distinguishes al-Jāmī's commentary is how he incorporates the insights of *'ilm al-waq'* into the study of syntax.²⁰ In simple terms, *'ilm al-waq'*, which some scholars regard as a precursor of</sup>

the modern science of semiotics, studies the relationship of how utterances are designated for meanings to become words.²¹ *Wad*['] is the designation between *al-mawdū*['] *lahu*, the meaning for which an utterance is designated, and *al-mawdū*['], the utterance which is designated for a meaning. What al-Jāmī means is that both utterances that have been designated for specific meanings like "Zayd" and utterances that have not been designated for any meanings in the Arabic language, like the inverse of "Zayd" as "dayz," but rather have been ignored (*muhmal*), are among the instantiations of the concept of utterance.

The last binary al-Jāmī mentions among the referents of "utterance" consists of the categories of simple (*mufrad*) and compound (*murakkab*). Arabic grammarians such as al-Jāmī and Ibn Hishām have explicitly defined the term "simple" as an utterance the parts of which do not refer to any part of the *kalima*'s meaning. Guillaume points out that Aristotle was the one who first articulated this aspect of the definition of "word."²² For example, when one says "Zayd," none of the letters that constitute the utterance refer to any part of the specific living rational being that is Zayd. On the other hand, if one says "Zayd is a seeker," then the particular parts of the utterance refer to particular parts of the utterance is no longer simple, but rather compound.²³ As al-Jāmī explains in detail, the word "utterance" refers to all these distinct meanings, some of which will have to be eliminated by the rest of the definitions.

A question that arises from comparing the initial general terms in the definitions is why al-Zamakhsharī uses the *tā* al-waḥda to mean specifically one utterance, whereas Ibn al-Ḥājib intentionally does not. The difference comes out in an utterance like "Abdallāh" (literally the slave of Allah) when it is designated for a specific person as a proper noun. Before its designation as a proper noun, "Abdallāh," referring to "slave of Allāh," is compound, since

parts of the utterance refer to parts of the meaning. Once "Abdallāh" is a proper noun, it no longer means "slave of Allāh," but rather its designated meaning is the specific human being who is so named. Therefore, according to the definition above, it is simple, not compound, since no phonetic part of "Abdallāh" refers to any actual part of the human being so named. However, even though "Abdallāh" as a proper name is simple, it cannot be called one utterance (*lafẓa*), since each of the two *kalimas* can be uttered individually as free morphemes. Thus, as al-Jāmī observes, al-Zamakhsharī, with the very first word of the definition, already eliminates the likes of "Abdallāh" as a proper noun from being one *kalima*, whereas Ibn al-Hājib and Ibn Hishām do not. The significance of this will become clear in what follows.²⁴

Al-Zamakhsharī and Ibn al-Ḥājib also differ in the next word of the definitions. Al-Zamakhsharī has one utterance "indicating ($d\bar{a}lla$)" (a simple meaning) which must be read in conjunction with the last word of his definition "by designation," while Ibn al-Ḥājib has an utterance "that is designated (wudi`a)." Al-Jāmī explains the reason for the difference:

Know that designation necessitates indication, for indication is the being of something in such a way that another thing is understood from it. Whenever designation occurs, indication occurs, so that after mentioning designation there is no need for mentioning "indication" just as it is in this book [*al-Kāfiya* of Ibn al-Ḥājib]. But indication does not necessitate designation since it is possible by intelligence, such as when the utterance "dayz" that is heard from beyond a wall indicates the existence of the utterer, and [indication is also possible] by nature, such as when the utterance "*uḥ* [coughing sound in Arabic]" indicates chest pain. Hence, after the mentioning of indication there is no escape from mentioning designation as is the case in *al-Mufaṣṣal*.²⁵

Al-Jāmī relates that audible indication is not limited to designation, but rather has two other categories: indication by intelligence and by nature. For the former, al-Jāmī intentionally gives the example of one who hears the word "dayz" beyond a wall. "Dayz" has not been designated for any meaning in Arabic, yet its utterance beyond a wall is an indicator for the hearer that indicates that there is a being who uttered that utterance behind the wall. The coughing sound has also not been designated for any meaning in Arabic, yet the utterance of the sound indicates chest pain by nature. Since al-Zamakhsharī uses the more general concept "indication," which also includes indication that is understood by reasoning and naturally, he has to qualify the general concept with the restriction "by designation."

Ibn al-Ḥājib, on the other hand, directly mentions the specific form of indication that is designation so that he does not need any further restrictions. As regards designation, the virtue of al-Zamakhsharī's definition is that it analyzes the concept in the most basic terms, while the virtue of Ibn al-Ḥājib's definition is that it is more concise. As al-Jāmī observes, with the restriction of designation in the definition of "word," al-Zamakhsharī and Ibn al-Ḥājib reduce the extensive scope of "utterance" to those elements that are designated for meanings, excluding utterances that do not indicate any meaning, or indicate meanings but not through designation.

Another restriction that is common to all three definitions is being simple. With this restriction, utterances that are compound, whether the compound constitutes a sentence or not, as in adjectival and genitive constructs, are excluded from the definition of a *kalima*. Al-Jāmī observes an important shortcoming in the usage of this condition in the definition:

Through this [i.e., the restriction of being simple], the like of *al-rajul* (the man), $q\bar{a}$ ima (a standing being that is grammatically feminine), and *başrī* (Basran) and their likes, in which part of the utterance indicates part of the meaning, are excluded from the definition (*hadd*) of the word, but because of the intensity of the blending, this is considered one utterance and is given one case ending. At the same time, the like bof "Abdallāh" as a proper noun remains in it [i.e., in the scope of the definition], although it is given two case endings. For the intelligent person who is familiar with the purpose of the science of syntax, it is not a secret that were the situation the opposite, it would be more appropriate. As for what the author of *al-Mufaşşal* mentioned as the definition of word, where he said "one utterance indicating a simple meaning by designation," the like of "'Abdallāh" as a proper noun is excluded from it, since one does not say "one utterance" concerning it, whereas the like of *al-rajul*, *qā'ima*, and *baṣrī*, which because of the intensity of their blending are considered a simple utterance, remain in it. But he [al-Zamakhsharī] subsequently excluded it with the restriction of being simple. Had he not excluded it [i.e., the like of *al-rajul*] by abandoning it [i.e., the restriction of being simple], this would have been more suitable as you are aware.²⁶

Al-Jāmī evaluates the definitions of Ibn al-Hājib and al-Zamakhsharī in terms of their inclusiveness and exclusiveness. The shortcoming of Ibn al-Hajib's definition is that it seems to be neither fully inclusive, including all instantiations of kalima, nor fully exclusive, excluding all things to which kalima does not refer. As for the former, al-Jāmī gives the example of al-rajul, *qā'ima*, and *baṣrī*. The problem is that since Ibn al-Ḥājib includes in his definition the restriction of being simple, none of the three can seemingly be considered a *kalima*. In modern linguistic terms, these words contain affixes that are meaningful bound morphemes. In the utterance alrajul, rajul refers to "man" and the definite article refers to the fact that the man is familiar. Parts of the utterance do refer to parts of the meaning, so that the utterance seems to be not a kalima but a compound, which in reality it is not. The same is true for qā'ima. Qā'im refers to the fact that the being is standing and the $t\bar{a}$ al-ta $n\bar{t}h$, a suffix that is a bound morpheme, refers to the fact that the being is grammatically feminine. Likewise, the parts of the utterance başrī (Basran) refer to parts of its meaning, the city and the attribution to the city. There is an answer to this objection to which al-Astarābādī previously articulated, which is that the parts of the utterance have so intensely blended to one another that the utterance has only one case ending and is considered a *kalima*, but this is a technical consideration of the grammarians that is external to the pure definition.²⁷

As for not being fully exclusive, this concerns utterances like "Abdallāh" used as a proper noun. As has been observed, Ibn al-Ḥājib, unlike al-Zamakhsharī, considers "Abdallāh"

as a proper noun to be a kalima, since parts of the utterance, both of which are free morphemes, do not refer to any part of the specific human being for whom the name has been designated. As al-Jāmī observes in actual speech, however, "'Abdallāh" will have two case endings. Even if they were to have the same case ending, this would be the grammatical government ('amal) of two different governing agents ('āmil). Since al-Jāmī articulates the purpose of syntax as familiarity with changes in endings of the kalima that indicate different meanings, Ibn al-Hājib's definition should have included words like *al-rajul*, *qā'ima*, and *başrī*, as each of these have one case ending and should have excluded utterances like "Abdallāh" used as a proper noun, since these have more than one case ending. Guillaume writes, based on al-Astarābādī, that "lafza does not exclude anything more than lafz does."²⁸ Al-Jāmī shows that this is incorrect and that the usage of *lafza* instead of *lafz* has significant concrete consequences.²⁹ In Ibn al-Hājib's defense, one can observe that in his conception, the semantic aspect of words like "Abdallāh" as a proper noun has priority over their syntactic properties, which is why he considers "Abdallāh" as a kalima rather than a compound. It is possible that as a jurist and jurisprudent the meaning of *kalimas* had greater significance for Ibn al-Hājib than their declension.

As for al-Zamakhsharī's definition, al-Jāmī observes that it does not have the shortcoming of being too broad, since with the very first word al-Zamakhsharī astutely excludes utterances like "Abdallāh" used as a proper noun. "Abdallāh" cannot be called one utterance (*lafẓa*) since it consists of free morphemes. Before al-Zamakhsharī uses the word "simple," his definition is also not too narrow, since words like *al-rajul*, *qā'ima*, and *baṣrī* can be referred to as "one utterance that indicates meaning by designation." However, with the addition of the

restriction of being "simple," al-Zamakhsharī's definition, like Ibn al-Ḥājib's, seemingly becomes not fully inclusive. Implicitly, al-Jāmī points to the fact that from the standpoint of referring to all elements of the definiendum and excluding all things to which it does not refer, al-Zamakhsharī's definition is superior to that of Ibn al-Ḥājib. Al-Jāmī also implies that the best definition of *kalima*, according to the criteria of being inclusive of all elements of the definiendum and exclusive of all its non-elements, is one utterance indicating a meaning by designation or one utterance that is designated for a meaning. Al-Jāmī's critique is significant because, despite the precedent of two great grammarians like al-Zamakhsharī and Ibn al-Ḥājib who incorporate the Aristotelian notion of word into their definitions of the Arabic *kalima* by using the restriction "simple" (*mufrad*), al-Jāmī rejects this restriction in the definition because it excludes elements of the Arabic *kalima*.

The Logicians and Their Advocate in Grammar: al-Abharī, Ibn Ḥazm, al-Ghazālī, and Ibn

Hishām al-Anşārī

So far, this study has focused primarily on the definitions of al-Zamakhsharī and Ibn al-Ḥājib because of their chronological precedence, the close relationship between their works, and, as will be seen below, Ibn Hishām has a significantly different approach to both the definition of *kalima* and the criteria that makes one definition preferable to another. To better understand Ibn Hishām's own commentary on and justification for his novel definition in his grammatical treatise *Qaţr al-nadā*, we need to take a brief look at how logicians understand definitions and the applicability of their approach to other fields of learning, since what Ibn Hishām essentially attempts to do is to articulate the definition of *kalima* according to the standards developed by logicians.

Perhaps the most influential pre-modern work on philosophical definition in both western and Islamicate civilization was the *Isagoge* (Introduction) of the Neoplatonic philosopher Porphyry (Furfūriyūs) (d. 305).³⁰ In the *Isaqoge*, Porphyry considers substance under the five universal categories of genus, species, difference, property, and accident, distinguishing each of these terms from the others. Islamicate philosophers such as al-Kindī (d. c. 252/866), al-Farābī (d. 339/950), Ibn Sīnā (d. 428/1037), the Christian theologian and philosopher Ibn al-Tayyīb (d. 435/1044), and the Ash'arī theologian, Shāfi'ī jurist, and Sufi al-Ghazālī (d. 505/1111), among Sunnī ulama, discussed the classification of *Isaqoge* in their own works.³¹ Athīr al-Dīn al-Abharī (d. 663/1264) included the content of the *Isaqoge* in the beginning of his *Isāqhūjī*, which is a short treatise on logic as a whole summarizing not only the five universals, but also the requirements for valid and sound arguments. Since then, al-Abharī's *Īsāqhūjī* has been taught as one of the standard introductions to logic in madrasahs that teach logic, with several later commentaries. As will be seen below, Ibn Hishām advocated a logical definition of kalima based on Porphyry's universals. It is not clear whether Ibn Hishām's knowledge of the universals came from the *lsāghūjī* of al-Abharī, who passed away roughly a century before him, or one of the prior Arabic presentations of the *Isagoge*, but understanding al-Abharī's *Īsāghūjī* facilitates understanding what Ibn Hishām tries to do in his redefinition of *kalima* by illustrating the logical norm for definitions as taught by logicians that preceded Ibn Hishām. Hence, the section on definitions at the very beginning of the *lsāghūjī* is translated in full.

We praise Allāh for His empowerment and ask Him guidance for His path and we pray for Muḥammad and all of his family. As for what is after, this is a treatise in logic in which we have presented what is necessary for anyone who starts any field of

knowledge to remember, asking Allāh for assistance. Truly He is the one who deluges the good and the gifts.

The utterance indicative by designation indicates all of that for which it has been designated [i.e., all of the meaning for which the utterance has been designated] by correspondence, [indicates] a part of it by inclusion, if it has a part, and [indicates] what adheres to it in the mind by adherence. Like the [utterance] "human," for it indicates the living rational being by correspondence, [indicates] one of them [i.e., the living or the rational being] by inclusion, and the one who is capable of knowing and the craft of writing by adherence.

Then the utterance is either simple, and it is that by a part of which the indication of part of the meaning is not intended, like "the human," or compound, and it is that which is not like that [i.e., part of the utterance indicates part of the meaning], like "stone thrower." The simple is either universal, and it is something the very conceptualization of which does not prevent the occurrence of sharing between many, like "the human," or particular, and it is something the very conceptualization of which prevents the occurrence of sharing], like "Zayd."³² The universal is either essential (*dhātī*), and it is that which enters the reality of its particulars, like "the living being" in relation to "the human" and "the horse," or accidental (*'aradī*), and it is that which is different than that, like "the laughing being" in relation to "the human."

The essential is either said in response to "what is it" according to sharing alone, like "the living being" in relation to "the human" and "the horse." This is the genus (*al-jins*) and is described (*yursamu*) as a universal that is said concerning a multitude differing in realities in answer to "what is it." Or it is said in response to "what is it" according to both sharing and specificity, like "the human" in relation to "Zayd" and "Amr." This is the species (*al-naw*) and is described as a universal that is said concerning a multitude differing in quantity instead of reality in answer to "what is it." Or it is not said in response to "what is it" but rather said in response to "which thing is it in itself" and this is what distinguishes something from that with which it shares the genus, like "the rational" in relation to "the human."³³ This is the difference (*al-faşl*) and is described as the universal that is said concerning in response to "which this is it is is it in itself."

As for the accidental, either its separation from the essence is impossible and it is the inseparable accident, or is not impossible and it is the separable accident. Each one of them is either specific to one reality and this is the property (*al-khāṣṣa*), like the potentially and actually "laughing being" in relation to "the human being." This [the accident specific to one reality] is described as the universal that is said for something under one reality only, as an accidental statement. Or each one of them is general for more than one reality, and this is the general accident (*al-ʿaraḍ al-ʿāmm*), like the potentially and actually "breathing being" for "the human" and other living beings, and is described as the universal that is said for that which is under different realities as an accidental statement.³⁴

The explanatory statement (*al-qawl al-shāri*h):³⁵ The definition (*al-hadd*) is a statement that indicates the essence of something and it is that which is composed from the proximate genus and difference of something, like "the living rational being" in

relation to "the human." This is the full definition (*al-hadd al-tāmm*). The defective definition (*al-hadd al-nāqiş*): it is that which is composed of the distant genus of something and its proximate difference like "the rational body" in relation to "the human." The full description (*al-rasm al-tāmm*): it is that which is composed of the proximate genus of something and its necessary property like "the living laughing being" in the definition of "the human." The defective description (*al-rasm al-nāqiş*): it is that which is composed of accidents the totality of which is specific to one reality, like our statement in the definition of "the human" that he is "a biped that has wide nails, exposed skin, stands straight, and habitually laughs by nature."³⁶

The influence of the logical definition on Ibn Hishām's argument concerning his novel definition of *kalima* will be discussed below. Here, it is worth noting that al-Abharī's discussion of the universals differs from Porphyry's in a number of aspects in both form and content. Formally, al-Abharī's presentation is more systematic and concise, treating each universal in the same way, whereas Porphyry's discussion is uneven, devoting more attention to some than others, and repetitive.³⁷ In terms of content, Muslim scholars have, understandably, taken out classifications that are contrary to the Islamic creed, such as Porphyry's anthropomorphic definition of god as a rational immortal animal, in which an animal is a percipient animate body.³⁸ More significantly, al-Abharī's systematic normative evaluation of the explanatory statement under four categories is not found explicitly in Porphyry's original. Although Porphyry explicitly states that the definition must be formed from the genus and difference, he does not say that the proximate genus should be used or that the usage of a proximate genus is superior to a higher genus. In fact, we know from Galen that this was debated among the Greek philosophers:

Since one genus is its proximate genus (that is what they call a genus which has no intermediates) whereas others have one or two intermediates and another is the highest of all, there is considerable discussion as to which genus should be placed first of all in a definition—the highest (after which there is nothing more general), or the proximate, or perhaps one of the intermediates (when it is clearer than either of the others)?³⁹

Among Muslim logicians, however, it became normative to define with the proximate genus such that definition with a higher genus was considered deficient, which is already evident in al-Ghazālī's discussion of the categories in *Mi'yar al-'ilm*.⁴⁰

There is another significant aspect of the text at its very beginning, which is al-Abharī's claim, "we have presented what is necessary for anyone who starts any field of knowledge to remember." The statement is significant because al-Abharī is not merely suggesting that logic is an important field of study, but goes further to say that anyone who studies any field of knowledge has to internalize logic; a claim that Porphyry does not explicitly make in his *Isagoge*.⁴¹ This may seem natural coming from a philosopher, as it is the tendency of scholars to highlight the importance of their field. Yet, what is remarkable in the history of Islamic thought is that the opinion that every student of knowledge should know logic was not confined to philosophical circles, but was also advocated in the strongest terms by some leading ulama of the religious sciences, some of whom were critical of the philosophers of their time.

Consider the polymath Ibn Hazm (d. 456/1064), who was famous for his piercing intellect as well as his harsh criticism of scholars with whom he disagreed. Contrary to what one might expect from his complete rejection of legal analogy as a *mujtahid* of the literalist Zāhirī school of law, Ibn Hazm strongly advocated the study of logic and authored a work of logic. Ibn Hazm writes in *al-Tagrīb li-ḥadd al-manțiq*,

If an ignorant person says, did anyone from the righteous predecessors speak concerning this [i.e., logic], it will be said to him: truly this knowledge is established in the self of everyone who has intelligence. The smart reaches the benefits of this knowledge with the breadth of understanding which Allāh, the Exalted, has enabled in him, whereas the ignorant is pushed like the blind until he pays attention to it. The other fields of knowledge are likewise. No one from the righteous predecessors, may Allāh be pleased with them, talked concerning issues of syntax; but when the ignorance of people concerning the vowels, with the change of which meanings change in the Arabic language, became widespread, the ulama put down (wada'a) the books of syntax and lifted ($rafa'\bar{u}$) great confusion.⁴² That was helpful for understanding the speech of Allāh, the Omnipotent and the Exalted, and the speech of the Prophet, may peace and blessings be upon him. The one who was ignorant of this had defective understanding of his Lord, the Exalted. This action of the ulama was good and merited reward for them. The statement is likewise concerning the books of ulama in language and law, for truly the predecessors had no need of any of that because of what [i.e., the knowledge] Allāh gave them from His bounty and because they witnessed the prophethood. Those after them needed all that. One sees that visibly and knows the deficiency of those who did not peruse these sciences and did not read those books, and that they are closely related to cattle. Likewise is this science, since truly for the one who is ignorant of it, the structure of the speech of Allāh, the Omnipotent and the Exalted, together with the speech of His Prophet is concealed. Disputes will become permissible for him, which he will not be able to distinguish from the truth.⁴³

Ibn Hazm was not the only prominent Muslim jurist and theologian to argue that logic was a

prerequisite for all fields of knowledge. Another advocate of the same position was al-Ghazālī.

As is well known, al-Ghazālī was sharply critical of the philosophers of his time for insisting on

non-Islamic metaphysical doctrines that were not only contrary to the apparent meaning of the

Noble Qur'ān but also not necessitated by logic.⁴⁴ Yet, unlike some prominent ulama who

rejected logic together with philosophy, and despite his own rejection of some of the

theological views of the philosophers, al-Ghazālī, like Ibn Hazm before and al-Abharī after him,

considered logic indispensable for any pursuit of knowledge. He writes in his autobiographical

al-Munqidh min al-ḍalāl,

As for logic, nothing from it pertains to the religion either with negation or affirmation, but rather it is reflection concerning paths of evidence, and deductions, and the conditions of the premises of proofs and how they are combined, and the conditions for the sound definition and its arrangement, and that knowledge is either conceptualization, the path to its understanding being the definition, or true statement, the path to its understanding being the proof. There is nothing in this to be rejected, but rather it is from the genus of what the theologians and people of reflection mention concerning types of evidence. They [i.e., the logicians] only differ from them in expressions and technical terminology, and minute investigations of definitions and subdivisions. The example of their discourse in this is like their statement, "if it is established that every a is b, it follows that some b is a," i.e., if it is established that every human is a living being, it follows that some living beings are human. They express that by saying that the affirmative universal is reversed as an affirmative existential.⁴⁵ And what relation does this have with the important subjects of religion so that it is denied and refused? If this is rejected, nothing results from its rejection for the logicians except a bad opinion of the intellect of the rejecter, nay, of his religion which he thinks is dependent on such rejection.⁴⁶

In his work on legal theory, *al-Mustaşfā*, al-Ghazālī goes further to say that the knowledge of

anyone who does not know logic cannot be trusted at all:

We mention in this introduction the discernments of the intellects and their confinement to the definition and the proof. We mention the condition of the real definition and the real proof and their divisions in a way that is more concise than what we mention in the book *Miḥakk al-naẓar* and the book *Miʿyār al-ʿilm*. This is not part of the general knowledge of legal methodology or the introductions specific to it, but rather it is the introduction to all fields of knowledge, and whoever does not comprehend it, there is no trust in his knowledge at all.⁴⁷

As al-Ghazālī states, like Ibn Hazm, he wrote books on logic, Mi'yār al-'ilm (The Measure of

Knowledge) and Mihakk al-nazar (The Touchstone of Reflection). Naturally, there were many

who disagreed with the view that knowing logic was obligatory for any seeker of knowledge

and some who even considered studying it impermissible because of its association with

philosophy, such as Ibn Ṣalāḥ who wrote, "as for logic, it is the entrance to philosophy and the

entrance of evil is evil."48 However, the view of scholars such as Ibn Hazm, al-Ghazālī, and al-

Abharī prevailed and logic became part of the standard curriculum of learning in madrasahs in

both the central Islamic lands and South Asia, and has remained so until today.

It is noteworthy, however, that just as al-Ghazālī in particular and *kalam* theologians in general did not accept or reject philosophy as a whole, but rather rejected aspects of the metaphysical doctrines of the philosophers that contradicted the apparent meaning of the Noble Qur'ān while strongly advocating the study of logic, within logic they did not accept all the standards. They accepted and used the valid forms of argument in their theological dialectic without strictly following the norm for the logical definition. This was not due to any doctrinal concern, but to its sheer impracticality.

In *Mi'yār al-'ilm*, after explaining in detail Pophyry's system of definition, al-Ghazālī has a chapter on the arduousness of articulating definitions according to these criteria. He lists four difficulties: identifying the proximate genera, making sure that the differences consist entirely of essential elements, identifying all the differences, and presenting them in the right sequence. Al-Ghazālī observes that since these exact requirements make logical definition exceedingly difficult, *kalam* scholars deemed sufficient a definition that distinguishes one thing from others. For them, definition (*al-ḥadd*) is the statement that is inclusive of its instantiations and exclusive of its non-instantiations.⁴⁹

Ibn Hishām likewise seems to espouse the school of thought that saw knowledge of logic as a prerequisite for any field of knowledge. To use Larcher's distinction who writes, "Astarābādī, although he was a logician, is not at all a logicist," Ibn Hishām was a logicist, although he was not a logician.⁵⁰ Unlike al-Ghazālī and *kalam* theologians, he fully adopts and applies the logical standard as articulated by Muslim logicians. Here is Ibn Hishām's justification for his new definition:

A: The kalima is a simple saying.⁵¹

C: *Kalima* is said in language without restriction for meaningful sentences, like His statement, the Exalted, "No, truly it is a word that he speaks," indicating his saying "My Lord, return me so that I do what is righteous in that which I left (Q 23:99-100)."⁵² In technical terminology, *kalima* is used for a simple saying. What is intended by "saying" is the utterance indicating a meaning, like "man" and "horse."⁵³ What is intended by "utterance" is the sound including some letters, whether it indicates a meaning, like "Zayd," or does not indicate [a meaning], like "dayz," the inverse of Zayd. It has indeed become clear that every saying is an utterance and the converse is not true [i.e., every utterance is not a saying]. What is intended by "simple" is that a part of which does not

indicate part of its meaning, and that is like "Zayd," for truly its parts, which are *z* and *y* and *d*, if they are mentioned alone, do not indicate anything which it [i.e., Zayd] indicates, as opposed to your saying "the boy of Zayd," for truly each of its parts, which are "boy" and "Zayd," indicates part of its [i.e., the saying's] meaning. This is called compound, not simple. If you say, "why did you not require designation in the [definition] of word just like the one who said "*kalima*' is an utterance that is designated for a simple meaning,"' I say they only needed that because they took "utterance" as their genus for "the word." ⁵⁴ Utterance is divided into the designated and the ignored, so they needed to avoid the ignored by mentioning the designated, that made me needless of requiring designation. If you say, "why did you abandon utterance for saying," I say, because the utterance is a distant genus, because of its being applied to the ignored and the used [i.e., the designated] as we have mentioned. "Saying" is the proximate genus, because it is specific for the used. The usage of distant genera is a defect according to people of reflection.⁵⁵

People of reflection refer to the logicians. In effect, Ibn Hishām argues that Ibn al-Ḥājib's definition is like calling the human being "a rational body" instead of "a rational living being," using the higher genus while there is a proximate. "Saying" is more specific than "utterance," since utterance refers to both sounds that are designated for a meaning in the Arabic language and those which have not been used for any meaning. Hence, using "saying" instead of "utterance" better defines the essence of "word," since it is more specific. Ibn Hishām, unlike the *kalam* theologians al-Zamakhsharī and Ibn al-Ḥājib, systematically applies the logical criteria of definition as articulated by Muslim logicians to the definition of "word." Here, it should be noted that Ibn Hishām was not the first to attempt to systematically apply logical standards to Arabic grammar. Already in the fourth/tenth century al-Rummānī (d. 384/994), a Mu'tazilī theologian and expert on Arabic language, applied logical terminology to Arabic grammar in his *Kitāb al-ḥudūd*. However, Abū 'Alī al-Fārisī (d. 377/987), a prominent grammarian of the Basran school, criticized al-Rummānī's approach saying, "if syntax is what al-Rummānī says, we have no share in that; if it is what we say, then he does not have any share in that."⁵⁶ This shows that

some grammarians objected to a full-scale adoption of logical standards in the study of Arabic syntax.

The Autonomy of Syntax

An important question remains, which is why other distinguished grammarians, including al-Zamakhsharī and Ibn al-Ḥājib, were not interested in fully defining *kalima* according to the criteria developed by logicians. As will be seen below, one cannot assume that al-Zamakhsharī and Ibn al-Ḥājib did not know logic. Even if one argues that the influence of logic on other sciences gradually increased over time, since Ibn Hishām's path was paved by such intellectual giants as Ibn Ḥazm and al-Ghazālī, who was al-Zamakhsharī's contemporary, this does not explain why later grammarians generally did not follow Ibn Hishām's definition, but rather preferred those of al-Zamakhsharī and Ibn al-Ḥājib. Al-Jāmī, for example, who criticizes aspects of both the definitions of al-Zamakhsharī and Ibn al-Ḥājib, does not include among his criticisms that they did not use the proximate genus. A comment that al-Jāmī makes elsewhere in his commentary, and the glosses on his commentary, provide an answer.

After the definition of *kalima*, the text of *al-Kāfiya* continues, "It [i.e., *kalima*] consists of nouns, verbs, and particles, because it either indicates a meaning in itself or not. The second is the particle. The first is either linked with one of three times [i.e., past, present, and future] or not. The second is the noun and the first is the verb. Truly by that, the definition (*ḥadd*) of each one is known."⁵⁷ In this succinct section, Ibn al-Ḥājib explains why *kalima* has only three types of elements in Arabic. *Kalima*s have either meaning in themselves, meaning they refer to reality without the need of adding another word, or not. The latter is the particle, since in most cases the particle needs a verb to attach itself to and a noun. *Kalima*s that have independent

meanings are either not linked with tenses, being nouns, or linked with tenses, being verbs. Al-Jāmī comments,

Kalima is shared between the three divisions. The particle is distinguished from its two brothers by the absence of independence in the indication [of a meaning]. The verb is distinguished from the particle by independence and from the noun by being linked [to one of three tenses]. The noun is distinguished from the particle by independence and from the verb by the absence of being linked [to a tense]. For each one a definer (*mu`arrif*) is known that includes its elements and excludes its non-elements. What is intended by definition (*hadd*) here is nothing but the inclusive exclusive definer. ⁵⁸

Al-Jāmī explains here that the grammarians, as opposed to the logicians, are not so much concerned with subtleties of essences but rather with defining things with definitions that distinguish them from other things, since their concern is the real language with its different types of utterances. According to al-Jāmī, the best definition for the grammarian, like the kalam theologian, is the definition that is inclusive of all the elements of the definiendum and exclusive of all its non-elements. From this perspective, the hierarchy of definitions in *Isāghūjī* ceases to be significant, since the full definition, the defective definition, the full description, and the defective description of "the human being" are equal in being inclusive of everything that is human and exclusive of everything that is not human. In his gloss on al-Jāmī's comment "what is intended by definition (hadd) here is not but the inclusive exclusive definer," 'Abd al-Ghafūr al-Lārī (d. 912/1506) says, "within this discipline [syntax], for the definition according to the literati (*al-udabā*') is the inclusive exclusive definer, and within this place, because that which is a compound from that which is shared and that which distinguishes does not necessitate that it is a definition (*hadd*) as opposed to the description (*rasm*)."⁵⁹ Al-Lārī highlights that, according to the criteria of the grammarians, even the distinction between definition and description becomes insignificant as long as these are equally inclusive and

exclusive. Al-Siyālkūtī (d. 1067/1657) writes in his gloss on al-Lārī's gloss, "since their goal from the definition is not but full distinction. As for the distinction between the essentials and accidentals, this is the duty of the philosophers searching the conditions of existents according to essences."⁶⁰ According to these grammarians, the science of syntax articulated its own criteria of definition that were different from the criteria of logicians, and al-Jāmī's vigorous analysis and criticism of the definitions of al-Zamakhsharī and Ibn al-Ḥājib were based on these criteria.

Sājaglīzādah in Waladiyya and al-Āmidī in his commentary on this treatise discuss why lexicographers and grammarians did not adopt the logical standard. Sacaklızâde writes that if someone objects to a logical definition or description, the proponent has to prove that the former consists only of essential universals and the latter from accidentals, which he says is difficult. Al-Āmidī comments, "The reason it is difficult is that the genus [e.g., living being] resembles the general accident [e.g., breathing being] and the difference [e.g., potentially thinking] resembles property [e.g., potentially laughing], so distinguishing them is difficult; squaring the circle is easier."⁶¹ Sacaklızâde continues, "Know that definition (hadd) having the meaning of that which is composed of essentials is only the convention of the experts of the scale [i.e., logicians, since with logic one weighs arguments] and those who agree with them. As for the experts of Arabic, it is the definition that is inclusive and exclusive."⁶² Even though Ibn Hishām articulated a new definition that is better than Ibn al-Hājib's according to the criteria of the logicians, according to the criteria of the grammarians, Ibn Hishām's definition is no different than Ibn al-Hajib's, and al-Zamakhsharī's definition is better than both even though it is chronologically the earliest. In terms of being inclusive of all elements and being exclusive of

all non-elements, defining *kalima* as "a simple saying" is no different than defining it as "an utterance that is designated for a simple meaning." Both seemingly exclude *al-rajul*, *qā'ima*, and *başrī*, as these are not strictly simple due to the affixes that are bound morphemes. When the definitions should include them, and include "Abdallāh" as a proper noun because it is simple, when they should exclude it, because even though it refers to a simple reality, it takes two case endings, and the purpose of syntax is to make one familiar with the endings of words.

But is the claim of al-Jāmī, al-Lārī, al-Siyālkūtī, and Saçaklızâde completely accurate? If so, then defining something by its genus and properties would be as good as defining it with the essential categories of genus and difference. Consider the following definitions of *ism* (noun) by al-Zamakhsharī and Ibn al-Hājib. Al-Zamakhsharī writes, "the noun is that which indicates a meaning by itself that is isolated from being linked. It has properties such as the permissibility of predication for it, the entrance of the definite particle, being genitive, nunation, and being in a genitive construct."⁶³ Ibn al-Hājib states, "the noun is that which indicates a meaning by itself that is not linked with one of the three times [past, present, and future]. Among its properties are the entrance of $l\bar{a}m$ [i.e., the definite particle], being genitive, nunation, predication for it, and being in a genitive construct."⁶⁴ One can see that both al-Zamakhsharī and Ibn al-Ḥājib took care to define the noun according to the logical standard of using only essential universals consisting of genus and difference, intentionally separating the definition of *ism* from its properties. However, they saw no need to go with the more exact logical standard of using the proximate genus in their definition of kalima, but instead preferred lafz (utterance), the highest genus in Arabic. So, their approach seems to be more subtle than what al-Jāmī, al-Lārī, al-Siyālkūtī, and Saçaklızâde say. At least as regards al-Zamakhsharī and Ibn al-Hājib, the issue was

not choosing between the definition of the logicians or that of the *kalam* theologians and the literati (*udabā*'), but a matter of degree. They did adopt the logical standards of the definition being coextensive with the definiendum and the norm of using essential genera and differences, but unlike al-Abharī and Ibn Hishām, they did not feel the need to restrict themselves to proximate genera.

Al-Āmidī offers an insight concerning why al-Zamakhsharī and Ibn Ḥājib were able to apply the more demanding logical standard of using only essential elements, unlike *kalam* theologians who saw this as exceedingly difficult. As we saw above, after acknowledging the difficultyof distinguishing the essential and accidental elements, al-Āmidī writes,

But this is only in existing realities and real definitions. As for relative understandings, its distinction is easy since it is based on the conventions of the masters of the field, so whatever they consider inside is essential and otherwise it is accidental. For example, when the grammarians define the *kalima* as an utterance designated for a simple meaning, whatever is within this definition is essential, such as utterance, designation, and meaning, and whatever is outside of it, such as the entrance of *lām*, nunation and being genitive, is accidental. Due to this Ibn al-Ḥājib said in the introduction to *i'rāb* (grammatical government) [i.e., *al-Kāfiya*] "and among its properties are the entrance of *lām*," etc.⁶⁵

The theologian, like the philosopher, deals with reality, whereas the grammarians were

discussing conceptual terms. As a result, it was easier for them to follow the logical norm of

essentiality, which to some extent is conventional in their field, than it was for the theologians,

since understanding the essence of reality is exceedingly difficult.⁶⁶

Conclusion

Given the vastness of Muslim intellectual heritage, any conclusions reached from a limited

study will be tentative. The Islamicate intellectual tradition explicitly articulated and applied

two distinct forms of definition. One, advocated primarily by philosophers and logicians, was

the full logical definition (*al-hadd al-tāmm*) that consisted of the proximate genus and difference. The other, advocated by the theologians and the literati (*al-udabā*'), was the inclusive exclusive definer (*al-mu'arrif al-jāmi' al-māni'*) that included all the instantiations of the definiendum and excluded all non-elements. This paper has argued that there was a third standard in between, which al-Zamakhsharī and Ibn al-Ḥājib used in their grammatical definitions, that accepts the logical standard of using only the essential universals of the genus and difference without adopting the more exact logical standard of using the proximate genus and difference. In fact, this was what Porphyry required in the original *Isagoge*. Of the three criteria, that of being coextensive is the easiest, that of being coextensive and essential is more demanding, and that of being coextensive, essential, and proximate is the most difficult. The interest of the logicians and the grammarians overlapped in the study of language and its most basic unit, the *kalima*, and their different conceptions of definitions shaped their definitions of *kalima*.

In Islamic civilization, one can observe three responses to Greek philosophy. One is that of the Islamicate philosophers of total adoption to the extent of interpreting revelation according to the doctrines of Neoplatonic metaphysics even when the apparent meanings of the statements of the Noble Qur'ān clearly contradict those doctrines. The second was total rejection. The third was a pragmatic approach of benefiting from what is useful in the Greek philosophical tradition, while abandoning those aspects that are irrelevant or contrary to the literal meaning of revelation. In *kalam*, al-Ghazālī represents this moderate approach, since he rejected some of the theological doctrines of the philosophers, while being one of the leading if not the most influential advocate of the teaching, learning, and application of Aristotelian logic

in Islamic history. Considering the political and theological climate of al-Ghazālī's era, it seems clear that one of the reasons kalam theologians stressed the importance of logical thinking was that they saw it as a way of showing the erroneousness, subjectivity, and inconsistency of the Bāținiyya (esoteric sects) such as the Ismā'īliyya, who advocated a theology where reason and the apparent meaning of revelation is subordinate to the esoteric teaching of the cult leader. In the words of one proponent of Ismā'īlism, Hamīd al-Dīn al-Kirmānī (d. after 411/1020), "logical argument from the intellect without the [esoteric] teacher is false (al-istidlal min taria al-'uqul min ghayr mu'allim bāțil)."67 In fact, because of the increasing pressure of the Fāțimīds in the eleventh century and the Bāținī propaganda to discredit the 'Abbāsīd caliphate, the Caliph al-Mustazhir bi-Allāh (r. 1094-1118) asked al-Ghazālī to write against them, as a result of which al-Ghazālī wrote Fadā'ih al-bāținiyya (lit. the Infamies of the Esotericists).⁶⁸ To the contrary, in the kalam paradigm, the intellect is a source of certain knowledge, and a claim derived from a sound argument can never be wrong.⁶⁹ Thus, demonstrating that one's beliefs are supported by sound arguments and that the beliefs of the opponents are illogical or inconsistent is one of the best ways of discrediting them, which is one of the reasons why most ulama have studied logic to this day. However, when the criteria of the logicians did not provide any tangible benefits, kalam theologians did not see any need to adopt them, as we witnessed in the kalam norm for definition.

The moderate approach of many grammarians towards logic resembles that of al-Ghazālī and *kalam* theologians. They took what was useful for their purposes, namely the commonsense conception that the definition should be coextensive with the definiendum, and in the case of some, the additional requirements of distinguishing essential genera and

differences from properties. They tried to rigorously apply these guiding principles in their grammatical definitions, while not fully adopting the logical criteria of definition. Likewise, al-Jāmī criticized the usage of the Aristotelian concept of a word being simple as he deemed it not suitable for the Arabic *kalima*.

Ibn Hishām consciously broke with the grammatical tradition represented by al-Zamakhsharī and Ibn al-Ḥājib, defining *kalima* completely according to the standards of the logicians, with the additional requirement of proximity. Yet, Muslim grammarians did not follow Ibn Hishām's attempt to fully adopt the logical norm for the perfect definition because they are not concerned with the exactness of essences. Like *kalam* theologians, they took from the logical tradition what they found useful and discarded what they found unnecessary. In this regard, *kalam* theologians and grammarians can serve as an example for Muslims facing foreign civilizations. Their approach was neither imitation nor dismissal but one of discernment: rejecting what is false or unusable and accepting what is true or beneficial.

¹ 'Abd al-Raḥmān al-Jāmī, al-Majmū'a al-nūriyya al-mushtamila 'alā sittat kutub fī l-naḥw al-awwal al-kāfiya l-lbn al-Ḥājib al-thānī sharḥ al-kāfiya li-l- 'allāma 'Abd al-Raḥmān al-Jāmī al-thālith ḥāshiyat 'Abd al-Ghafūr al-Lārī 'alā sharḥ al-Jāmī al-rābi' ḥāshiyat 'Abd al-Ḥakīm al-Siyālkūtī 'alā ḥāshiyat 'Abd al-Ghafūr al-Lārī al-madhkūr al-khāmis al-ḥāshiya al-musammā bi- 'aqd al-nāmī li-Muḥammad Raḥmī al-Akīnī 'alā al-Jāmī al-sādis ḥāshiyat 'Abd al-Ḥakīm al-Siyālkūtī al-madhkūr 'alā awākhir al-Jāmī , ed. Fu'ād Nāsir (Midyat (Turkey), Dār Nūr al-Ṣabāḥ, 1430/2010), 1:86. For ease of reference, individual works within the collection will be cited by the particular author's name. All dates converted from the Hijri calendar to the Common Era are approximate.

² For an overview of the concept of definition, see Takashi Yagisawa, "Definition," in *Cambridge Dictionary of Philosophy*, edited by Robert Audi, 2d ed. (NY: Cambridge University Press, 2006).

³ Aryeh Levin, "The Medieval Arabic Term *kalima* and the Modern Linguistic Term Morpheme: Similarities and Differences," in *Studies in Islamic History and Civilization in Honour of Professor David Ayalon*, ed. M. Sharon (Jerusalem: Cana & Leiden, 1986), 423-446; "Kalima," *Encyclopaedia of Arabic Language and Linguistics*; "The Concept of *Kalima* in Old Arabic Grammar," in *The Word in Arabic*, ed. G. Lancioni and L. Bettini (Leiden: Brill, 2011), 17-32. Jonathan Owens, *the Foundations of Grammar: An Introduction to Medieval Arabic Grammatical Theory* (Amsterdam: John Benjamins Publishing Company, 1988), 113.

⁴ Pierre Larcher, "What is a kalima? Astarābādī's Answer," in *The Word in Arabic*, 33-48. Jean-Patrick Guillaume, "Defining the Word within the Arabic Grammatical Tradition: Astarābādī's Predicament," in *The Word in Arabic*, 49-68.

⁵ Kātib Chalabī comments that *al-Kāfiya*'s fame makes any introduction needless. Hājjī Khalīfah Mustafā b. 'Abd Allāh Kātib Chalabī, *Kashf al-zunūn* (Beirut, Dār al-Kutub al-'Ilmiyya, 2008), s.v. "al-Kāfiya fī al-naḥw."

⁶ Ibn Hishām, *Sharḥ qaṭr al-nadā wa-ball al-ṣadā* (Riyāḍ: Dār al-Ṭalā'i', 2004), 95, 127, 213.

⁷ Incidentally, al-Zamakhsharī was Ḥanafī in law, Ibn al-Ḥājib was Mālikī, and Ibn Hishām became Ḥanbalī after first being Shāfiʿī. Aḥmad b. Muṣṭafā al-shahīr bi-Ṭāsh Kubrī Zādah (Taşköprüzade), *Miftāḥ al-saʿāda wa-mişbāḥ al-sayāda fī mawdūʿāt al-ʿulūm* (Beirut: Dār al-Kutub al-ʿIlmiyya, 1422/2002), 1:133, 184, 2:87.

⁸ Kātib Chalabī, *Kashf al-zunūn*, s.v. "al-Kāfiya fī al-naḥw." Khayr al-Dīn al-Ziriklī, *al-Aʿlām* (Dār al-ʿllm li-l-Malāyīn, 2002), s.v. "al-Jāmī."

⁹ Ertugrul Okten, "Abd al-Raḥmān Jāmī and the Ottoman Linguistic Tradition: Philosophy of Language and *'Ilm al-Waḍ'*" in *Jāmī in Regional Contexts*, ed. Thibaut d'Hubert and Alexandre Papas (Brill, 2018), 283-308.

¹⁰ For a short discussion of the concept *al-jāmi al-māni* in Islamicate literature see R. Brunschvig, "Ğāmi Māni," *Arabica* (January, 1962): 74-76.

¹¹ Al-Taftāzānī, *Sharḥ al-ʿaqā ʾid al-Nasafiyya* (Damascus: Dār al-Bayrūtī, 1428/2007), 21-23.

¹² 'Abd al-Wahhāb al-Āmidī, 'Abd al-Wahhāb 'alā al-waladiyya (Istanbul: Asitane, 1318AH), 11-17.

¹³ Cf. J. R. Cassidy, "Aristotle on Definitions," *Southern Journal of Philosophy* (summer, 1967): 117.

¹⁴ Al-Jāmī, *al-Majmūʿa al-nūriyya*, 1:39. Positing, institution, and convention have been used to translate *al-wadʿ* in modern research. I have used designation (translation of the Arabic *al-taʿyīn*) instead since this is how grammarians of Arabic commonly define *al-wadʿ*. Aḥmad Shukrī in his treatise on *wadʿ* defines it as "designation of something to something such that whenever the first is conceived the second will be understood for the one who knows the designation." Aḥmad Shukrī, *Taṣwīr al-wadʿ ʿalā matn namūdhaj al-wadʿ* (Istanbul: Maṭbaʿa-i ʿĀmira, 1305 AH), 3.

¹⁵ Ibn al-Hājib, *al-Majmūʿa al-nūriyya*, 1:18 ff.

¹⁶ Ibn Hishām, Sharḥ qaṭr al-nadā, 31 f.

¹⁷ Al-Jāmī, *al-Majmūʿa al-nūriyya*, 1:23-24.

¹⁸ Al-Jāmī, *al-Majmūʿa al-nūriyya*, 1:28.

¹⁹ Al-Dasūqī, Hāshiyat al-ʿallāma al-shaykh Muḥammad al-Dasūqī al-Mālikī ʿalā sharḥ al-muḥaqqiq Abī Layth [sic. Abī al-Qāsim] al-Samarqandī ʿalā al-risāla al-ʿAḍudiyya li-l-qādī ʿAḍud al-Dīn ʿAbd al-Raḥmān b. Aḥmad wa-bihāmishihi ḥāshiyat al-ʿallāmh Muḥammad al-Ḥafnāwī al-Shāfiʿī, ed. Mehmet Nuri Nas (Midyat, al-Maktaba al-Islāmiyya). B. Weiss, "A Theory of the Parts of Speech in Arabic (Noun, verb, and particle): A Study in ''Ilm al-Waḍ''," Arabica 23 (1976): 23-36.

²⁰ Kātib Chalabī, *Kashf al-zunūn*, s.v. "Risāla fī l-wad'." The authenticity of the attribution of this commentary to al-Jāmī has been disputed. Ertugrul Okten, "Abd al-Raḥmān Jāmī," 283-308.

²¹ The similarity between the classical Muslim conception of the designation of utterances for meanings and Saussurian semiology has been noted previously by Guillaume, "Defining the Word," 59, and Antonella Ghersetti, "'Word' in the Linguistic Thinking of 'Abd al-Qāhir al-Jurjānī," in *The Word in Arabic*, 93.

²² Guillaume, "Defining the Word," 52.

²³ This type of compound is called *al-tarkib al-isnādī*, the predicative compound.

²⁴ Al-Jāmī, *al-Majmūʿa al-nūriyya*, 1:26, 39.

²⁵ Al-Jāmī, *al-Majmūʿa al-nūriyya*, 1:40.

²⁶ Al-Jāmī, *al-Majmūʿa al-nūriyya*, 1:39.

²⁷ Muḥammad b. al-Ḥasan al-Radī al-Astarābādī, Sharḥ al-kāfiya fī al-naḥw (Tehran: al-Maktaba al-Murtadawiyya),
5.

²⁸ Guillaume, "Defining the Word," 49-68.

²⁹ Al-Astarābādī's alternative definition of "a simple utterance that is designated (*lafẓ mufrad mawdū*')" has the same shortcomings. Al-Astarābādī, *Sharḥ al-kāfiya*, 4. Guillaume, "Defining the Word," 57.

³⁰ Although some experts have claimed that it was written as an introduction to Aristotle's *Categories*, Jonathan Barnes rejects this view, stating that it is an introduction to logic and philosophy in general. Porphyry, *Introduction*, tr. Barnes (Oxford: Oxford University Press, 2003), xv. However, there is no zero sum game between these goals, and Porphyry's own words at the very beginning of his treatise show that he intended both. Porphyry, *Introduction*, *3*.

³¹ For numerous commentaries on the text and its versification, see Kātib Chalabī, *Kashf al-ẓunūn*, s.v. "Īsāghūjī." Turkiye Diyanet Vakfi Islam Ansiklopedisi, s.v. "Isaguci," by Abdulkuddus Bingol. Bingol makes the claim that according to Ibn al-Qifțī (d. 636/1238), Ibn al-Muqaffaʿ (d. 142/759) translated the work from Persian to Arabic already in the second/eighth century, but I could not verify the claim in Ibn al-Qifţī's biographical dictionary of philosophers under the biographies of either 'Abdallāh b. Muqaffa' or Farfūrīyus. Ibn al-Qifţī, *Ikhbār al-'ulamā' bi-akhbār al-ḥukamā*' (Beirut: Dār al-Kutub al-'Ilmiyya, 2005), s.v. "'Abdallāh b. Muqaffa'" and "Farfūrīyus." Bingol also writes that Ibn Nadīm (d. c. 385/995) notes that it was also translated in the third/ninth century from Syriac to Arabic by Abū al-Qāsim al-Raqī, but in the *Fihrist* I found the name as Ayyūb b. al-Qāsim al-Raqī. Ibn Nadīm, al-*Fihrist* (Beirut: Dār al-Ma'rifa), 341.

³² Barnes translates the original Greek as "individual."

³³ Translating *nāțiq* as rational in line with Barnes translation of the Greek.

³⁴ These five categories, the genus (*al-jins*), the species (*al-naw*[°]), the difference (*al-fasl*), the property (*al-khāssa*), and the general accident (*al-'araḍ al-'āmm*), are called the five universals.

³⁵ The explanatory statement is what theologians and grammarians would call *jāmi*⁶ *māni*⁶ (the definition that is coextensive with the definiendum).

³⁶ Mahmūd Hasan al-Maghnīsī (d. 1222/1807), *Mughnī al-ţullāb sharh matn Īsāghūjī*, ed. 'Işām b. Muhadhdhab al-Sabū'ī (Damascus: Dār al-Bayrūtī, 1430/2009), 37-39. The description proceeds from the feet to the head.
³⁷ Porphyry, *Introduction*, xvii.

³⁸ Ibid, 10, 110.

³⁹ Ibid, 112.

⁴⁰ Al-Ghazālī, *Miʿyar al-ʿilm* (Jidda: Dār al-Minhāj 1437/2016), 320.

⁴¹ An argument can be made that Porphyry implies this, since when he explains his purpose in writing the text, he says that this knowledge is necessary to understand Aristotle's predications and "also for the presentation of definitions, and generally for matters concerning division and proof, the study of which is useful." Since knowledge is justified true belief, all knowledge must be based on definitions and proofs of some sort, so if to know the five universals is necessary for definitions and proofs, one can conclude it is necessary for every field of knowledge. Porphyry, *Introduction*, 3.

⁴² The deliberate sequential usage of antonyms, *al-ţibāq*, is a literary device of *al-balāgha* (Arabic rhetoric). Cf. al-Sayyid Aḥmad al-Hāshimī, *Jawāhir al-balāgha fī l-maʿānī wa-l-bayān wa-l-badīʿ* (Cairo, Maktabat al-Ādāb, 1426/2005), 292.

⁴³ 'Iṣām b. Muhadhdhab al-Sabū'ī, the editor of *Mughnī al-ţullāb*, in his introduction to the edition has gathered statements of ulama for and against the study of logic. The quotations from Ibn Ḥazm and al-Ghazālī are from this introduction. al-Maghnīsī, *Mughnī*, 28.

⁴⁴ Al-Ghazālī, *al-Iqtiṣād fī al-iʿtiqād* (Beirut: Dār al-Minhāj, 1440/2019), 410.

⁴⁵ I have translated the quantifiers according to how they are currently referred to in predicate logic.

⁴⁶ Al-Maghnīsī (d. 1222 AH), *Mughnī*, 29.

⁴⁷ Ibid, 30.

⁴⁸ Ibid, 23. Intriguingly, he uses what resembles a syllogism to prove his point with the implication that logic is evil.
 ⁴⁹ Al-Ghazālī, *Mi'yār al-'ilm* (Beirut: Dār al-Minhāj, 1437/2016), 339-341.

⁵⁰ Larcher, "Arabic Linguistic Tradition II", in *the Oxford Handbook of Arabic Linguistics*, ed. J. Owens (Oxford, Oxford University Press, 2013), 204.

⁵¹ The text starts with the letter *s* while the commentary starts with the letter *sh*, translated here with the letters A and C, the first referring to *muşannif* (author) and the latter referring to *shāriḥ* (commentator), which in the case of *Sharḥ qaṭr al-nadā* is one and the same person, Ibn Hishām.

⁵² The point is that the Noble Qur'ān refers to the statement of the one who wants to return to the world after death to do good deeds as a "*kalima*," which shows that in spoken language "word" does not mean a simple saying, but a "saying," which can consist of a sentence rather than the grammatical *kalima*.

⁵³ Ibn Hishām means utterance indicating a meaning by designation, as will become clear from what follows. Or else, as al-Jāmī relates, "dayz" heard from behind a wall is also indicative, although "dayz" is not a saying in Arabic.
 ⁵⁴ As we have seen, this was Ibn al-Hājib's definition.

⁵⁵ Ibn Hishām, *Qaţr*, 31-32.

⁵⁶ Turkiye Diyanet Vakfi Islam Ansiklopedisi, s.v. "Rummani."

⁵⁷ Al-Jāmī, *al-Majmūʿa al-nūriyya*, 1:40-46.

⁵⁸ Ibid, 1:47.

⁶² Ibid. The idiom al-Āmidī uses in Arabic is literally taking off the thorns from the tragacanth, so my translation is idiomatic.

⁶³ al-Zamakhsharī, *al-Mufaṣṣal fī ʿilm al-ʿarabiyya* (Amman: Dār ʿAmmār, 2003), 33.

⁶⁴ Ibn al-Ḥājib, *al-Kāfiya fī ʿilm al-naḥw wa-l-shāfiya fī ʿilm al-taṣrīf wa-l-khaţţ* (Cairo: Maktabat al-Ādāb), 11.

⁶⁵ Al-Āmidī, *ʿAbd al-Wahhāb ʿalā al-waladiyya*, 28.

⁶⁶ Cf. Khaled El-Rouayheb, "Theology and Logic," in *Oxford Handbook of Islamic Theology*, ed. Sabine Schmidtke (Oxford: Oxford University Press, 2018), 416.

⁶⁷ Daniel De Smet, "Ismāʿīlī Theology" in *the Oxford Handbook of Islamic Theology*, 314. Translation is mine.

68 Turkiye Diyanet Vakfi Islam Ansiklopedisi, s.v. "Fedaihu'l-Batiniyye."

⁶⁹ Nūr al-Dīn al-Ṣābūnī, *al-Bidāya fī uṣūl al-dīn*, 8th ed. (Ankara: Gurup Matbaacilik, 2005), 18.

⁵⁹ Al-Lārī, *al-Majmūʿa al-nūriyya*, 47.

⁶⁰ Al-Siyālkūtī, *al-Majmūʿa al-nūriyya*, 47.

⁶¹ See Al-Āmidī, *Waladiyyah*, 28.