

THE GLOTTAL STOP /ʔ/ IN MIDDLE ARABIC :
A STUDY IN LANGUAGE VARIATION *

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0.0 INTRODUCTION

For a long time the linguistic situation in the Arab world has been characterized as diglossic. Diglossia as discussed by Charles Ferguson (1951) is a stable linguistic phenomenon that prevails in speech communities in which a "high" and a "low" form of the same language are used side by side, each with a clearly defined role. The two functionally differentiated forms of Arabic have been traditionally labelled Classical Arabic (known in its present form as Modern Standard Arabic) and colloquial Arabic. Many a linguist has deplored this dichotomy. For the Lebanese 'Anis Frayha (1955) to name only one, these two forms of Arabic are essentially two languages representing two distinct selves:

We think, speak, sing, murmur our prayer, talk kindly to our children, whisper to our beloved, seek understanding with whoever we want to, and insult those whom we see fit to, in a flowery and smooth language which does not retard thinking nor require much effort. But when we assume a formal position, in the capacity of a teacher, preacher, lawyer, broadcast announcer, or a lecturer, we have to attire ourselves with another linguistic personality, and we have to talk in a language with difficult vowel endings and with rigid rules in its constructions and expressions.

Although Frayha's claim may sound somewhat exaggerated now that over two decades have gone by, it is undeniable that diglossia has had many serious consequences both educationally and culturally, especially in the Arab countries where the Arabic language is in direct competition with a foreign language (Lakhdar 1975). This phenomenon has engendered in the last

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thirty years heated debates in the Academies of the Arabic Language throughout the Arab world.

While the effects of diglossia are still felt, the phenomenon itself is not as stable as it appears to be, or as others have claimed it to be. In fact, the high-low dichotomy has increasingly come under attack by those who study language as a variable, flexible medium rather than an unchangeable norm (El-Hassan 1978, Mitchell 1978).

Over the past twenty years or so, there has been emerging a new form of Arabic which is neither low nor high, commonly known as Middle Arabic (^cArabiyya Wusṭa). In the sparse literature that has been written on the subject, it has been referred to as 'pan-Arabic' by Mitchell (1962) and Abdel-Masih (1975), 'Modern Inter-Arabic' by Bishai (1966), 'Educated Spoken Arabic' by Badawi (1973) and El-Hassan (1978) among others.

The object of this paper is threefold: first, to review some of the sociolinguistic factors which have contributed to the emergence of Middle Arabic and to its development; second, to present some of the linguistic characteristics of this medium; and third, to show through a quantitative study of the variation of the glottal stop /ʔ/, that this so-called Middle Arabic (MA) tends to be more classicized than vernacularized.

1.00 THE EMERGENCE OF MIDDLE ARABIC

Varied and complex sociolinguistic factors have contributed to the emergence of MA. Briefly stated, MA grew out of the pressing need for a medium adequate and spontaneous enough to express the modern concerns and realities of the educated Arabs. For a long time these Arabs have felt that the vernacular was not equipped to cope with the educational and technical trends that were shaping their daily lives. Modern Standard Arabic (MSA), though increasingly adequate through intensive modernization efforts, was felt to be too artificial and inflexible by the few who could speak faultlessly. This uneasiness, this communicative tension led many Arab writers and journalists to advocate a new form which combines both MSA and the vernacular. Among the most vocal of these promoters was Ahmed Lutfi As-Sayyid who, from the beginning of the century was predicating the idea of a 'new language.' In one of the editorials of his paper Al-Jarida (1913) he wrote:

We want to raise the language of the general public towards the level of the written language and to simplify the necessary elements of the written language and thus bring it closer to the level of daily discourse.

Many novelists and playwrights tried to follow this mode in their writings. Farah Anton (1913), Taoufiq al-Hakim (1956, 1967), and Yusif as-Siba'î (1960) are only a few of them.

With the massive spread of education throughout the Arab world, and the increase of pan-Arab professional and political meetings, this 'third language' as al-Hakim called it, has gradually gained 'droit de cité' as a functional, flexible medium. Its extensive use by Arab leaders

on the one hand and the media on the other have reinforced its viability as a bridge between the high and low forms of Arabic. This mediating role seems to be a factor in the destabilizing of diglossia and thus a precursor of inevitable language change (Mahmoud 1977).

2.0.0 THE LINGUISTIC CHARACTERISTICS OF MIDDLE ARABIC

MA is a linguistic amalgam, a continuum whose outer limits are the high and low forms of the diglossic spectrum. Its closeness to one pole as opposed to the other is governed by such variables as the educational, geographical backgrounds of the speakers/hearers, the topic discussed and the speech situation. Although MA is spoken mainly by the educated, it is understood by the majority of speakers in the Arabic speech community. The more educated the speaker is, the wider are the choices of subjects discussed and the more spontaneous and fluent his use of the language becomes.

Lexically, MA tends to draw heavily on the literary and technical terms available in MSA, but it incorporates some elements that proved serviceable in the vernacular of the speaker. Most importantly what characterizes this so-called MA is the occurrence of some linguistic features that are by and large characteristic of the spoken language. These features are encountered at (1) the phonological level, (2) the morphological level, and (3) the syntactic level.

2.1.0 The Phonological Level

The most common features at this level are:

- (a) the variable dropping of the glottal stop when it occurs medially and finally, as will be discussed later,
- (b) the use of [g] or [ʔ] as in [qamar] → [gamar] or [ʔamar] 'moon'
- (c) the diphthongs [ay] and [aw] are often realized as [i:]/[ɛ] and [u:]/[ɔ] respectively as in [bixayr] → [bixi:r] 'I'm fine'; [yawm] → [yu:m] or [yɔ:m] 'day', etc.

2.2.0 The Morphological Level

Just by way of exemplification we will confine ourselves to verb conjugation. Quite often at this level, verbs reflect the morphological rules that are in operation in the vernaculars. Thus the distinction between the dual and the plural forms of verbs, commonly found in MSA, is missing. So is the distinction between feminine plural and masculine plural in the present indicative. When only the latter form is used the indicative suffix is usually deleted as in:

[yarḥalu:na] (MSA) → [yarḥalu] 'they move away.'

Also omitted is the morpheme that distinguishes second person masculine from feminine in the present indicative and the imperative.

2.3.0 The Syntactic Level

It is perhaps at this level that the influence of colloquial Arabic is the most felt. All the words commonly borrowed from MSA are used in their pausal form, i.e., without case endings (i^cra:b). Contextual clues and the fixed order of the Arabic sentence constituents have rendered these markings superfluous. Even the most educated avoid

using them simply because placing them accurately requires an active command of the rules of grammar which only a few of them possess.

Example: ḥaṣala-ṛ-ra:gil ∅ ʕala ruxṣat ∅ ṣayd ∅

'the man obtained a hunting license'

(The symbol ∅ marks the absence of the case ending. Note that the morpheme 'ra:gil' 'man' appears in its colloquial form where the [ʒ] in the MA spoken by Egyptians turns into [g].) Another feature that characterizes this level is the use of the unmarked colloquial form of the relative pronoun (?illi) for the MSA form which takes different shapes according to the gender and number of the antecedent. A further example is the placing of the demonstrative pronoun after the noun rather than before as in the case of MSA.

Most of the studies mentioned above dealt with the subject of MA mainly from a descriptive point of view except perhaps for the studies of Badawi (1973), H. Blanc (1960), and Mitchell (1978). These scholars have attempted to look at MA as a medium of many layers which varies according to linguistic and extralinguistic parameters.

3.0.0 METHOD

3.1.0 The Subjects and the Data

The transcribed data for this study comes chiefly from two sources. The first is a series of interviews conducted in Tunisia and the United States. The subjects were eight educated Arab adult males from Syria, Tunisia, Egypt, and Jordan. The topics discussed ranged from sports to business administration. The second source is a set of recordings of TV and radio broadcasts of parliamentary debates, of

speeches by national leaders of Tunisia, Morocco, and Egypt. The range of subjects is just as varied as in the first series.

3.2.0 The Glottal Stop as a Variable

3.2.1 Why the Glottal Stop? The glottal, which we will henceforth call by its Arabic name Hamza, has been one of the most disputed features of Arabic phonology ever since its belated addition to Arabic orthography in the eighth century A.D. It was chosen here mainly for two reasons:

(a) It brings out the variation that existed long before the standardization of the Arabic language as we know it today. More specifically, it portrays, to my mind, the kind of variation that characterizes MA in its present, fluctuating form (Bishr, 1969: 41-63).

(b) The Hamza has acquired a certain prestige through its consistent use in Qur'anic texts and recitation as well as in literary texts. Hence its use by the educated as a classicizing device to signal a switch from one register to another. Thus it was felt here that a study of its inherent variation would enable us to chart the flow of MA and perhaps identify its role in an increasingly unstable diglossic situation.

3.2.2 The Variable. In this study only the medial and final Hamzas were dealt with. In the medial instances two kinds were discarded: (1) the one that occurs between two identical vowels as in [saʔala] 'to ask' or [raʔasa] 'to head, preside'; (2) the other is the variant of the voiceless uvular stop [q] as commonly encountered in the

MA Arabic spoken by Egyptians as in the words [ʕaʔl] 'brain' and [faʔr] 'poverty.' In both instances the Hamza is rarely deleted if at all. Its omission would change the meaning of the lexical item radically.

3.2.3 The Constraints. The constraints that govern the variable deletion of the medial and final Hamzas were originally grouped under eight factors or environments:

- A: the Hamza occurring between a vowel (V) and a consonant (C),
- B: occurring between two non-identical vowels,
- C: occurring finally,
- Q: occurring finally but preceding a pause,
- H: the lexical item where the Hamza occurs comes from MSA,
- L: the lexical item comes from colloquial Arabic,
- I: occurring in informal speech,
- F: occurring in formal speech.

As Fig. 1 shows, only five factors were retained, later grouped under two factor groups, I and II.

<u>Factor Group I</u>	
A:	(?)-----(\emptyset) / V___C
B:	(?)-----(\emptyset) / V _i ___V _j
C:	(?)-----(\emptyset) / ___#
<u>Factor Group II</u>	
H:	Lexical item from MSA.
L:	Lexical item from Colloquial Arabic.

Fig. 1. Phonological & lexical constraints governing the variable deletion of the Hamza.

The elimination of the other factors became necessary because (1) Q showed several categorical results when using the SPSS program (crosstabulation operation¹), (2) factors I and F duplicated the effects of H and L which, as it will be shown, later proved to be more predictive of the rule operation than other factors.

It is worth noting here that for factors A and B the preceding and the following environments were considered simultaneously regardless of their individual relative weight. This is done because both environments act cumulatively to determine the orthographic "seats" on which the Hamza occurs. These seats, the (?alif), the (wa:w) and the (ya:?) are not sounded unless the medial Hamza is omitted. Once omitted, the medial Hamza is "softened out" so to speak, into an [a:] as in [fa?s] → [fa:s] 'pickaxe' or into an [i:] as in [ʒi?t] → [ʒi:t] 'I came' or into an [y] as in [ʒara:ʔib] → [ʒara:yib] 'taxes' or less commonly into an [u] as in [ʒa:ʔu] → [ʒa:u] 'they came' or [u:] as in [muʔmin] → [mu:min] 'faithful'.

4.0.0 PROCEDURE

In order to assess quantitatively the variation of the Hamza in these environments, the Cedergren-Sankoff varbrule II program was used (Cedergren-Sankoff 1974; Rousseau & Sankoff 1978). This program is a statistical model that describes in probability terms the contri-

1. The SPSS (Statistical Package for the Social Sciences) is a program used to perform the most common statistical operations needed for research in the social sciences.

bution of each environment (i.e., set of constraints) to the operation of an optional (variable) rule.¹ The rule we are concerned with here is the variable deletion of the Hamza in the environments specified in Fig. 1. The closer to 1.00 the probability value of an environment is, the more likely it will favor the application of the rule.

5.0.0. RESULTS AND DISCUSSION

Although the grouping of some factors and the elimination of others may have skewed some of the figures, the overall results are rather significant. As the probability figures in Table 1 and the summary graph show, it is least likely for the Hamza to be deleted if the lexical item is borrowed from MSA (i.e., Factor H is the least favorable for the operation of the rule). It is most likely to be deleted if it occurs between a vowel and a consonant, (i.e. Factor A is the most favorable for the operation of the rule), and it is next most likely to be deleted if the lexical item is borrowed from colloquial Arabic (Factor L).

1. For a critical review of the use of variable rules in describing variation in language see Kay & McDaniel (1979) and Sankoff & Labov (1979).

2. For other studies of variation using quantitative approaches see in particular Bailey (1973), Bailey & Shuy (1973), Bickerton (1971), Labov (1972), and Wolfram and Fasold (1974).

Factors	Probability Figures
A: (?) / V___C	0.759
L: Lexitem from Col. A	0.679
C: (?) final	0.406
B: (?) / V _i ___V _j	0.321
H: Lexitem from MSA	0.317

Table 1. Output for the deletion of the Hamza using the Varbrule II program.

Note: The data follows the prediction very closely. The least fitting environment has a Chi square of 0.421.

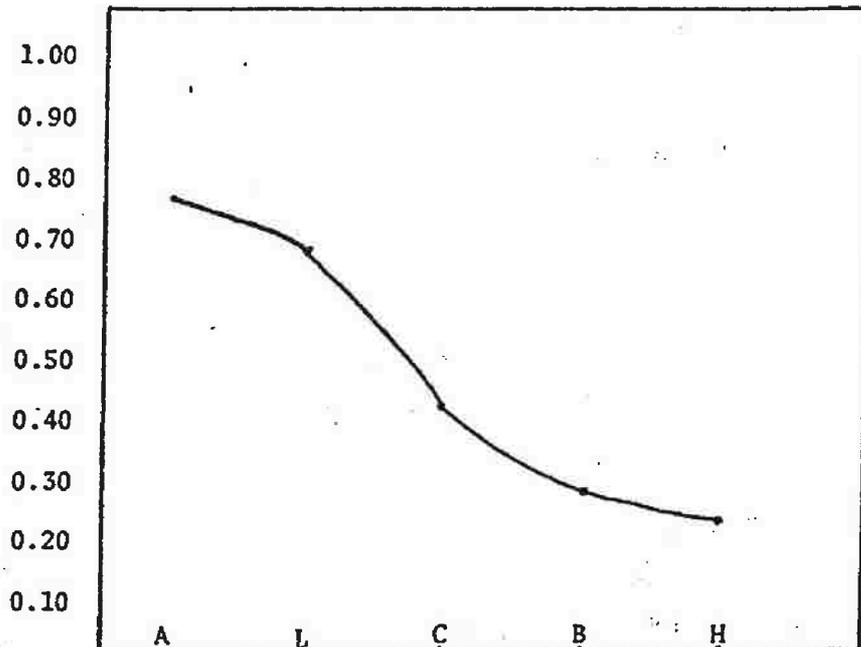


Fig. 2. Relative effect of five factors on the probability of the deletion of Hamza.

Moreover, it seems that one of the overriding factors in determining the variable presence of the Hamza is the origin of the lexical item. This fact is corroborated by the crosstabulation in Table 2 where 66% of the words in which the Hamza was retained come from MSA. The table also shows that there are more retained Hamzas than deleted ones.

	Col. A	MSA
Hamza deleted	12 66.6	18 34.0
Hamza retained	6 33.3	35 66.0
Total	18	53
$\chi^2 = 5.89$	df = 1	P < .025

Table 2. Crosstabulation, variable by lexitem.

By retaining the Hamzas in most MSA forms and restoring them to some colloquial forms, the speakers in this sample are using a more classicized form of Arabic than a vernacularized one. This, one might argue, is not surprising considering the environment in which this form of Arabic is acquired and by whom. What is rather surprising, however, is that any text written in MA is equally amenable to a vernacular rendition as well as a MSA rendition without improvising any major syntactic or lexical changes. This flexibility seems to make of MA a spontaneous, comfortable medium of communication.

5.0.0 CONCLUSION

In conclusion, we will try to pull together some of the points made in this paper. After an initial and sketchy reassessment of the linguistic situation in the Arab world, it is suggested that the term "diglossia" does not adequately describe the increasing interplay between the high and low forms of Arabic. We called this interplay Middle Arabic. Brief consideration was then given to the major sociolinguistic forces that were behind the emergence of this "median" form. Because of its continuum nature, Middle Arabic tends to vary considerably along many linguistic and extra-linguistic dimensions. Only internally motivated (inherent) variation was dealt with in the last part of this paper. To exemplify this inherent variation, the variable deletion of the glottal stop (Hamza) was studied through a quantitative approach. In the discussion of the results, we attempted to show that the variation of this phonological feature is rule-governed and the relative weight of each set of linguistic constraints can be quantitatively determined. In its present, fluctuating state, MA tends to be more classicized than vernacularized.

By concentrating solely on inherent variation, we realize that we overlooked the impact some extra-linguistic factors may have on the variable behavior of a certain linguistic feature (Labov 1972b, 1966). It is hoped that this study will contribute to our realization that the Arabic language like the people it must serve, is a changeable, variable medium which can no longer be ostracized from the daily concerns of the modern Arab.

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