

A Morphophonemic Analysis of Closed Syllable Shortening in the Holy Quran

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حاصل على دكتوراه في اللغويات الانجليزية

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الملخص العربي:

في القرآن الكريم يوجد عمليات صوتية كثيرة. إحدى هذه العمليات الصوتية هي حذف حرف العلة الخاصة بالفعل الأجوف و التي يتم تقصيره فيها. تحدث هذه العملية كنتيجة لبعض العوامل الصرفية التي تحكم و تضبط الفعل سواء في زمن الماضي أو المضارع. في زمن المضارع , يتم حذف حرف العلة في الأفعال الجوفاء عندما تسبق بأداة الجزم "لم" شريطة أن يسند الفعل إلى المتكلم الأول سواء في صيغة الجمع أو الإفراد، أو المخاطب المفرد المذكر، أو جمع الغائب المونث. أما في زمن الماضي, يتم تقصير الأفعال الجوفاء عندما تسند إلى المتكلم الأول سواء في صيغة الجمع أو الإفراد، أو المخاطب المفرد المذكر و المونث الأول في حالة الإفراد و الجمع، أو جمع المونث الغائب.

الكلمات المفتاحية: القرآن الكريم، حذف حرف العلة، الصرف، الأفعال الجوفاء

English Summary

In the Holy Quran, there are many phonological processes. One of these phonological processes is closed syllable shortening in which long vowels are shortened. This process occurs as a result of some morphological features which are included in the inflectional categories governing verbal forms in the Holy Quran. It is accomplished either in imperfective or perfective forms pertinent to verbs. Furthermore, this process is only concerned with hollow verbs which are intermediated by long vowels. Hollow verbs are shortened according to tense, voice, mood, and aspect. In the imperfective form, hollow verbs are shortened when they are preceded by the negative particle “lam”; furthermore, they are attributed to the first person singular/plural, second person masculine singular, and third person feminine

singular/plural. As for the perfective form, hollow verbs are shortened when they are attributed to the first person singular/plural, second person masculine/feminine singular/plural, and third person feminine plural. Accordingly, there is an interaction between the morphological and phonological systems in the Holy Quran.

1. Abstract

This research aims to conduct a morphophonemic analysis of closed syllable shortening (CSS) which is a phonological process associated with hollow verbal structures within the Holy Quran (HQ) (Watson, 2002). This analysis is based on the notion that there is a stable relationship between morphology and phonology in the HQ's language which has some linguistic restrictions. In terms of phonology, CSS is pertinent to long vowels shortened in certain positions. Furthermore, morphology sheds light on verbal inflectional categories included in mood, tense, aspect, and voice. The study analyzes the data collected from Mushaf Al-Madinah through the observation of CV:C to CVC. Qualitative methods are utilized to analyze data. The study concludes that the CSS included, in the HQ, is stimulated via inflectional categories represented in tense, aspect, voice, and mood either in the imperfective or perfective form.

Keywords: Closed syllable Shortening, Inflectional Morphology, Long Vowels

2. Introduction

In the Holy Quran (HQ), parts of speech (POS) are sentential elements working together to compose a meaningful sentence (Fine, 1998). A word is categorized into a noun, a verb, or a particle (Ryding, 2005). Accordingly, POS are classified into a noun, a verb, or a particle. The HQ is remarked for some linguistic combinations namely noun with pronoun, verb with pronoun, and preposition with particle; such combinations enrich the HQ's orthographic system (Albuhayri, 2013). Clitics (enclitics and proclitics) are

morphemes having the ability to convey grammatical information (Albuhayri, 2013).

Furthermore, clitics can constitute a finite set; nonetheless, some combinations occur between proclitics or enclitics with the aim of giving an additional list of combinatorial clitics. Accordingly, there is a relationship between the phonological and morphological systems especially in shortening long vowels which is restricted to verb (Watson, 2002). She points out that CSS is a phonological process which is pertinent to verbal inflectional category. The inflectional categories of verb are included in tense, mood, voice, and aspect.

3. Statement of the Problem

This study is an analysis of how long vowels are shortened through a morphological interface. For example, CV:C syllable structure is shortened to CVC within the perfective and imperfective forms. Inflectionally, verbal nuclei show high degree of shortening especially with certain pronouns expressing the perfective form; nonetheless, in its imperfective form, verbal codas are assigned to shortening in case of being preceded by certain negative particles. Furthermore, the imperative mood of hollow verbs configures CSS of CV:C to CVC.

4. Limitations of the Study

The current study is limited to a morphophonemic analysis of CSS pertaining to the HQ. Although vowels are categorized into monothongs and diphthongs, the current

study sheds light upon shortening long monothongs. Accordingly, the current research is pertinent to the specification of the CV:C to CVC syllabic typology. In terms of morphology, the current research is associated with verbal inflectional categories (Alfozan, 1989) represented in mood, tense, aspect, and voice.

5. Research Objectives and Questions

The study aims to demonstrate the following points:

1. To show the influence of the negative particle /lam/ before hollow verbs.
2. To detect the role of pronominal clitics in the perfective form.

The study tries to answer the following questions:

1. What is the role of the negative particle of shortening verbs?
2. How are verbs shortened in the perfective form?

6. Previous Studies Associated with the Current research

The process of CSS is highlighted by many authors. Myers (1987) investigates closed syllable shortening in English. Closed syllable shortening is a phonological process in which long vowels are shortened (Myers, 1987). The study adopts the framework of the distinctive feature theory of segments through *The Sound Patterns of English* (Chomsky, 1968). The study sheds light on syllable shortening in both derivational and inflectional morphology. In other words, the study follows the derivation processes from verb to noun. However, inflectional morphology is

pertinent to the ablaut in which present-tensed irregular verbs are shortened in their past tense. The study concludes that the CSS process is not a linguistically-specified rule. Furthermore, it is more associated with a stress-sensitive process of re-syllabification.

Buckley (1991) investigates a phonological analysis on the CSS process in Kashaya which is a language spoken in northern California. The maximal surface syllable in Kashaya has two moras, adopting the shape CV: or CVC (McCarthy, 1979). Kashaya morphological concatenation entails in a word-internal CV:C syllable which leads to CSS. The study sheds light on the interaction of Closed-Syllable Shortening and Accent Placement in Kashaya. The study concludes that the syllabification system and Weight by Position are separate rules which can act independently. Furthermore, there are no constraints in blocking rules of syllabification system; however, in certain cases it can be violated (Paradis. 1988).

7. The HQ's Phonological System

The HQ's phonemic system is categorized into vowels and consonants. According to Hassig (2011), the HQ includes six vowels: /i/, /a/, /u/, /i:/, /a:/, and /u:/ shown in the following figure.

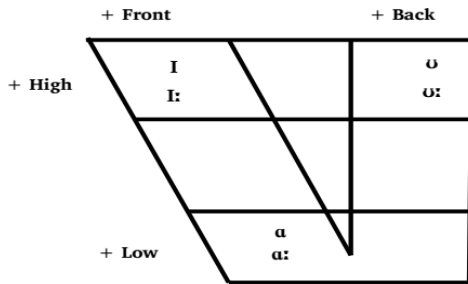


Figure 1 The HQ's Vowel Systems

Regarding the previous figure, there are six vowels, three of which are long whereas the other three vowels are short. The three short vowels are /i/, /a/, and /u/; however, /i:/, /a:/, and /u:/ are long. Moreover, he states that the HQ is also featured by the presence of the diphthongs /aʊ/ and /aɪ/. In terms of consonants, Hassig (2011) points out that consonants are described according to the manner of articulation, the place of articulation, and voicing as in the following table.

Table 1 The HQ's Consonantal Systems

Manner	Labial	Alveolar	dental	Emphatic	Palatal	Velar	Uvular	Pharyngeal	Glottal
Stops	b	d t		d' t'	ɟ	k	q		ʔ
Fricatives	f	z s	ð θ	ð' s'	ʃ		χ x	ħ h	h
Nasals	m	n							
Lateral		l							
Approximants	w	r			j				

Regarding the pervious table, there are stops, fricatives, nasal, and glides. Stops are /b/, /d/, /t/, /dʔ/, /tʔ/, /ɟ/, /k/, /q/, and /ʔ/ while fricatives include /f/, /z/, /s/, /θ/, /ð/, /ðʔ/, /sʔ/, /ʃ/, /χ/, /x/, /ħ/, /h/, and /h/. In addition, nasals are /n/ and /m/. Laterals and approximants are known as glides; glides cover /l/, /w/, /r/, and /j/. In terms of articulation place, there are labials, alveolars, dentals, emphatics, palatals, velars, uvulars, pharyngeals, and glottals. Labials are /b/, /f/, /m/, and /w/. Alveolars are /d/, /t/, /z/, /s/, /n/, /l/, and /r/.

Dentals are /ð/ and /θ/. Emphatics are /dʔ/, /tʔ/, /ðʔ/, and /sʔ/. Palatals are /dʒ/, and /ʃ/. Velars are /g/ and /k/. Uvulars are /q/, /ɣ/, and /x/. Pharyngeals are /ʕ/ and /ħ/. Glottals are /ʔ/ and /h/. In terms of voicing, voiced consonants are /b/, /d/, /dʔ/, /dʒ/, /z/, /ð/, /ðʔ/, /ɣ/, /ʕ/, /n/ /m/, /l/, /w/, /r/, and /j/, whereas voiceless consonants are /t/, /tʔ/, /k/, /q/, /ʔ/ /f/, /s/, /θ/, /sʔ/, /ʃ/, /x/, /ħ/, and /h/.

8. The HQ's Syllabic Structures

According to Gadoua (2000), the HQ syllabic typologies are restricted to five syllables as shown hereby:

- CV bi "by"
- CVC min "from"
- CV: lee "to me"
- CV:C bāb "door"
- CVCC kalb "dog"

In accordance with Gadoua (2000), it is explicit that the HQ prevent branching onsets. However, two final [-CC] consonants, on the other hand, are allowed in CVCC. In other words, complex codas are allowed in the HQ.

9. The HQ's Morphological System

The HQ's morphological system is associated with POS which is pertinent to noun, verb, and particle. In accordance with verb, the inflectional categories are detected below:

• Tense

In Arabic, verb has tri-distinctive forms with regard to past, present, and imperative. According to Haywood and Nahmad, (1965), perfective and imperfective tenses are the two main tenses in Arabic. However, Wright (1967) discusses

the two basic Arabic tenses in addition to their occurrence in some diverse forms. Nonetheless, the future tense is structured through adding the enclitic sa- /sa-/ or sawfa /saʔfa/ which follows the syllabic structures of CV/CV. Benmamoun (2000) points out that the HQ is characterized by the compound perfective tense which indicates a progressive action.

• Mood Marking

According to Mahfoudhi (2002), verbs coincide with nouns in the HQ. Whereas nouns are monitored for case, verbs are morphologically marked for mood. Clearly, verbs display agreement with their subjects; in addition, they demonstrate morphological distinctions of Arabic tense. Morphologically, traditional Arab grammarians assume that verbs are to be inflected by certain morphological markers such as nouns with the aim of denoting certain grammatical conditions. The exploration of these markers is completely governed by verb tense.

Marantz (1995) draws a lot of distinctions between the uninflected and the inflected forms. The past tense of verbs is uninflected; it is restricted to one form which shows mood distinction. However, the imperfective verbal forms are inflected; they are inflected in accordance with diverse morphological endings to monitor mood (Bohas, 1990; Plunkett, 1993). In terms of Holes (1995), there are four different moods. Furthermore, the use of certain mood is specified by its verbal structure. There are four verbal moods: indicative, subjunctive, jussive, and imperative.

In accordance with indicative mood, it indicates report and expresses factual statements especially in declarative affirmative sentences (Ryding, 2005). Furthermore, the

subjunctive mood expresses an action of desire, wish, doubt, or necessity (Ryding, 2005). It is monitored through the use of the diacritics /-a/. According to Saidat (2006), verbs, followed by the complementizer /ʔan/ or the particle /hata:/, are assigned to such a linguistic mood.

However, the jussive mood is concerned with negation especially the negative particle "lam" (Fassi Fehri, 1993). The jussive mood diacritics are expressed through sokoon which means that there are no vowels at the end; in other words, it ends with a consonantal phoneme (Ryding, 2005). Accordingly, it is featured by the non-existence of proclitics. That is, no proclitic is to be added to the verb after the final consonant. More clearly, the jussive mood lacks both short vowels /-u/ and /-a/.

In terms of the indicative mood, it is realized through final /-na/ or /ni/ since the subject is a pronominal clitic; however, both the subjective and jussive moods are identified through the absence of /-na/ or /-ni/. To clarify, the presence of "lam" /lam/, before the 3rd person plural masculine, indicates the long /u:/.

As for the imperative mood, it occurs when the verb expresses command. Further, imperative mood is only restricted to the 2nd person either singular or plural.

• Voice

Voice in the HQ is divided into active and passive (Ryding, 2005). In the HQ, the passive voice is a fundamental morphological process. Further, both the past and present verbal forms, in Arabic, are transformed into passive through turning the form of vowels (Fassi Fehri, 1993). The vowel following the initial consonant is transformed into the short /-u/ in accordance with both forms. The one, preceding the final consonant, is turned into the short /-i/ with reference to

the perfective form and the short /-a/ in the imperfective form.

10. Methodologies

The current research analyzes CSS phonological processes within the HQ. Since CV:C syllable structures are found in verbal context, the researcher collects verbs from the HQ containing CV:C. The researcher chooses Mushaf Al-Madinah as the content of collecting data. Furthermore, there is an identification of V: as the nucleus located between margins. The researcher makes a list of ten verses within Mushaf Al-Madinah. There is an employment of observation method. The researcher observes verbs that have CV:C in their imperfective form; in addition, these imperfective verbs of CV:C transform into CVC in the perfective form. Also, CV:C transformation into CVC in the imperfective form is existent according to certain rules.

11. Data Analysis

According to Liberman (1977) and Kiparsky (1968), the CSS is a phonological process in which long vowels are shortened; that is to say, /i:/, /a:/, and /u:/ are shortened to /i/, /a/, and /u/. This phonological process is associated with verbs which contain long vowels as an intermediate structure. The following figure clarify the CSS process:

1. qāla /qa:la/ (1) وَقَالَ اللَّهُ إِنِّي مَعَكُمْ (المائدة: 12)
2. qul /qul/ (2) قُلْ هُوَ اللَّهُ أَحَدٌ (الإخلاص: 1)
3. qultum /qultum/ (3) وَإِذَا قُلْتُمْ فَاعْدِلُوا (الأنعام: 152)
4. qulna /qulna/ (4) وَقُلْنَا حَنَسٌ لِلَّهِ مَا هَذَا بَشَرًا إِنْ هَذَا إِلَّا مَلَكٌ كَرِيمٌ (يوسف: 31)
5. qulnä /qulna:/ (5) قُلْنَا اهْبِطُوا مِنْهَا جَمِيعًا (البقرة: 38)
6. aqul /ʔaqul/ (6) أَلَمْ أَقُلْ لَكُمْ لَوْلَا تُسَبِّحُونَ (القلم: 28)
7. kanū /ka:nu:/ (7) وَلَهُمْ عَذَابٌ أَلِيمٌ بِمَا كَانُوا يَكْذِبُونَ (البقرة: 10)
8. kuntum /kuntum/ (8) وَادْعُوا شُهَدَاءَكُمْ مِنْ دُونِ اللَّهِ إِنْ كُنْتُمْ صَادِقِينَ (البقرة: 23)
9. yakādu /jaka:du/ (9) يَكَادُ الْبَرْقُ يَخْطَفُ أَبْصَارَهُمْ (البقرة: 20)
10. kidta /kitta/ (10) لَوْلَا أَنْ نُبَيِّنَنَّكَ لَقَدْ كِدْتَ تَرْكَنُ إِلَيْهِمْ شَيْئًا قَلِيلًا (الإسراء: 74)

It is clear that the long peaks of the hollow verbs /jaku:n/, /jaka:d/, and /jaqu:l/ are shortened. In other words, /jaku:n/ is shortened to /kun/, /jaka:d/ is shortened /kid/, and /jaqu:l/ is shortened /qul/. Furthermore, it is monitored that the CSS process occurs owing to verbal inflectional categories: enclitics, the negative particle "lam", and the imperative mood.

• **Enclitics**

According to Marantz (1995), enclitics are bound morphemes which have morphological and syntactic functions. It is noted that the enclitics /-ta/, /-tɔm/, /-na:/, and /-na/. The enclitic /-ta/ identifies the 2nd person masculine singular. The enclitic /-tɔm/ identifies the 2nd person masculine plural. However, the enclitic /- na:/ refers to the 1st person plural. The enclitic /-na/ identifies the 3rd person feminine plural. The process of CSS is phonologically in the following figure:

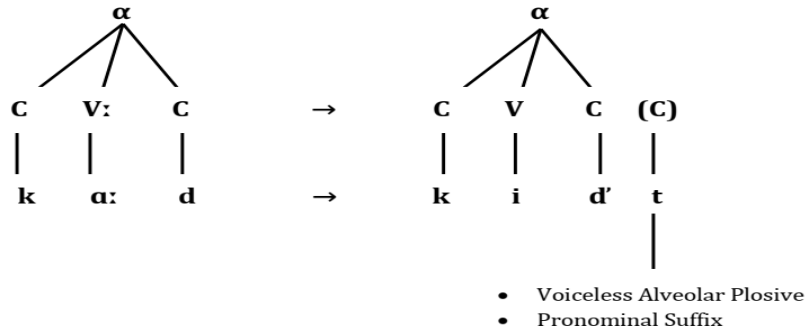


Figure 2 CSS Activation in the Perfective Form

It is explicit that the presence of the enclitic /-ta/ contributes to facilitating the CSS process in the perfective form. Thereupon, the phonological form of qultum /qɔltɔm/, qulna/qɔlna/, qulnä /qɔlna:/, kuntum /kɔntɔm/, and kidta /kitta/ is accomplished owing to the enclitics.

• **The negative particle "lam"**

According to Ben Benmamoun (2000), the negative particle “lam” is adjacent to the imperfective form “the present tense”. Furthermore, it pre-modifies verbs. The CSS process is attained in the imperfective verb when verb is

preceded by the negative particle. In addition, the proclitics identify the 1st person singular/plural, the 2nd person masculine singular, and the 3rd person feminine plural. It is represented hereby:

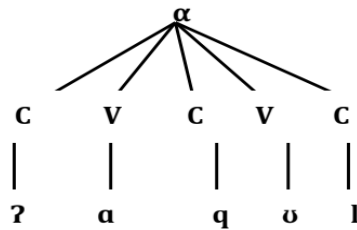


Figure 3 CSS Activation through the Negative Particle "lam"

It is noted that there are two syllables when hollow verbs are preceded by the negative particle "lam".

- **The Imperative Mood**

According to Mahfoudhi (2002), there are three forms of imperative mood in the HQ. The CSS process is associated with the 2nd person singular masculine. Thereby, hollow verbs are shortened when they identify the 2nd person singular masculine. The process of CSS is shown below:

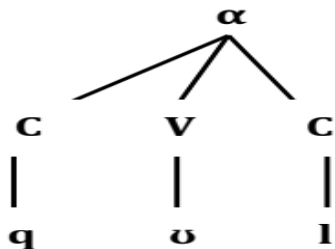


Figure 4 CSS Activation through the Imperative Mood

To conclude, it is clear that the hollow verbs /jaku:n/, /jaka:d/, and /jaqu:l/ follow the syllable structure of CV/CV:C; in the sense that, the second syllable has a long peak which is introduced in both /a:/ and /u:/. More clearly, it is noticeable that CSS occurs in accordance with certain morphological factors. In (1), the hollow verb /jaqu:l/ still retains the long peak; however, in (2), (7), (8), (9), and (10), the long peak is turned into the long peak. In terms of (2), the CSS process is attained through the imperative mood of the verb on being inflected for the 2nd person singular masculine.

Nonetheless, in (7) the CSS process is obtained through the perfect mood (past tense) on being inflected for the 2nd person singular masculine. In terms of (8), the perfective form specifies the CSS process when the verb is inflected for the 3rd person plural feminine. However, in (9), the phonological process of CSS is accomplished through the perfective form which is inflected for the 1st person plural. In terms of (10), the presence of the negative particle leads to shortening the long peak on condition that the verb is inflected for the 1st person singular which is indicated by the proclitic /ʔa/. Accordingly, hollow verbs, conjugated in the perfective form, are to be shortened on being inflected for certain pronouns representing the nominative case as shown hereby:

- 1st person singular/plural /to/ and /na/
- 2nd person singular plural /ti/, /ta/, /tom/and /-tona/
- 3rd person plural feminine /na/

12. Conclusion

The study concludes that the hollow verbs are shortened both in the imperfective and perfective verbal forms. As for the perfective form, hollow verbs are shortened when they are inflected for the first person either singular or plural, second person either singular or plural, and the third person plural feminine. As for the imperfective form, hollow verbs are shortened when they are preceded by the negative particle /lam/. In addition, verb is to be inflected for the 1st person singular/plural, 2nd person singular masculine, and the 3rd person plural feminine.

13. References

- Albuhayri, S. (2013). *The Pronominal System in Standard Arabic: Strong, Clitic and Affixal Pronouns* (Unpublished Doctoral Dissertation, Arizona State University).
- Alfozan, A. I. (1989). *Assimilation in Classical Arabic: A Phonological Study*. Unpublished Doctoral Dissertation, University of Glasgow.
- Benmamoun, Elabbas. (2000). *The Feature Structure of Functional Categories: A Comparative Study of Arabic Dialects*. Oxford: Oxford University Press.
- Bohas, G., J. P. Guillaume & D. Kouloughli. (1990). *The Arabic Linguistic Tradition*. London: Routledge.
- Buckley, E. (1991). Kashaya Closed-syllable Shortening and Prosodic Syllabification. *In Proceedings of the 10th West Coast Conference on Formal Linguistics* (pp. 65-74). Linguistics Association.
- Chomsky, N. and M. Halle. (1968). *The Sound Pattern of English*. Harper and Row, New York.

- Fassi Fehri, A. (1993). *Issues in the Structure of Arabic Clauses and Words*. Dordrecht; Boston: Kluwer Academic.
- Fine, E. H., & Josephson, J. P. (1998). *Nitty-Gritty Grammar Book: A Not-So-Serious Guide to Clear Communication*. Random House Digital, Inc.
- Gadoua, A. H. (2000). Consonant Clusters in Quranic Arabic. *Linguistic Notes*. Ottawa, pp. 59-86.
- Hassig, H. L. (2011). Deriving Cairene Arabic from Modern Standard Arabic: A Framework for Using Modern Standard Arabic Text to Synthesize Cairene Arabic Speech from Phonetic Transcription (M.A. Thesis).
- Haywood & Nahmad, (1965). *A New Arabic Grammar of the Written Language*. London: Lund Humphries.
- Holes, C. (1995). *Modern Arabic: Structures, Functions, and Varieties*. London; New York: Longman.
- Kiparsky, P. (1968). 'Linguistic Universals and Linguistic Change', in E. Bach and R. Harms (eds.). *Universals in Linguistic Theory*, Holt, Rinehart and Winston, New York.
- Liberman, M. and A. Prince. (1977). On Stress and Linguistic Rhythm, *Linguistic Inquiry* 8, 249-336.
- Mahfoudhi, A. (2002). Agreement Lost, Agreement Regained: A Minimalist Account of Word Order and Agreement Variation in Arabic. *California Linguistic Notes* 27: pp. 1-28.
- Marantz, A. (1995). *The Minimalist Program*. In Webelhuth, G. (ed.) *Government and Binding Theory and the Minimalist Program*. Oxford: Blackwell. 351-82.
- McCarthy, J. (1979). On Stress and Syllabification. *Linguistic Inquiry* 10.443-465.
- Myers, S. (1987). Vowel Shortening in English. *Natural Language & Linguistic Theory*, 485-518.

- Paradis, Carole. (1988). On Constraints and Repair Strategies. *Linguistic Review* 6.71-97.
- Plunkett, B. (1993). *The Position of Subjects in Modern Standard Arabic*. In Mushira, E. & C. Holes (eds.) *Perspectives on Arabic linguistics V "Papers from the 5th Annual Symposium on Arabic Linguistics"*. Amsterdam: John Benjamins. 231-60.
- Ryding, K. C. (2005). *A Reference Grammar of Modern Standard Arabic*. Cambridge; New York: Cambridge University Press
- Saidat, A. (2006). *The Syntax of Quranic Classical Arabic: Principles and Parameters Approach*. Doctoral Dissertation. (The University of Texas at Arlington)
- Watson, J. C. E. (2002). *The Phonology and Morphology of Arabic*. Oxford: Oxford University Press.
- Wright, W. (1967). *A Grammar of the Arabic Language*. Cambridge: Cambridge University Press.