The Arab grammarians differentiate between the ziyāda (augment) that introduces an element of meaning and the ziyāda that appends (yalḥiq) one morphological form to another. Having realized the potential of the concept of ilḥaq (appending) as an analytical tool in morphology, the grammarians divided appended words into several types according to the number of the radicals in their roots and the type of ziyāda that is involved, and tried to justify forms and patterns with reference to a set of detailed rules which they elaborately describe. This paper deals with the issues the grammarians tackle in their study of ilḥaq, such as its purpose, the possibility of analogically extending its examples, and the inapplicability of idgām (gemination) to its patterns. It also examines how the grammarians use ilḥaq to reduce considerably the number of morphological patterns that form a closed system, to explain away anomalous and rare patterns, and thus to limit deviation from the norm (qiyās) and to test the validity of a host of morphological issues.

1.1. Within the Arabic root system a consonant may either be a radical (aṣl) or an augment (ziyāda), i.e., part of the etymological root or some kind of morphological affix, respectively. In discussing augmented forms, grammarians usually differentiate between the purely morphological ziyāda, whose purpose is to introduce an element of meaning, and the ziyāda whose purpose is to append (yalḥiq) one formal word pattern to another by interpreting one or more consonants in the word as having the status of affixes and not radicals. As with many postulates, this distinction goes back to Sibawayhi (d. 180/796; Kitāb, II, 9), and probably to his teacher, al-Ḥalīl b. Ahmad (d. 175/791), whose influence on him was overwhelmingly in the areas of phonology and morphology (cf. Carter 1973, 154, and 1981, 352). To clarify this distinction, the grammarians had not only to define the limits between the two types of ziyāda in view of both form and meaning, but also to justify why certain words could not be considered appended (mulḥaq), although their forms do suggest such a possibility.

This painstaking task which the grammarians shouldered, and which
necessitated close scrutiny of a host of mostly complex and rarely used words whose patterns are said to be the result of *ilhāq* (appending), was motivated by their general tendency towards limiting the items that constitute a closed system—particularly, the number of patterns the available corpus of words should be divided into—and by their interest in using the rules that govern *ilhāq* as testing devices to prove the validity of their more general morphological premises. This paper sets out to investigate the methods the grammarians used in their study of *ilhāq* and to demonstrate how they tried to incorporate these rules within their overall system of morphological analysis.

1.2. Much of the material on *ilhāq* is discussed in several scattered parts of the *Kitāb* (esp. II, 8–11; 197; 334–41; 401–403), but Sibawayhi nowhere gives a definition of *ilhāq* or formulates and lists together the rules that pertain to it. Equally scattered are the comments of Mubarrad (d. 285/898) in his *Muqtaḍab* (esp. I, 204–205, 244; II, 225ff; III, 88, 385–86; IV, 3–4). Māzinī (d. 248/862), on the other hand, discusses the different aspects of *ilhāq* in one part of his *Taṣrīf* (I, 34–53), be it in less detail than in the *Kitāb* or the *Muqtaḍab*. However, Ibn Ğinnī’s (d. 392/1002) commentary on the *Taṣrīf* complements its text to make it more or less comprehensive. Furthermore, as we shall see later, Ibn Ğinnī makes several perceptive observations on *ilhāq* as part of his unparalleled approach to linguistic analysis.

As for the most well-organized and comprehensive study of *ilhāq* in the sources, it is obviously that of Astarābāḏī (d. 686/1287) in *Šarḥ al-Šāfiya* (I, 52–70). It is surprising, however, that some authors of major works on morphology barely mention a few rules about *ilhāq*, as did Ibn ‘Uṣfīr (d. 669/1271) in his *Mumti‘* (I, 206–208), or sporadically mention its function without devoting a particular section or chapter to it, as did Ibn Ğinnī, who at times mentions, in his alphabetical list of ḥurūf (here, phonemes) in *Sirr šinā‘at al-i‘rāb*, that a certain *harf* can have the function of *ilhāq* (e.g., *alif*; II, 691–93).[^1]

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[^1]: It should be noted that Ibn Ğinnī, in his *Sirr*, generally avoids the use of the term *ilhāq*, and uses the more general term *ziyāda* instead. For instance, he mentions a large number of the examples of *ilhāq* of tāʾ, nūn (I, 167–69 for both) and wāw (II, 594) without referring to *ilhāq*. He might have preferred *ziyāda* because it contrasts more directly with asf (i.e., what is part of the word’s root), since he tries to establish the contrast between what is augmented and what is a part of the root. Another possible reason is that since he investigates in his *Sirr* not only the morphological characteristics of the ḥurūf, but also their
Many of the later sources also show little interest in *ilhāq*, and it is remarkable that, unlike his commentary on Ibn Ginni’s *al-Taṣrīf al-mulūkī* (64f.), Ibn Ya’īs’s (d. 643/1245) most detailed work, *Ṣaḥḥ al-Mufāṣṣal*, does not include a special chapter on *ilhāq* (see sporadic mention of the term in VI, 113, 119, and IX, 146–48; cf. Zamaṣṣārī, *Mufāṣṣal*, 240, 241, and 358, where the term *ilhāq* appears only in the latter case). Also noteworthy is that Suyūṭī (d. 911/1505) has an atypically short summary of the main issues of *ilhāq* in his *Hamʿ al-hawāmīc* (II, 216–17)—most of which relates to whether or not it is restricted to what the Arabs actually used—and only an incidental mention of *ilhāq* as one of the kinds of *ziyāda* in Ašbāh (IV, 137).

Finally it should be mentioned that works that deal with loan words usually cite *ilhāq* as one of the main factors that affect the Arabicized forms of these loans. For example, Ġawāliqī (d. 540/1145) and Ḥaḍāǧī (d. 1069/1659) mention several patterns that demonstrate this phenomenon (*Muʿarrab*, 8, and Ṣifāʿ, 36–37), and Ibn Kamāl Pasha (d. 940/1533) has a lively discussion of its role in Arabicization and frequently refers to this role in analyzing particular examples (*Risāla*, 47f.; and index, p. 153). This interest in the relation between *ilhāq* and loan words, it may be noted, owes its origin to Sībawayhi’s chapter on *mā uʿriba min al-aʿgāmiyya* (What has been Arabicized from foreign languages; *Kitāb*, II, 342).

Since the above-mentioned authors are largely in agreement concerning the function of *ilhāq* and the material that constitutes its corpus, we shall refer to them collectively unless we need to specify or indicate different views.

2.1. Although Sībawayhi does not give a formal definition of *ilhāq*, his discussion of it includes all the elements later grammarians used in formulating its definition. These elements are the following: (a) that it is a *ziyāda*; (b) that it causes triliterals to be appended to quadriliterals and quinqueliterals, and quadriliterals to be appended to quinqueliterals; (c) that this *ziyāda* is different from the one which uniformly introduces an element of meaning; (d) that the pattern of the appended word should syntactic traits, and refers to the introduction of particles by using the root *LHQ* (e.g., *lahāq*, *lahiqat*, *talḥaqq*; *Ṣirr*, II, 325, 332, 384, 396, etc.), he consciously tried to avoid the term *ilhāq* for the sense of appending, so as not to cause confusion between the two types.

2 The meanings of the cited examples will be indicated only in cases where the semantic aspect is discussed, and the examples will be given mostly as
phonologically conform to the pattern of the word to which it is appended, i.e., what can be referred to as the target pattern; (e) that the derivatives of the appended word should be congruent to the derivatives of the target word; and (f) that the rules of assimilation (idgām), if applicable, should not be made operational in the appended word because this would change its pattern and hence its congruence to the word to which it is appended. Due to the highly complex nature of the subject, sections 2.2–2.4 will deal in more detail with the grammarians’ views on the above elements, and we shall try later to examine issues of a more general nature that relate to the grammarians’ use of this tool in their linguistic analysis.

2.2. The phonemes used for appending are mostly wāw, and yā’ (e.g., kawtar and daygām, both appended to ǧa’far; and ḥirwa‘, and ‘ityar, both appended to dirham), but they also include, among others, nūn (e.g., ra‘shan, appended to ǧa’far), mīm (e.g., dilqim appended to zibrīq), and alif (e.g., ḥabanṭā—from the root HBT, with the addition of nūn and alif—which is appended to ḥabarkā, itself with a final alif that is not part of the root). Such instances of augmentation with no recurring phonemes are often attributed to their basic roots by a semantic comparison between their apparent root and an assumed root with less radicals. A good example is that of dulāmiṣ (shining), whose apparent root DLMS is further reduced to a triliteral root semantically related to it, DL (cf. dālīs, dālis, dilāṣ, and dalāṣ, all of which mean “shining”; see Ibn Manzūr, Lisān, DLS, and Zubaydī, Amṭila, 62). Thus, the mīm, according to the grammarians, appends dulāmiṣ to ḡuḥdib, an authentic quadriliteral.

In addition to this, theoretically any phoneme can be used for appending if it recurs within the appended word. Examples include mahdād, ḥidabb, ʿatawlal, ḥalakūk, qurtāt, ʿafrāṣag, and qušaʾirāra appended to ǧaʿfar, qimatr, furazdaq, qarabūs, qurtās, ʿabanqas, and ḥuzaʾīla, respectively (Suyūṭī, Muẓhir, II, 35–36). The difference between nouns because the sources use them much more than verbs to illustrate ilhāq.

3 The phonemes of augment, including those used for ilhāq, i.e., s, ʾ, l, t, m, w, n, y, h, ā, are generally referred to by mnemonic devices such as saʿalumānihā, al-yawma tansāhu, hawītta l-simāna, wa-ātāhu Sulaymān, amānun wa-tashilun, tashimun wa-hanāʿun, etc. See Ibn Ǧinnī, Munṣif, I, 98; Astrarbāḏi Ṭarḥ, II, 331; Suyūṭī, Ḥamʿ, II, 214.

4 See Bohas and Guilluame (1984, 109f.) for a discussion of ilhāq by the addition of one of the letters of augment or by the recurrence of one of the roots, and the difference between the two types.
between the first seven representative examples and their respective counterparts is that all members of the first group may be attributed to roots whose radicals are supposedly reducible to a number less than the number of radicals in the root of their counterparts to which they are appended. For example, ‘atawtal (stout, fleshy, and flabby) is apparently quinqueliteral like farazdaq, but since it is semantically related to the root ‘TL (which indicates abundance, stoutness, flabbiness, etc., and which was augmented by the addition of wāw and tā‘, according to the pattern fa‘allal), it is considered triliteral in origin, unlike the loan word farazdaq, none of whose radicals may be reducible with reference to a triliteral or quadriliteral root to which it may be assigned. Similarly, halakāk (intensely black) is derived from a triliteral root HLK which indicates blackness, whereas its counterpart, qarabūs (part of a horse’s saddle), also a loan word, is thought to have four radicals (q, r, b, and s) that must be considered part of its supposed root.5

Based on the above, the vast majority of the corpus of appended words may be divided into five types:6

5 We chose our two examples from loan words because they clearly have irreducible roots, but it must be noted that Arabic quadriliterals and quinqueliterals may also have irreducible roots, as in ġa‘far and ḥuza‘bīta, both of which are mentioned as examples above. For other examples where the semantic aspect indicates the existence of ilhāq, see Āstārābādī, Šārīh, II, 333 f. In certain cases, both the rules of augmentation and the semantic resemblance between the appended word and other derivatives from the same root point to the existence of ilhāq. One example is kawṭar (abounding in good), whose wāw, according to Ibn Ğinnī (Taṣrīf, 16), is an augment for two reasons, namely, that the word has three radicals other than the wāw, and that the meaning of abundance is present in the word kaṭr, which is derived from the same root as kawṭar.

6 The use of ilhāq in the classification of words according to the number of their radicals should be distinguished from its use by some lexicographers for a similar classification into triliterals, quadriliterals and quinqueliterals. What a lexicographer like Ibn Durayd means by saying that certain words are “annexed” to the quinqueliterals (ulhīqa bi-l-ḥumāṣī) is that it is easier to classify them with the quinqueliterals as a distinct group, and not that they were made to conform to one of the patterns of the quinqueliterals as the more common use of the term ilhāq implies. This explains why in the pattern fa‘ālil, for example, dulāmīs and guhādīb, considered by the grammarians to be triliterals appended to an augmented quadriliteral (see the second type mentioned in the text above), both appear in Ibn Durayd’s Ġamhara (II, 1210, 1212) as examples of words that are “annexed” to quinqueliterals. In other words, Ibn Durayd is interested here in ilhāq as a tool for classifying words in exhaustive lists, and not in the
i. Triliterals appended to quadriliterals: e.g., ḡadwal (ḠDL) and raʿšan (RʿṢ), compared with ḡaʿfar (ḠFR); and duḥul (DḤL) and ḥulkum (HLK), compared with burṭun (BRTN).

ii. Triliterals appended to augmented7 quadriliterals: e.g., dul¢amiʿ (DLṢ), compared with guḥ¢adib (ḠHDB); īḥīl (HL), compared with birṭīl (BRTL); and ḡabawnan (HBN), compared with ḡabawkar (HBKR).

iii. Triliterals appended to quinqueliterals: e.g., ʾinqaḥ (QŻL), compared with qirṣaṭ (QRST); and ḡanfar (ḠFL), compared with ʾadrafūṭ (ʾḌF). Since words cannot have more than five radicals, ilḥaq does not affect quinqueliterals (li-anna banāt al-ḥamsa laysa warāʾahā šayʾ min al-ʾasl ā-yulḥaq bi-hi; Ibn Ṣinnā, Munṣif, I, 51). In other words, because there is no target pattern which the quinqueliterals can be appended to, ilḥaq was not applied to them, and they had to be placed outside the closed system which ilḥaq represents (see 3.3 below).

2.3. At the level of meaning, the grammarians draw a sharp distinction between ilḥaq and augmentation through which patterns that indicate certain meanings are formed. Of course, this latter type is much more widespread than ilḥaq and may be viewed as derivation (iṣṭiqāq) par excellence,8 whereas ilḥaq is a special type of derivation whose relative frequency of use is quite limited. This not withstanding, the grammarians consider the two types to be on an equal footing in the process of deriving words since they consider each of them to be representative of a distinct purpose of ziyāda. As noted in 1.1 above, Sibawayhi (Kitāb, II, 9)

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7 Augmentation here mostly means the addition of a diphthong or a long vowel (ā, ā, or ī), probably since these, unlike short vowels, appear in writing.

8 It is noteworthy that some grammarians use ilḥaq to distinguish between taṣrīf (morphology) and iṣṭiqāq (derivation). Their argument is that the former is more general than the latter specifically because ilḥaq may be included under taṣrīf but not under iṣṭiqāq (Suyūṭī, Muzhir, I, 351).
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alluded to the distinction between two kinds of *ziyada*, one of which appends one form to another (*tulhiq binā‘an bi-binā‘*), while the other introduces an element of meaning (*tadḥul li-ma‘nā*).

Māzīnī also makes this distinction (*Taṣrif*, I, 13, and Ibn Ğinnī, *Munsīf*, I, 13–17), but in a less direct way. Based on the purpose of *ziyada*, he classifies it into four types: (a) the *ziyada* of *ihāq*, which appends one form to another; (b) the *ziyada* for vowel prolongation, such as *‘aḡūz* and *gašrīb*; (c) the *ziyada* that indicates a meaning (*ma‘nā*), such as *nūhān* (tawwīn) and the prefixes of the imperfect (*ḥurūf al-mudāra‘a*); and (d) the *ziyada* that is inseparable from the word because the very meaning (*ma‘nā*) of the word is dependent on the augmented pattern, e.g., the *alif* and *ṭā‘* of *iftaqrā‘a*, which have been part of the pattern *ifta‘ala* since it was first coined (*wudī‘a*) and used instead of *faqrā‘a*. A closer look at this apparently more elaborate classification, however, readily reveals that it is essentially consistent with Sibawayhi’s, since it contrasts *ihāq* with the *ziyada* that indicates meaning. Of the latter type are (c) and (d) above, where the word “meaning” is used in Māzīnī’s text, as well as (b), since vowel prolongation is part of the structure of several patterns that are indicative of meaning, as in Māzīnī’s own example, *‘aḡūz*, of the pattern *fa‘āl*, which indicates a common adjective for both masculine and feminine, and which has a plural, *‘aḡā‘āl*, that is exclusively indicative of the feminine (Sibawayhi, *Kitāb*, II, 208; cf. II, 131, where the *wāw* in *‘aḡūz* is contrasted with the *ziyada* of *ihāq*).

Ibn ‘Usfūr’s classification of the types of *ziyada* (*Mumti‘*, I, 204–6) is even more elaborate than Māzīnī’s, since it includes types that are either purely phonological, such as the *ḥā‘* of quiescence (*ḥā‘ al-sakt*), or that do not strictly qualify for inclusion under separate headings, such as the feminine ending of *zanādiqa*—called *ṭā‘* (or *ḥā‘*) of compensation (*ṭā‘ al-*iwa‘d*) on the assumption that it compensates for the elided *yā‘* in *zanādiq*—which actually belongs to a pattern that indicates the plural, and hence meaning. Taking this into consideration, the core of Ibn ‘Usfūr’s classification is basically in agreement with that of Sibawayhi and Māzīnī.

The distinction of the grammarians between the *ziyada* of *ihāq* and the *ziyada* of *ma‘nā* raises the problem of those appended words which

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9 This *yā‘* refers to the written form of the word, and should be understood as a reference to the long vowel *ī* which was shortened to *ī* (cf. *zanādiq* and *zanādiqa*).
apparently do carry an element of meaning due to their augment. An example of such words is hawqala (said of a man who ages and becomes weak), which is appended to faw‘ala (Ibn ‘Uṣfur, Mumti‘, I, 167), and whose meaning is not identical to the original verb, haqila (said of a camel that suffers indigestion after drinking water mixed with sand). To resolve this discrepancy, Astarābādī uses this example, among others (Šarḥ, I, 52–53), to introduce a vital component to the definition of ilhāq, and hence to the distinction between ilhāq as a ziyyāda that is described as not having to do with meaning and the ziyyāda that indicates meaning. In his terms, the ziyyāda of ilhāq is ḍayr muṭṭaṣira fi ḍīḍat ma’nā, that is, it does not systematically add a well-defined element of meaning. It is this unsystematic characteristic of ilhāq that truly distinguishes it from the ziyyāda that systematically introduces a discernible element of meaning and is therefore outside the sphere of ilhāq, as is the case in the hamza of ‘akbar and ‘afdal, which, he says, consistently expresses the comparative (tafdīl), and the mīm of the pattern mif‘al, which consistently indicates the instrument (Šarḥ, I, 53; II, 332).

2.4. At the purely formal (lafẓi) level, the grammarians identify several rules associated with ilhāq. These rules, scattered as they are in the earlier sources, were assembled by some later authors either to formulate an accurate definition of ilhāq, as did Astarābādī (Šarḥ, I, 52), or to list each criterion (dābi‘) that reveals the use of ilhāq, as did Ṣuyūṭī (Hamr‘, II, 216). In this respect too, the grammarians seem to be most interested in the distinction between ziyyāda of ilhāq and ziyyāda of ma’nā. Indeed, their discussion centers on two main aspects which endorse their distinction of the two types. The first aspect is the congruence between the appended word and the word to which it is appended with regard to the number of radicals and the metric measure (wazn), i.e., the pattern of harakāt and sakanāt (occurrence or non-occurrence of vowels after consonants). This congruence, the grammarians stress, should also apply to the derivatives of both words, that is, in the case of verbs (usually cited in the perfect), it should manifest itself in the imperfect, the imperative, the verbal noun, the active participle, and the passive participle, and in the case of nouns, it should appear in the diminutive and broken plural forms. Without going into details and exceptions to this general guideline of congruence, suffice it here to say that it was used to show the underlying difference between what is mulhaq and what is not.

For example, Astarābādī (Šarḥ, I, 55; cf. Ibn Ḥaḍrāt, Ḥaṣā‘is, I, 222, 232) argues that the inclusion of the verbal noun in the above list of de-
derivatives that manifest congruence between the words that are appended and the words they are appended to should disqualify patterns such as af’ala, fa’ala, and fā’ala from being appended to the verb dahrağa, with which they rhyme, since their verbal nouns, if‘āl, taf‘il and muftā’ala, are not congruent with the verbal noun of dahrağa, which is dahrağa(tun), of the pattern fā’ala(tun). Similarly, in nouns, the insistence that congruence should apply in broken plurals, according to Astarābādi (ibid., I, 56), readily shows that himār, in spite of being metrically equivalent to qimaçtir, cannot be considered appended to it, since its broken plurals, humur and ahmira, are not of the same pattern as gamāṭīr. Obviously, the inclusion of such peculiarities of ilḥāq in its definition in Astarābādi’s Sarh (I, 52) is the reason why this definition, whose aim is to exclude other phenomena, is unusually long and detailed.

The second aspect which the grammarians focus on in the distinction between the ziyyāda of ilḥāq and the ziyyāda of ma’nā at the formal level is that idgām (gemination) applies to the latter but not to the former. Sibawayhi notes the difference between these two types of ziyyāda as to the applicability of idgām, and devotes a chapter to those appended words whose final radicals are reduplicated but not geminated (Kitāb, II, 401–402; cf. II, 408). Thus, he contrasts qardad, which is appended to ga‘far and salhab, with maradd, originally *mardad, and attributes the lack of idgām to ilḥāq itself. The aim of the contrast between qardad and *mardad is to show that idgām, for which both words qualify according to their phonological structure, becomes inoperable in the presence of ilḥāq. In fact, Sibawayhi argues that idgām does not take place in such appended words because the speaker intentionally keeps the last two radicals separate in order to achieve ilḥāq through the augment (lam tudgim li-anmaka innamā aradta an timmā‘ifa il-tulhiqahu bi-mā zidta bi-dahraqtu wa-īlahdaltu). This is why in ḡalbaba, he says, the two bā’s are not geminated, hence the use of the forms ḡalbabtu, muqalbab, ḡulbiba, taqalbaba, yataqalbabu, and the like, which are appended to their counterparts derived from dahrağa, such as tadahrağa, yatadahrağu, and dahraştu (Kitāb, II, 401; cf. Fārisī, Ta‘līqa, V, 156–57; Mubarrad, Muqtadab, I, 204–205, 244). Ibn ʿUsfūr (Mumti’, I, 207)

10 See Sibawayhi’s Kitāb, II, 197 and 211, for examples of the broken plurals of appended words.

11 See the phonological reasons Bohas and Guillaume (1984, 39–41, 110–113) cite for this phenomenon.
lends further support to this line of thinking by arguing that speakers tolerated the heaviness of two separate radicals (iḥtamašā ẓiqlaš iḏimāš al-miššayn) in such examples in order for their patterns to remain congruent to the words to which they were appended.

This structural identity, so to speak, of appended words was viewed by Ibn Ğinnî—whose unremitting quest for exploring the underlying principles of linguistic phenomena is largely unrivalled in the Arabic tradition—as part of a more general tendency which he detects in a host of examples (Ḥašâ‘is, III, 232–40; esp. 232–33) and which he discusses under the title al-imtinaš min naqš al-ḡarad (refusal to contradict the objective). The essence of his argument, in the case of ilḥāq, is that its objective of achieving congruence between appended words and what they are appended to would have been annulled if normal iḏgām been applied, and thus the Arabs refrained from applying the rules of iḏgām to appended words because it was necessary to protect (ḥirāša) and preserve (ḥifz) the original purpose. Apart from the fact that this explanation presupposes a conscious effort on the part of the speaker, its inclusion with allegedly comparable phenomena is an attempt to show that ilḥāq, which represents an anomalous case with regard to the rules of iḏgām, is not necessarily anomalous in other respects. In connection with this, we shall try to show later (see 4.2 below) how the grammarians incorporated the phenomenon of ilḥāq within the general grammatical system, as they saw it, by applying to it the same criteria of analysis that they use in other cases.

3.1. Based on the elements that they included in defining ilḥāq (see 2.1 above), and on their distinction between the ziyaḏa of ilḥāq and the ziyaḏa of maʿnā both at the level of meaning and form (2.3 and 2.4 respectively), the later grammarians were well-disposed toward assigning to ilḥāq an ultimate purpose that would justify its existence as an independent phenomenon. In this respect, it seems that they wanted to surpass the earlier grammarians, who merely stated that the ziyaḏa of ilḥāq appends one word to another (tulḥiq bin an bi-binā; see Sībawayhi, Kitāb, II, 9, and Māzini, Ṭasrif, I, 13) and did not go beyond this self-explanatory level to determine a more specific purpose for ilḥāq.12 The usual view among the later grammarians is that the ultimate purpose of

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12 The same may be said of Mubarrad and Ibn al-Sarrāq (d. 316/929), who cite a large number of appended words (Muqṭadab, see 1.2 above; and Usūl, esp. the chapter on abniya, III, 179–222) but do not cite any particular purpose for the phenomenon itself.
this ziyāda is to accommodate the use of the language, particularly in rhymed prose (sağ‘) and poetry, with ittisā‘ or tawassu‘ (lit., latitude of speech). This view, which is attributed by Ibn Ğinnī to his teacher Abū ḌAlī al-Fārisī (d. 377/987) seems to have been generally, but not universally, adopted in the sources (cf. Ibn Ğinnī, Ḣasā‘īṣ, I, 358; II, 25, and Munṣif, I, 34, 38, 43; Ibn Ya‘īś, Šarḥ al-Mulūkī, 65; Astarābāḏī, Šarḥ, I, 66–67; Suyūṭī, Ham‘, II, 217). The problem with this interpretation, however, is twofold. Firstly, the proposed ittisā‘ could only be achieved if the writer or poet were free to apply analogy and come up with words that may never have been heard before. Fārisī was aware of this prerequisite and tried to circumvent it by asserting that one may invent such words, on the analogy of attested examples, and thus use, in poetry, constructions like darbaba Zaydun ‘Amran, marartu bi-rağūlin darbabīn, and darbabun afdalu min ṣarūqgin, where darbab is used as a verb, an adjective, and a noun, respectively (Ibn Ğinnī, Munṣif, I, 43–44; cf. Ḣasā‘īṣ, I, 358–59).

The inadequacy of this argument is nonetheless evident to Ibn Ğinnī, who alludes to his teacher’s view, both in Ḣasā‘īṣ and Munṣif, as part of his discussion of Māzīnī’s distinction between those appended forms that are qiyāsī (regular, analogically extended) and those that are samā‘ī (unproductive, restricted to attested material). In fact, Ibn Ğinnī seems to alert the reader to the limited applicability of Fārisī’s view. He does this not only by giving an account of their discussion, during which Ibn Ğinnī asks whether it would not be tantamount to inventing speech (a-fatartağīl al-luğa irtigālan; Ḣasā‘īṣ, I, 359; cf. Munṣif, I, 44), but also by supporting Māzīnī’s view that analogical extension does not apply to any of the appended forms other than those of the pattern fa‘ilal, such as mahdad and gałbab, where the third radical is duplicated (Munṣif, I, 42), and thus forms like ga‘har, bayṭar, ga‘dwal, hidyaamu, rahwak, arṭā, mi‘zā, salqā, and ga‘bā (Ḥasā‘īṣ, I, 358) are restricted to samā‘ī. Moreover, the issue of the qiyāsī versus the samā‘ī nature of ilḥāq is presented by Suyūṭī (Ham‘, II, 217; cf. Ibn Mālīk, Tashīl, 299) as a subject of controversy among three parties. The first of these restricts ilḥāq to samā‘ī, unless the grammarians need to create words with which to train students, whereas the second party—to which Fārisī belongs—puts no restraints on analogically extending its attested examples. The third party is more selective since it resorts to the criterion of frequency of usage to determine the permissibility, or otherwise, of allowing analogical extension.

The other problem related to Fārisī’s view that ittisā‘ is the ultimate
purpose of *ilhāq* is that, as we learn from some grammarians, the same notion of *ittisāq* can explain other types of *ziyāda* and, conversely, that some specimens of *ilhāq* are explicable by alternative notions used to explain other types of *ziyāda*. The first part of this problem is most clearly visible in Ibn al-Ḥāǧib’s (d. 646/1249) text (in Astarābāḏi’s Šarḥ, I, 65–66), where he assigns different purposes for the existence of patterns, including augmented ones, and cites *tawassuṭ* as the reason for using the *maqṣūr* (abbreviated) and *mamdūd* (prolonged) forms (i.e., in certain doublets), as well as what he calls *dū l-ziyāda* (augmented [word]). The other part of the problem is evident in Astarābāḏi’s explanation of Ibn al-Ḥāǧib’s text, since he asserts that the notion of *hāqa* (need), rather than *tawassuṭ*, is the real purpose of using the *ziyāda* of *ilhāq* as well as other kinds of *ziyāda*, such as that of the active participle, the passive participle, and the verbal noun. Astarābāḏi then hastens to say that it is also possible to explain the *ziyāda* of *ilhāq* by *tawassuṭ*.

It is evident from the above that the grammarians, starting with Farrāʾi, were trying to justify the existence of *ilhāq* by assigning a purpose to it, just like other morphological phenomena which they associated with distinctive purposes. By insisting, however, on determining this purpose more specifically than did earlier grammarians such as Sibawayhi and Māzīnī, who merely stated that *ilhāq* appends certain words to others, these grammarians actually failed to appreciate why their forerunners acknowledged *ilhāq* as a distinct phenomenon, and consequently why they contended themselves, in determining its purpose, with explaining what it does, and stopped short of seeking a more specific purpose to ascribe to it.

### 3.2
In order to understand the significance of *ilhāq* for the earlier grammarians, and particularly with regard to the difference we have just mentioned between them and their successors, it is more appropriate to speak of the *role* that they assigned to *ilhāq* in their analysis than of the *purpose* that it serves from the angle of the speaker. In other words, the early grammarians, most notably Sibawayhi and Māzīnī, treated *ilhāq* as a phenomenon in its own right and did not consider it to be part of any larger phenomenon because they realized its huge potential as a tool of morphological analysis. Theoretically speaking, they could have considered it to be a kind of *ištiqāq* whose examples are characterized by the

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13 This refers to words that can be either *maqṣūr* or *mamdūd*, such as *fidāʾ* and *fidāʾa*, *zinā* and *zināʾ*, *haygā* and *haygāʾ* (Farrāʾ, *Maqṣūr*, 38, 42, and 43, respectively).
use of certain phonemes and/or the repetition of others, and so on (e.g., say that halakūk is derived from the root HLK with the introduction of the long vowel û and the repetition of k). Alternatively, they could have said, as some lexicographers did (see n. 6), that these examples are of the same patterns as those words to which they are appended and could thus effectively have avoided the need to speak of ilhāq (e.g., halakūk would be—regardless of the number of its radicals as explained in 2.2 above—on an equal footing with qarabūs, both of the pattern fa’alūl, and not appended to it). The fact that they chose to think of it as a distinct phenomenon, therefore, was not dictated by the nature of the corpus of words that were considered to be examples of it—unlike, for example, the three other kinds of ziyyāda that Māzinī mentions (see 2.3 above) and that are linguistic realities that naturally represent undeniable and self-explanatory distinct phenomena. In effect the early grammarians were responding to their own interest in what they perceived as a major analytical tool. This explains why they were not concerned with what its purpose is from the point of view of the speaker. As for the later grammarians’ search for a purpose for ilhāq grounded in pragmatics rather than pure analysis, it is now evident that it went against the very reason why the earlier grammarians recognized ilhāq as a distinct phenomenon.

The most obvious advantage that ilhāq represented for the earlier grammarians is that it enabled them to reduce considerably the number of what we can describe as major morphological patterns that they had to acknowledge within a closed system. A quick look at the list of words that are said, in any grammatical work that includes them, to be appended to the word that represents such a pattern readily reveals the extent of this reduction. In the case of the major pattern fa’alāl, for example, Ibn al-Sarrāḡ (Uṣūl, III, 182) gives ǧa’far and salhab as the noun and adjective that represent it and to which other words are appended. These words, the supposed radicals of whose roots are considered to be reducible to less than the four radicals of ǧa’far and salhab (see 2.2 above), are: hawqal (fawṣal), zaynab (fayṣal), ǧadwal (faṣwal), mahdad (faṣal), ʿalqā (faṣlā), raʾṣan (faṣlan), sanbata (faṣlat or fanṣal).14

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14 The final tāʾ of the word sanbata(tun), of course, should not count in the proposed pattern, otherwise its inclusion under fa’alāl by Ibn al-Sarrāḡ would be inexplicable. He most probably included it under fa’alāl because sanbat is its variant (Sibawayhi, Kitāb, II, 348; cf. 327; Ibn al-Dahhān, Šarḥ, 101; Astarābāḏī, Šarḥ, II, 340). Faṣlat is more likely to be intended by Ibn al-Sarrāḡ than faṣlan (see Suyūṭī, Muḥir, II, 15, for both possibilities) because the word after it, ʿansal, represents fanṣal, and Ibn al-Sarrāḡ systematically gives one
'ansal (fan‘al). The eight different patterns which these eight words represent were thus grouped together under one major phonological pattern, fa‘al, since all of them conform to its wazn (metric measure), that is, its pattern of ḥarakāt and sakanāt (see 2.4 above). Similarly, hundreds of words are then cited by Ibn al-Sarrāq and grouped in such major patterns (ibid., III, 181–222). Further reduction in the number of patterns is achieved by the grammarians’ acknowledgement of the possibility of appending triliterals to quadrilaterals that are, themselves, appended to quinqueliterals (Kitāb, II, 341)—such as ‘afanɡaɡ (root ‘FG) which is appended to ɡabanfal (root 6HFL), itself appended to safarɡaɡ (root SFRGL)—and of deriving appended words from other appended words (Astarabādi, Šārḥ, I, 55)—as tasaytanu, which is appended to tadaḥraɡa and is derived from ɡaytanu, itself appended to dahraga. Understandably, the grammarians halted the process of reduction with words that are augmented quinqueliterals, such as qabaṭar, simply because they did not find a six-radical pattern to which they could append them, and so there was no possibility of grouping words under major patterns (cf. Sibawayhi, Kitāb, II, 9; Fārisī, Bağdādiyyat, 122, 434; Ibn Ğinni, Munṣif, I, 51, and Ḥasā‘is, I, 319–20; Ibn ‘Usfūr, Mumti‘, I, 206). The grouping of appended words into major patterns gave the grammarians another considerable analytical advantage, namely, that they were able to draw up rules that are applicable not only to the words that represent the pattern and are not themselves appended to other words—e.g., ɡa‘far and salhab of the major pattern fa‘al mentioned in the previous paragraph—but also to all the words whose patterns are appended to fa‘al—e.g., hawqal, ‘awsaɡ, zawraq, hawdaɡ, etc., which are of the pattern faw‘al, and zaynab, ḡaylam, ʂayraf, ʂaygam, etc., which are of the pattern ʃay‘al, and so on. Such rules are abundant in the sources, as example for each pattern.

This grouping process which drastically reduces the number of “major” patterns is paralleled by the mostly Basran method of expressing augmented patterns, in most cases, by using only the letters f, ū, and l, in contrast with one Kufan method which allows the repetition of the same augments in the proposed pattern. Thus, safarɡal and ʂamardal are both represented as fa‘allal according to the first method, but as fa‘algal and fa‘aldal, respectively, according to the second. Obviously, the first method avoids generating an exceedingly large number of patterns and readily reveals the words that belong to the same pattern. See Suyūṭi, Ham‘, II, 213, for the differences among grammarians in expressing patterns; cf. Fārisī, Bağdādiyyat, 529–31, and Astarabādi, Šārḥ, I, 10–21.
early as Sibawayhi’s Kitāb. For example, Sibawayhi formulates a universal rule to the effect that all triliterals that were augmented to become quadriliterals and were appended to genuine quadriliterals have, like these quadriliterals, broken plurals of the pattern mafā‘il, such as ḡadwal, ‘ityar, kawkab, tawlab, sullam, dammal, ḡundab, and qardad, whose plurals are ḡadāwil, ‘aṭāyir, kawākib, tawālib, salālim, dammāmil, ḡanādīb, and qarādīd, respectively (II, 197, and Fārisī, Ta’līqa, IV, 95; see other examples in Ḥudayma’s Fahāris, 364–72). The ultimate application of such rules may be seen in the pattern lists that some sources have (e.g., Ibn al-Sarrāq, Uṣūl, III, 181f., and Suyūṭī, Muzhir, II, 6f.). In such lists, the grammarians group together appended words with the words that they are appended to and present each group as a homogeneous category that shares several morphological traits applicable to all its constituents, irrespective of whether they are appended words or not.

3.3. The grammarians’ use of îlhāq as an analytical tool shows that they also employed it to achieve one of their principal goals—to limit deviations from the norm (qiyyās) and maximize the applicability of grammatical rules.16 The necessary condition for this purpose to be achieved, in the case of îlhāq, is the existence of a closed and well-defined system that would unmistakably identify appended words and patterns and describe the rules to which they are subject. Once this is accomplished, words that do not conform to these rules can be easily disqualified from inclusion in the closed system.

The mere fact that îlhāq involves the condensation of several patterns into one major pattern (see 3.2 above) goes a long way towards reducing the examples to a more manageable number. Moreover, a sizeable portion of the corpus of appended words represents extremely rare usages which, after being appended to major patterns, become effectively part of the norm of their own class and, consequently, cease to stand out as extremely rare or solitary examples, as they indeed were prior to the classification process of îlhāq. One such example is hammariš (adjective for a very old and wrinkled woman; e.g., ‘aḡāz hammariš), which repre-

16 For a study of this principle and its effect on the pedagogical attainability of grammatical rules, see Baalbaki (forthcoming). It should be mentioned here that since our primary sources on îlhāq are almost exclusively Basran, we cannot say for certain whether there was a partisan divide on the issue or not, but the methods which the Basrans use in this case largely reflect their general interest in interpreting data in a way that would restrict the existence of deviations.
sents a pattern *fa‘alila*\(^{17}\) described by Sibawayhi as *qalil* (*Kitāb*, II, 339) and which may be the only quadriliteral example of this pattern (Ibn Manzūr, *Lisan, HMRS*). Once this pattern is appended to a quinqueliteral word, such as *qahbalis*, *ğahmarıș*, and *şahsaliq* (*Kitāb*, II, 341, 354; Suyūṭī, *Muzhir*, II, 35), it becomes part of a larger entity and is no more regarded as anomalous. The same can be said of other examples usually cited as appended words, such as *naḥwariș*, *bulahniya*, *firindād*, *ţayzala*, ‘*ilwadd*, and others.

Other techniques the grammarians employed in matters related to *ilhāq* should also be seen in the light of their effort to limit deviation from the norm. Sibawayhi’s treatment of *qīqā* and *țızā* involves one such technique. Now these two words belong to the category of *ism* (noun), as opposed to *maṣdar* (verbal noun), and so the word to which they are to be appended should also be an *ism*, in line with the regular distinction Sibawayhi—and the later grammarians—drew between *ism* and *maṣdar* in their study of *ilhāq*. The anomaly in the case of *țızā* and *qīqā*, however, is that the pattern to which they should be appended—the reduplicated biliteral of *fi‘al*, i.e., *‘*fi‘a*‘*, such as *qilqāl*—is used exclusively with *maṣdars* (Sibawayhi, *Kitāb*, II, 386; Māzīnī, *Taṣrif*, II, 180; Ibn ‘Uṣfūr, *Mumtí*, I, 151). To avoid this anomaly, which would affect the applicability of the distinction between *ism* and *maṣdar*, Sibawayhi appends these two words to the nearest hamzated and unduplicated *fi‘al* pattern (i.e., *‘*li‘al*) that does occur with *isms*, and chooses ‘*ilbā*’ to illustrate it. Another technique that ensures the widest possible application of *qiyyās* is the analogical extension of the rule (*jārd al-ḥukm*; see Astarābāḏi, *Šahr*, II, 63) as applied to words whose derivation is not known. Thus, the *yā*’ of the appended word *gayāl*, according to Ibn Ġinnī (*Munṣif*, I, 35), can only be an augment in spite of the fact that the derivation of the word is unknown, because it can be demonstrated by examining other words that *yā*’ or *wāw* can be one of the radicals (i.e., as opposed to augments) of quadriliterals only in reduplicated forms.\(^{18}\)

Similarly, Astarābāḏi extends the rule through which the recurring con-

\(^{17}\)In addition to this pattern, Sibawayhi refers to *hammarıș* in two other places as being of the pattern *fa‘alil* (II, 341) and *fan‘alil* (II, 354). Cf. *Lisan, HMRS*, where Ibn Manzūr attributes to Sibawayhi the proposal of two of these three patterns on two different occasions. See also Ibn ‘Uṣfūr, *Mumtí*, I, 269, and Suyūṭī, *Muzhir*, II, 29.

\(^{18}\)As in the nouns *wazwaza* and *wahwaha* (*Taṣrif*, II, 216; III, 86), and *ya‘ya‘a* and *yasyaha* (Ibn Durayd, *Gamhara*, I, 216, 225).
sonant is known to be an augment in a large number (kaṭīr) of words whose derivation is known—such as the appended words ḏurahriḥ, hilblāḥ, and marmāris, which he relates to their cognate triliteral roots—to those words whose derivation is not known—such as șamahmāḥ and barahraḥa—and clearly says that he does so by way of analogy so that the rule might be applicable to all attested examples (faṭaradnā ʃ-hukm fī ʃ-kull; see Şārḥ, I, 63). As a result, the rule’s applicability is made to be universal rather than partial, and deviant examples become subject to the same rule that applies to the majority of the words of this type.

Turning to the identification of those words that do not qualify for inclusion in the closed system of appended material, it is clear that the grammarians not only strove to specify the characteristics of appended words so as to establish decisive criteria for the inclusion of material, but also dwelt on providing reasons for not including words that do not fit these criteria. As we saw earlier, particularly in 2.1–2.4, the grammarians specified the phonemes that may be used for ʾilḥāq and their positions within appended words, the number of radicals in these words as well as in the words to which they are appended, the major patterns into which they may be grouped, the nature of the relationship between the ziyāda of ʾilḥāq and that of meaning, the formal (lafzī) rules that apply to the derivations of these words, and the suspension of the rule of ʾidgām, where otherwise required, to them. Consequently, it may be said that any word that is at variance with any of these criteria cannot be part of the ʾilḥāq corpus. The following examples will demonstrate how non-appended words are identified by the application of these criteria and shed further light on the grammarians’ use of ʾilḥāq as a morphological testing device.

a. The position of the augment. Several rules are mentioned under this criterion (Astarābādī, Šārḥ, I, 56–57 and Suyūṭī, Hamʿ, II, 216–17). The hamza, for example, may be used for ʾilḥāq in medial and final positions, but in an initial position it cannot be an appending (mulḥiqa) augment unless it occurs together with another augment, referred to as musāʿid (aṭid).19 Thus, whereas ṣṭaladad and ṣṭidrawn are considered to be appended to safarḡal and ḡirdahl, respectively, because their initial hamza is accompanied by a nūn or a wāw, ṣṭafkal, ṣṭublum, and ṣṭītmid, whose initial hamza is the only augment, do not qualify as examples of ʾilḥāq.

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19 Astarābādī (II, 56), however, states that he finds no good reason why an initial hamza may not by itself, without a musāʿid, be considered mulḥiqa.
b. The number of radicals. As was pointed out in 2.2 and 3.2 above, words were excluded from *ilhāq on the basis of the number of their radicals. The most obvious case here is that of augmented five-radical words, such as *’adrafīt, *’andalīb, gaba’ṭarā, and dabaṣṭarā.\(^{20}\) Since there are no target words, i.e., six-radical words excluding any augment, to which these examples may be appended, the grammarians had to exclude them from the *ilhāq corpus and look elsewhere for possible interpretations. Hence, their explanation of the final alif in *qaba’ṭarā—which they were also unable to explain as a feminine ending, since the word accepts nunation and since the variant form *qaba’ṭarāt does include the feminine ending (Sibawayhi, *Kitāb*, II, 9, 78, 342)—as an augment of enlargement (takfīr al-kalīma) may be viewed as one way out of a difficult problem that arose because of the limitations of *ilhāq* (cf. Māzīnī, *Taṣrīf*, I, 51, and Ibn ʿUṣūrī, *Mumtāz*, I, 206).

c. The “target” pattern. In addition to the lack of a target pattern to which augmented quinqueliterals may be appended (see “b” above), several other words, and even whole patterns, were not considered to be appended because of the lack of a target word or pattern to which they can be appended. For instance, Sibawayhi (*Kitāb*, I, 401–402) says that *iḥmarātu* and *iṣḥābatu*, both of triliteral roots, are not examples of *ilhāq* because there is no quadriliteral of the type *iḥraṣamtu* or *iḥraṣamtu*, respectively, to which they can be appended. Māzīnī (*Taṣrīf*, II, 269) passes a similar judgment on *iḥmadana* for lack of the type *iḥrawgama*, as does Mubarrad (*Muqtaḍab*, IV, 3) with words like *iḥtūz, raṣīf*, and *risāla*, which have no quadriliteral counterparts to which they can be appended. At times a whole pattern is said not to be intended for *ilhāq*, as in the case of *fa’lā*, for which there is no corresponding unhamzated pattern—i.e., a quadriliteral such as *sardāh* or *sarbāl*—to which it can be appended, and hence its two final alifs (i.e., ā and ē) are, according to Sibawayhi (*Kitāb*, II, 10) and Fārisī (*Taʿlīqa*, III, 38), used exclusively as a feminine ending.

d. The structure of the pattern. Contrary to “c” above, the target pattern may be available, but the structure of the words that can theoretically be appended to it prevent the process of *ilhāq*. This may be illustrated by the pattern *fa’lāl*, which theoretically is a target pattern to which triliterals may be appended, but no triliteral was appended to it

\(^{20}\) Cf. n. 7 above. The word *handaqūq* is usually mentioned with this group as well, but we did not include it because it is, as Ibn ʿGinnī rightly notes (*Munṣīf*, I, 53), of a quadriliteral origin, since its qāf occurs twice.
because its examples are restricted to reduplicated biliterals (hence *faˈʃaː*), be they nouns (asmāʾ), such as zalzāl and ɡaṭɡāṭ, or adjectives (ṣifāt), such as ḥaṭṭāt and ḥaqqāq (Sibawayhi, Kitāb, II, 338). The reason for this is that the structure of triliterals prevents the formation of reduplicated words, since this would theoretically require a nonexistent six-radical pattern. In comparison, the two sister patterns fiˈlāl and fuˈlāl were actually used as target patterns because their examples have four radicals that are not duplicated, such as qinṭār and qurtās, and therefore words of triliteral origin like ġilwāḥ and qurtās, respectively, lent themselves to be appended to them.

e. Meaning, derivatives and idgām. The discussion of these three criteria in 2.3 and 2.4 above included several examples of words and patterns that were considered, in each case, to be outside the sphere of īlḥāq because they do not conform to the criterion at hand.

4.1. As several examples cited above have shown, the various rules and details related to īlḥāq were used by the grammarians as a testing device for a host of morphological issues. So widespread was the practice that one may conclude that it represented for them a major objective, in addition to the principal objective of reducing the patterns within the closed system of appended words. Three of the most essential morphological premises they used īlḥāq as a testing device to check the validity of will be briefly discussed below.

a. The distinction between radicals according to aṣl and ziyāda. Appended words are used to confirm this distinction through the process of derivation and the realization of a common meaning they share with the roots. Sibawayhi (Kitāb, II, 116), for example, argues that ʿafarnā (strong lion), because of its affinity to ʿifr and ʿifrāt (both also mean “strong lion”), is an appended word because of the ziyāda of its n and ā, and he shows how this ziyāda—as well as that in ʿufāriya, which likewise means “strong lion”—is reflected in various aspects of their morphology. This is further tested by the four diminutive forms ʿufāyrin, ʿufāyrina, ʿufāyr, and ʿufāyriya, the first two of which prove that the ā of ʿafarnā is zāʿida, whereas the other two prove that its nūn is zāʿida. In this particular case, appended words are used to check the validity of the morphological rules that govern the diminutive and that are largely based on the distinction between what is aṣl and what is ziyāda in the words from which diminutives are formed.

b. The assignment of the position of the ziyāda. Since appended words mirror the phonological construction of the words that they are appended
to, including the positions of what is *asl* and what is *ziyāda*, they were used by the grammarians to check the correctness of the roots that they assign for augmented words. An example of this are the two words *ihranğama* and *ihranţama*, said by the grammarians to be quadrilaterals (banāt al-arba’a) because they interpret the *nān* as an augment (cf. Māzini, Ṭaṣrīf, I, 86). This interpretation is supported by the comparison some grammarians make (ibid., I, 86–89, and Ibn Ğinnī’s commentary) between these words and appended words such as *iq’ansasa* and *islangā*, the *mawdī* (position) of whose augmented *nān* is determined to be between the ‘ayn and the làm, i.e., the second and third original radicals of the roots *Q’S* and *SLQ*, respectively. It may thus be said that the two types of words reciprocally support the grammarians’ interpretation of each of them.

c. The identification of inadmissible patterns. The problem of identifying what is permissible and what is not seems to have occupied the earlier grammarians and lexicographers, probably as part of their effort to uncover the rules that determine the structure of Arabic words and consequently to be able to recognize as Arabicized or invented any word that is inconsistent with these rules. In this respect, the grammarians proposed several unattested patterns of *ihāq* which violate accepted structures in order to show that the impermissibility is due to the impermissibility of their counterparts to which they would have theoretically been appended. Ibn Ğinnī’s (Munṣīf, I, 88–89) masterly discussion of why patterns of the types *if’anwalatu*, *if’anlaytu*, *if’analtu*, *if‘analtu* do not occur reveals that these were proposed to demonstrate their incompatibility with the attested pattern *if’anlaltu*, as in *ihranğantu*, to which augmented quadrilaterals are usually appended (Suyūti, Muṣhir, II, 41). Furthermore, the grammarians’ discussion of the criteria that disqualify words from being considered as examples of *ihāq* (see 3.3 above) shows how they repeatedly use them to check the validity of the rules that determine the permissibility or otherwise of target words and patterns to which other words and patterns may be appended.

The use of *ihāq* as a testing device nowhere finds it ultimate applica-

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21 The earliest attempt of this kind is probably Ḥallī’s introduction to Kitāb al-‘Ayn, written in the second half of the second century A.H. In it, he discusses some of the phonetic characteristics and phonotactics of Arabic words (I, 52–55) and specifically cites examples whose phonetic structure betray their foreign origin (e.g., *du’suqa* and *ğulâhîq*) or their invention by skillful scholars (nahārü; e.g., *kaša’tağ* and *ḫada’tağ*). See also Baalbaki 1998, 52–53, Sara 1991, 36–38, and Talmon 1997, 137–38.
tion better than in what is known as masāʾil al-tamrīn (drill problems or exercises). Such drills are not only intended as pedagogical devices to train students and examine their grasp of the concepts involved. More essentially they test the applicability of these concepts through increasingly difficult questions, the answers to which should be in compliance with the theoretically permissible structures of Arabic words and patterns.22 Indeed, Ibn Ḥinnī, in his justification of Māzīnī’s lengthy chapter dealing primarily with ilḥāq material and entitled “Analogically formed unsound words the only patterns of which are used in sound words” (ḥūḍ ā bāb mā qīṣa min al-muʿall wa-lam yāqī’ mitālhu illā min al-ṣaḥīḥ; Taṣrīf, II, 242–323), says that the reason for the invention of this “science” (ʿilm) is to use attested material as the basis for analogically constructing unattested material. By so doing, the grammarians could confirm the soundness of the morphological postulates that they used to explain attested usage. In Māzīnī’s chapter, for example, the rules governing the use of ʿaw and ʿaʾ, known as iʿlāl, are thoroughly checked by arbitrary formulations such as *ibyyaʿaʾa, *uqwūwila, *iwʿawʿā, *iwīwāʾ, and ʿāwawāt (II, 243, 245, 247, 251, 257, respectively). The fact that each of the questions which usually begin with the stereotype expression “Construe (ibni) x from y” should have one correct answer shows how the sum of rules that the grammarians deduced from usage worked together to yield attested words as well as theoretically usable words. Among the rules these drills seem to test in relation to ʿaw and ʿaʾ are the effect of vowels on them, the shift from one of them to the other, their compatibility and incompatibility, and principles related to gemination, omission, and their relation with hamza.

4.2. On a wider scale, the grammarians were keen to incorporate ilḥāq into their overall system of grammatical analysis and to demonstrate its pertinence to it beyond the morphological level. It is for this purpose that they try to show how some of their assumptions and general principles of analysis are harmonious with their approach to ilḥāq. An example of this is the principle that if a word is characterized by jiqal (heaviness), the

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22 These drills are comparable to the grammarians’ practice of converting complex sentences into relative structures. The aim of this process, known as ḣūḍār (predication), as Carter (1981, 353) correctly argues, “may well have been to transform all utterances into propositions in order to test their truthfulness,” but it “finished up as a mere pedagogical device.” Likewise in the case of our drills, their pedagogical purpose has eventually gained supremacy over their use as a device for testing morphological rules.
Arabs avoid the addition to it of another element that aggravates its *tīqal*, or introduce into it an element of *ḥiffa* (lightness) to counterbalance its *tīqal*. This very principle, which is especially familiar in *nahw*—e.g., as in its application to justify the lack of *tanwīn* in diptotes (cf. Sibawayhi, *Kitāb*, I, 7), and the use *damma*, due to its *tīqal* (heaviness), with the agent and the *fatḥa*, due to its *ḥiffa* (lightness), with the direct object, since a verb can have only one agent but may have more than one direct object (cf. Ibn al-Anbārī, *Asrār*, 78, and Baalbaki 1995, 87–88)—is carried over to the domain of *ilhāq*. Thus, Ibn Ğinnī (*Munṣīf*, I, 51) argues that quinqueliterals were only augmented with one element (here, a long vowel) and not two elements since this would bring together two kinds of *tīqal*, that of the word’s structure and that of two augments. He then proceeds to show how this fact has direct bearing on *ilhāq* because it limits the number of radicals that a target word can have. Astarābāḏī (*Šārḥ*, I, 64), on the other hand, invokes the principle of counterbalancing *tīqal* with *ḥiffa* to show that since it was not applied to the likes of *mahdad* and *alandad*—i.e., the *tīqal* of the augmented structures was not counterbalanced with the *ḥiffa* that gemination would have brought about—such words must have been intentionally deprived of gemination because they were meant to be appended words. Although this case is about the inapplicability of a particular principle to one kind of *ilhāq* because of a compelling reason, the mere fact that it warranted such a justification is extremely important, since it demonstrates the expectation that *ilhāq* not be at odds with other constituents of the grammatical system.

This expectation most probably owes its origin to the awareness of the grammarians that since they chose to treat *ilhāq* as a distinct phenomenon to facilitate morphological analysis, although this was not dictated by the nature of the linguistic data (see 3.2 above), they had to defend its use and thus justify their choice. Obviously the most efficient way to do this was to demonstrate that *ilhāq* is well accommodated to the general system and harmonious with some of it major principles, such as *ḥiffa* and *tīqal*, *samāʿ*, and *qiyyās* (cf. Māzinī, *Ṭaṣrīf*, I, 41; Ibn Ğinnī, *Haṣāʾīs*, I, 114), rejection of anomalous (*ṣāḥd*) data (cf. Astarābāḏī, *Šārḥ*, I, 69), resemblance to unattested material23 (Ibn Ğinnī, *Haṣāʾīs*, II, 343), and

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23 *Surdad* and *sūdād*, according to Ibn Ğinnī, are appended to words that do not feature in actual usage but have the force of what is uttered (*fi hukm al-maṣfūq*). This is similar to the claim of the grammarians that some nouns, such as the interrogative particle *má*, resemble supposed, non-existent particles that
the like, and that it operates according to well-defined rules that exhibit a logical relation among appended patterns (cf. Kitāb, II, 401, where Sibawayhi establishes the following correspondence: fa’āl: fa’āl = fa’ūl: fa’ūl = fi’il: fi’il; and Ibn Ġiinnī, Munṣīf, I, 47, where the relation between quinqueliterals and quadriliterals is said to be the same as that between quadriliterals and triliterals). Ultimately, perhaps, the grammarians wanted to demonstrate that ʾilḥāq is yet another proof of the underlying logic of language and to stress that it is the grammarian’s task to discover the various ways in which this logic expresses itself.

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A. Primary sources


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could be expected to have been coined but were not. Cf. Ibn ʿAqīl, Šārḥ, 32–33; Ibn Ḥišām, Awdāh, I, 31; Baalbaki 1995, 87.


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