

# Variation and Change in a Contact Setting in Mecca

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The aim of this paper is to reveal the results of a sociolinguistic investigation in the holy city of Mecca, Saudi Arabia. The researcher examined the variation and change in the speech of Ghamdi migrants who migrated from the South-Western region, Al-Baḥa, of Saudi Arabia to the Western part, Mecca. This migration brought Ghamdis into everyday contact with Meccan. Meccan and Ghamdi dialects are mutually intelligible, however, the linguistic differences between them are enormous. They are different syntactically, morphologically, phonologically, semantically, and lexically. Therefore, it has been expected that sort of variation and change will occur in this contact setting. The study discussed the change in the usage of the interdentals  $(\theta)$ ,  $\phi$ ), and  $(\delta^{c})$  in relation to three social variables, namely, education, age, and gender. The researcher attempted to answer the following questions: Is there an age effect on the speech of Ghamdi migrants in Mecca? Does gender play a role in the changes that occur in the speech of Ghamdis? Does the level of education have any impact on the Ghamdi linguistic behaviour? And Is there any relation between language change and level of Ghamdis' education? The results revealed that Ghamdi migrants maintained their heritage variants  $[\theta]$ ,  $[\delta]$ , and  $[\delta^{c}]$  at the expense of the Meccan variants [t], [d], and  $[d^{c}]$ .

Keywords: dialect contact, variation, migrants, social variables

## Introduction

In this empirical research, the researcher used dialect contact as a framework to investigate the change and variation in the speech of migrants who decided to dwell in the sacred city of Mecca. The migrants came and still coming from Al-Baha city which locates in the South West of Saudi Arabia; they are called "Ghamdis." Ghamdi migrants started migration to big urban cities in Saudi, including Mecca, a hundred years ago, and may be more, to find easier lifestyle and to improve their financial situation. Ghamdis found themselves in a contact with a mutually intelligible dialect, Meccan, but with lots of linguistic differences. Conducting this research was driven by these obvious linguistic differences. The researcher investigated the change in the speech of Ghamdi dialect particularly, the interdental variants, plain interdentals  $[\theta]$ , voiceless interdental fricative;  $[\delta]$ , voiced interdental fricative; and emphatic interdentals  $[\delta^{c}]$ , emphatic voiced interdental fricative. These variants disappeared in Meccan dialect and replaced by their stop/sibilant counterparts [t], [s]; [d], [z]; and  $[d^{s}]$ , [z]. Regarding social variables, the researcher included education, age, and gender in this study. The participants were chosen based on these variables, their ages ranged from 14 to above 62 years old, they are males and females, and they have different educational level starting from illiterate people to Ph.D. holders. The findings revealed that education was not a determiner variable in this study. In regard of age and gender, the results showed young female participants tend to use Meccan variants, stops [t], [d], and [d<sup>s</sup>], more than the other groups. However, the tendency of using stop variants was very low. It was not enough to be an indication of a

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change in progress towards Meccan variants. In fact, Ghamdi migrants showed high level of preserving their heritage variants.

# The Study

This research aims to examine the changes occurred in the speech of Ghamdi migrants using dialect contact as a framework. Trudgill (1986) pointed out that a long-term contact between mutually intelligible dialects leads to changes and variation in these dialects. The current research is driven by the obvious differences between Ghamdi and Meccan dialects; they are different in all linguistic levels; and they also come together in a long-term contact.

In terms of social variables, the researcher chose education, age, and gender as social variables in this study. Linguistically, she examined the change and variation that occurred in the Ghamdi variants particularly, interdental variants, plain fricative interdentals [0], and emphatic fricative interdental [ $\delta$  <sup>S</sup>]. While interdentals are maintained in Ghamdi dialect, they have disappeared in Meccan, merging with their stop/sibilant counterparts. Below is an illustration for this change:

$$\begin{split} & [\theta] > [t], [\thetaa:le\theta] > [ta:let] ``third'' \\ & [\theta] > [s], [\thetaa:bit] > [sa:bit] ``stable, steady'' \\ & [\tilde{d}] > [d], [\tilde{d}ura] > [dura] ``corn'' \\ & [\tilde{d}] > [z], [\tilde{d}anb] > [zanb] ``sin'' \\ & [\tilde{d}^{S}] > [d^{S}], [\tilde{d}^{S}uhr] > [d^{S}uhr] ``noon'' \\ & [\tilde{d}^{S}] > [z], [\tilde{d}^{S}a:bet] > [za:bet] ``officer'' \end{split}$$

In the following part, the researcher provides a summary of a few studies that examined the interdentals situation in different Arabic countries. This summary shows that although the examined linguistic variables are the same, the interdentals, the studies revealed different findings. This proves that each Arabic context has its own social, religious, political, and financial circumstances that would influence the linguistic behavior differently.

## The Interdental in Some Arabic Countries

#### In Bahrain

In 1987, Holes conducted a sociolinguistic study in Bahrain to examine the change in its dialect. Holes (1987) considered two important social factors, namely, religious sectors and geographical segregation. He found that Bahraini community, Arabs (Sunni) and Bahārna (Shi'i), used to live as clusters in different areas in Bahrain. Linguistically, he examined 20 phonemic and morphophonemic variables including the classical interdentals ( $\theta$ ), ( $\delta$ ), and ( $\delta^{\varsigma}$ ). With regard to these three interdentals, Arab and Bahrāna use them variably. The former group maintains the interdentals [ $\theta$ ] $\delta$ [], and [ $\delta^{\varsigma}$ ], while the later realises them as [f], [d], and [ $d^{\varsigma}$ ], respectively. The findings revealed that there is variability in using [f], [d], and [ $d^{\varsigma}$ ] by Bahrāna speakers. They tend to use the Arabic variants [ $\theta$ ],  $\delta$ ], and [ $\delta^{\varsigma}$ ] when they speak in public, however, in a purely domestic and more intimate context they immediately shifted to their Bahrāna. Holes (1987) ascribed this variability in Baḥrāna speech to the fact that the Baḥārna traditional features are non-standard and have lower status in the community at large.

#### In Jordan

Al-Wer (1991) obtained her data from three Jordanian towns, namely, Sult, Ajloun, and Karak. She examined the influence of urban Palestinian dialect on the Jordanian dialect. The Palestinian variety includes the stop variants [t], [d], and [d<sup>S</sup>], while Jordanian dialect encompasses the interdental variants [ $\theta$ ], [ $\delta$ ], and [ $\delta$ <sup>S</sup>]. Her results manifested that young Jordanian women prefers to use the stop variants [t] and [d<sup>S</sup>]. In addition, she noticed that the use of [t] and [d<sup>S</sup>] also increased as the level of women's education becomes higher (see details in Al-Wer, 1991).

## In Saudi Arabia

In Jeddah city, the Western region of Saudi Arabia, Al-Shehri (1993) examined the changes that occurred in the speech of Shehri migrants regarding the use of two of the interdentals:  $/\theta/$  and  $/\delta/$ . The dialect of Jeddah is missing the interdental variants [ $\theta$ ] and $\delta$ [, they have been replaced with the stops [t] and [d]. Al -Shehri found that migrants maintain their heritage variants [ $\theta$ ] and [ $\delta$ ].

Another study has been conducted in Jeddah city by Al-Essa (2008). She has investigated the changes that occurred in the Speech of Najdi migrants who migrated from the middle part of Saudi to settle in Jeddah. Najdi dialect is one of the conservative Saudi variants that maintain some of the classical Arabic, such as interdentals and gender distinction in possessive pronouns. Al-Essa investigated number of linguistic features. However, for the purpose of this study, the researcher of the current study presented the part of the interdentals. In relation to the social factors age, gender, and level of contact, Al-Essa found that the adaptation of the Jeddah variants [t], [d], and [d<sup>§</sup>] is limited, Najdi speakers are showing a high tendency to preserve their original variants [ $\theta$ ] $\tilde{\varphi}$ [, and [ $\delta$ <sup>§</sup>].

The results of Al-Shehri (1993) and Al-Essa (2008) correspond to the findings of the current research as will be explained in the following sections.

# Participants' Social and Linguistic Background

The participants in this study are Ghamdi migrants who migrated from Al-Baḥa which locates in the South-Western region of Saudi Arabia into the holy city of Mecca in the Western region. Ghamdis who settled in Mecca for long time with their families are occupying different jobs, living in different districts and networking with Meccan people. Ghamdis came from a community that has totally different social and cultural background from Meccan community. Although the difference between these two communities is so blatant, Ghamdis and Meccan live harmonically together for decades. This coexistence brings Ghamdis into daily contact with Meccan people.

On the linguistic level, Ghamdi and Meccan dialects are two Saudi dialects which are mutually intelligible. Although they are mutually intelligible, they are different on all linguistic levels. As far as the author knows, just few works investigated Ghamdi dialect Prochazke (1988) presented his comprehensive book about Saudi dialects, including Ghamdi dialect. Another research has been conducted by Alghamdi (2014) about Ghamdi dialect in which she examined the changes occurred in some of its sounds. However, Ghamdi dialects are considered a conservative dialect since it maintains a lot of features inherited from the classical Arabic. For instance, the classical diphthongs (aw) and (ai); the interdental ( $\theta$ ),  $\emptyset$ ), and ( $\delta$ <sup>s</sup>); and the possessive object suffixes that show gender distinctions in the second and third plural forms, as demonstrated in Table 1 below.

The Tossessive Object Suffixes in Onumai Dialect						
Gender Third person Second person						
Pl. masc.	bait-him "their home"	bait-kum "your home"				
Pl. fem.	bait-hinnah "their home"	bait-kunnah "your home"				

 Table 1

 The Possessive Object Suffixes in Ghamdi Dialect

In contrary, Meccan dialect has been the subject of a number of linguistics studies. For example, Sieny (1972) described Meccan dialect on the level of syntax. Ingham (1971) provided a comprehensive description of Meccan phonology, morphology, and syntax. In addition to two studies were conducted by Abu-Mansour (1987) and Kabrah (2004), they examined the dialect of Mecca on the level of phonetics. Meccan dialect has the opposite structure of Ghamdi dialect, it is a mixed of different varieties. This mixture in Meccan is a result of the cosmopolitan nature of the city. Therefore, many of the classical Arabic features are missing in Meccan dialect, such as the ones in Ghamdi dialect mentioned above. In actual fact, Meccan dialect encompasses of features from Egypt, levant dialects, such as stops and sibilants; it also includes of non-Arabic features, such as the variant /z/ instead of  $/\delta^{S}/$  and  $/d^{S}/$ . Al-Jehani (1985) suggested that the /z/ variant came from Turkish language during the Ottoman era.

## Methodology

The researcher collected her data from Ghamdi migrants in Mecca. She attempted to find answers to the following questions: Is there an age effect on the speech of Ghamdi migrants in Mecca? Does gender play a role in the changes that occur in the speech of Ghamdis? Does the level of education have any impact on the Ghamdi linguistic behaviour? Is there any relation between language change and level of Ghamdi education? In the light of these questions, the researcher selected the participants. The participants were males and females, and they represent different age groups 14-29, 30-45, 46-61, and 62+. They also represent different levels of education, so they vary from the illiterate to Ph.D. holders.

Sociolinguistic interviews were used to collect the data. The sociolinguistic interview differs from a survey in being less structured; the researcher initiated a free conversation and imbedded some prepared questions to control the flow of the conversation or sometimes to elicit the needed variables which are classical interdentals  $(\theta)$ ,  $(\delta)$ , and  $(\delta^{s})$ .

# **Results and Discussion**

## **Interdentals in Relation to Education**

The variability in the speakers' level of education and the role of education as a channel that broadens speakers' social network were strong motives to choose education as a parameter in this study. However, the collected data in this study did not reveal any influence of the education variable on the speakers' linguistic outcome. For example, one highly educated speaker who has extensive contact with Meccan people, which are obligatory networks since he works as a professor in the university, showed an extremely high level of conservatism vis-a-vis the use of traditional Ghamdi linguistic features. Another example from this study showed the opposite, where an illiterate speaker who has ordinary social networks with Meccan people uses a dialect that is more Meccan than Ghamdi. Al-Wer (2002), in her discussion of the role of education on language change, argues that education "per se" is not the immediate reason behind these changes, rather than "level of education" acts as a "proxy" variable on behalf of the inevitable expansion in one's social contacts as a result of mixing with

a wider and more heterogeneous group in institutions of higher education. However, the results of the current study did not reveal this influence. Therefore, the researcher decided that education is not an efficient variable to interpret the results obtained from this study.

## Interdentals in Relation to Age

Tables 2-4 below illustrate the percentages of using plain interdental variants  $[\theta]$ ,  $[t], \tilde{\mathfrak{q}}]$ , and [d] and the emphatic interdentals  $[\mathfrak{d}^{s}]$  and  $[d^{s}]$  in relation to age.

#### Table 2

Age	[θ] (%)	[t] (%)	Ν		
14-29	93	7	343		
30-45	93	7	237		
46-61	99	1	166		
62+	100	0	117		

The Percentage of  $(\theta)$  Variants in Relation to Age and the Results of the Significance Test

Notes. Wald Chi-Square = 1.474; p = 0.688.

# Table 3

The Percentage of  $(\delta)$  Variants in Relation to Age and the Results of the Significance Test

Age	[ð] (%)	[d] (%)	N	
14-29	89	11	353	
30-45	88	12	266	
46-61	98	2	170	
62+	100	0	123	

Notes. Wald Chi-Square = 3.847; p = 0.278.

#### Table 4

The Percentage of  $(\delta^{S})$  Variants in Relation to Age and the Results of the Significance Test

		0 3	0 3	
Age	$[\tilde{d}^{s}]$ (%)	$[d^{S}](\%)$	Ν	
14-29	84	16	346	
30-45	89	11	256	
46-61	98	2	160	
62+	100	0	109	

*Notes.* Wald Chi-Square = 12.979; *p* = 0.005

Since this research is dealing with migrants (Ghamdis) who moved from one city to another, it has been expected that adaptation of new linguistic features (Meccan features) would happen as a result of dialect contact. However, the data showed that the adaptation of the Meccan variants [t], [d], and [d] by Ghamdi migrants is low; they were highly conservative. The researcher also noticed that speakers use [t] and [d] variants more in particular words, more frequently used words, for example, they use [d] in demonstrative pronouns *da* "this," *dola* "those" ... etc. and the verb *axad* "he took" with all its derivations and the word *keda* "like this." With regard to [t], they use it more in numerals, such as *talāta* "three," *tāni* "second," and the word *katīr* "very much," with all its derivations. Similarly, in Al-Essa's (2008) work, she found that Najdi speakers produce [t] and [d] mostly in high frequency items, such as the ones mentioned above. Trudgill (1986) has discussed this phenomenon; he described it as "incomplete accommodation," which involves lexical diffusion. Trudgill stated that what is happening in this case is a phonetic, rather than a phonological modification; the speakers "modify

their pronunciation of particular words ... their purpose is to make individual words sound the same as when they are pronounced by speakers of the target variety" (Trudgill, 1986, p. 58).

In the case of  $(\delta^{s})$  variants, apparently, the data showed that Ghamdi speakers deal with the Meccan variant  $[d^{s}]$  differently from the other stops [t] and [d]. The occurrence of  $[d^{s}]$  variant was not confined to particular words; it occurred in a wide range of items, such as  $[d^{s}axmah]$  "giant;" [al?afd<sup>s</sup>al] "the best;" and  $[bassid^{s}]$  "some." In addition, the frequency of occurrence of items with  $[d^{s}]$  was more than tokens with [t] and [d]. In other words, the adaptation to  $[d^{s}]$  differs quantitatively and qualitatively from [t] and [d].

# Interdentals in Relation to Gender

Below, the percentages and the statistical results of  $(\theta)$ ,  $\phi$ ), and  $(\delta^{S})$  variants in relation to gender are illustrated in Tables 5, 6, and 7.

#### Table 5

The Percentage of  $(\theta)$  Variants in Relation to Gender and the Results of the Significance Test

Gender	[θ] (%)	[t] (%)	Ν
Females	92	8	491
Males	99	1	372

*Notes.* Wald Chi-Square = 14.208; *p* < 0.001.

# Table 6

The Percentage of  $(\delta)$  Variants in Relation to Gender and the Results of Significance Test

Gender	[ð] (%)	[d] (%)	Ν
Females	88	12	523
Males	98	2	383

*Notes.* Wald Chi-Square = 24.240; *p* < 0.001.

## Table 7

<i>The Percentage of (ð</i>	S V	/ariants in	Re	elation to	Gender	and the	Results of	of Sign	ificance I	Test

Gender	$[\delta^{2}](\%)$	$[d^{s}](\%)$	Ν
Females	84	16	506
Males	99	1	365

*Notes.* Wald Chi-Square = 53.185; *p* < 0.001.

The data in Tables 5 and 6 clearly show that both females and males favoured the heritage features [ $\theta$ ] and [ $\delta$ ]. This result is in line with the findings of Al-Sheri (1993) and AL-Essa (2008). Their participants from both genders showed the same tendency of preservation. In Table 7, gender in correlation with [ $\delta$ <sup>s</sup>] and [d<sup>s</sup>] shows an almost identical pattern as [ $\theta$ ], [t], [ $\delta$ ], and [d]. Overall, both groups favour the heritage variant [ $\delta$ <sup>s</sup>]. In general, female speakers are ahead of the male speakers in using the Meccan variants [t], [d], and [d<sup>s</sup>], and the difference among them is significant (p < 0.001). However, the speakers realised / $\delta$ <sup>s</sup>/ as [d<sup>s</sup>] 16% of the time, while they used [t] 8% and [d] 12%, which means that the change to [d<sup>s</sup>] is occurring faster than the change to [t] and [d]. This goes along with the findings of Al-Wer (1997), Abdel-Jawad and Awwad (1989), Jassem (1993) and Al-Khatib (1988) (as cited in Al-Wer, 2004). This result further supports the observation first made by Al-Wer (2004) that the emphatic and plain interdental variables consistently show different rates of transition from interdental to stop, and the rate is faster in the case of the emphatic.

The findings, in general, revealed that Ghamdis migrants tend to preserve their heritage features  $[\theta]\beta$ ][, and  $[\delta^{s}]$  and avoid using Meccan variants [t], [d], and  $[d^{s}]$ . The researcher would ascribe this linguistic behavior to two important points:

1. The first one is a linguistic point, namely, the frequency of occurrence of the interdentals. According to Prochazka (1988), the interdentals  $[\theta]$  and  $[\delta]$  and  $[\delta]$  are features used in all Saudi except in Hijazi dialects including Meccan. Ingham (1971) pointed out that Meccan people replace interdentals with stops[t], [d], and  $[d^{s}]$ , and in some words, with sibilants [s], [z] and [z];

2. The second point is a psychological one; the fact that the dialects that do not have interdental sounds are in the minority in Saudi Arabia probably gives rise to a public perception that the use of the stop variants in place of the interdental sounds is "non-local," "non-indigenous," "foreign," etc. We can consider this observation as some sort of a "psychological barrier" that delays or prevents their diffusion in the speech of those whose heritage dialects do maintain a phonological split between the interdental and stop sounds.

It is worth mentioning that Alghamdi (2019) examined the change in the diphthongs (aw) and (ai) variables in the speech of Ghamdi migrants in Mecca. She found that Ghamdis showed an opposite linguistic behavior from what has been discovered in the current research. Ghamdis were extremely interested in Meccan variants the monophthongs [ $\epsilon$ :] and [ $\sigma$ :], the results showed the high tendency of Ghamdis adoption of Meccan monophthongs. Therefore, the trajectory of linguistic change, generally, in the speech of Ghamdi migrants in Mecca can be summarized in two points:

1. Ghamdi migrants showed a high level of using the Meccan monophthongs [ε:] and [ɔ:] at the expense of their heritage diphthongs [ai] and [au] (Alghamdi, 2019);

2. In regard of the interdentals  $[\theta]$  and  $[\delta]$  and  $[\delta]$ , they showed a different linguistic manner. They maintained their heritage variants  $[\theta]$  and  $[\delta]$  and  $[\delta]$ , the data manifested their low level of using Meccan variants [t], [d], and [d<sup>S</sup>].

This trajectory of the change in Ghamdi dialect is not random. Rather, it follows a systematic manner. Ghamdis in their speech, they adopt the features of the majority and they abandoned the minority features. It is true, that they adopt the Meccan monophthongs [ $\epsilon$ :] and [j:], but in fact, monophthongs are the variants that exist in most Saudi dialects, while they did not prefer the Meccan variants [t], [d], and [d<sup>s</sup>], because they exist only in Hijazi dialects including Meccan. The interdentals [ $\theta$ ] and [ $\delta$ ] and [ $\delta$ <sup>s</sup>] are the features of all other Saudi dialects.

These findings supported the suggestion that there is an emergence of a standard Saudi dialect where all regional variants are eliminated. For further details and evidence (see Al-Shehri, 1993; Alghamdi, 2014; Alqahtani, 2015; Al-Ammar, 2017; Hussain, 2017).

## Conclusion

This socio-linguistic study investigated the change in the dialect of Ghamdi migrants in the sacred city of Mecca. With respect to the linguistic variables, the variants of the interdentals were examined plain interdental  $[\theta]$  and  $[\theta]$  and empathetic interdental  $[\delta^{s}]$ . Three social variables were used to correlate with the linguistic variables, namely, education, age, and gender. The variants  $[\theta]$  and  $[\theta]$  and  $[\delta^{s}]$  are realized by Meccan people as stops/sibilants [t], [s]; [d], [z]; and  $[d^{s}]$ , [z] respectively. The researcher has expected that Ghamdi migrants will replace their heritage variants with the Meccan variants as a result of the long-term contact. However, the results showed that sibilants did not occur at all in the speech of Ghamdi migrants; the stops occurred in the speech of young women but in a very low rate. In general, the findings revealed that Ghamdi migrants

preserved their variants  $[\theta]$  and $\theta$ ] and  $[\delta^{\circ}]$ . In Alghamdi (2019), the results showed an opposite linguistic manner by Ghamdi migrants in Mecca; the researcher examined the change in Ghamdi dialect, particularly, the wide diphthongs [ai] and [au]. She found that there is a change in progress towards Meccan variants, the monophthongs [ $\epsilon$ :] and [ $\sigma$ :]. The researcher ascribed this discrepancy to the idea of minority and majority. In fact, the diphthongs [ai] and [au], Ghamdi variants, are features of minority, they are replaced by the monophthongs [ $\epsilon$ :] and [ $\sigma$ :], which are used in most Saudi verities. Conversely, is the case with the interdentals, the stop variants [t], [d], and [ $d^{\circ}$ ] do not exist in Saudi dialects but in Hijazi varieties including Meccan dialect. These results supported an idea that has been suggested by some Saudi sociolinguists that there is an occurrence of a standard Saudi dialect. However, further research is needed to corroborate this suggestion.

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