



Research Article

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The Sociolinguistic Variation of (āʔ) in Hatim¹

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Abstract

This sociolinguistic study investigates the variation in the pronunciation of the variable (āʔ) in the variety of Hatim, north-west Jordan. This variable is studied in relation to five factors: age, gender, education, outside contact and following linguistic environment. Data were collected via informal sociolinguistic interviews. Sixty-four participants (30 males, 34 females) were recorded spontaneously by the researchers (duration=2227 minutes). Two variants for the variable (āʔ) were found in the variety of Hatim: the tradition variant [ā] and the innovative one [āʔ]. The Rbrul analysis of the data shows that only outside contact, gender and following linguistic environment are statistically significant. Put differently, participants with high contact with other speech communities used the innovative variant more than those with low contact. As it is the case in most speech communities, female participants favoured the innovative variant over the traditional one. In relation to the following linguistic environment, it was found that the innovative variant is favoured when it does not occur at utterance boundaries. There appear to be two competing forces in the variety of Hatim, one for the traditional Horani feature (i.e., dropping the final glottal stop) and another for an innovative feature (i.e., keeping the final glottal stop) that happened to coincide with the pronunciation in Modern Standard Arabic. It can safely be argued that the driving force behind this change in progress is not a reversion to Modern Standard Arabic. Rather, it is the present-day social prestige associated with the pronunciation of the final glottal stop that is pushing for this change.

Keywords: Variationist sociolinguistics, Jordan, Horan, Hatim, variable (āʔ)

1. Introduction

Since the 1960s, sociolinguistics has been taking a prominent role in the field of linguistics as it aims to study the relation between language and society (Hudson, 1996). The impact of social factors, such

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as age, gender, level of education, social class and contact, on the use of language is indisputable. Variation in the speech of different people from the same speech community is persistently attested in daily conversations. In fact, even each person's speech is versatile and constantly changes due to different stylistic and social settings and domains (Crystal & Ivic, 2014). Put differently, "variation is an inherent property of speech" (Burki, 2018, p. 1973). Despite the fact that language change is natural and inevitable, speakers are often judged in relation to the way they speak (Spolsky, 1998). Prestige, market pressure and peer pressure are few factors that can determine the trajectory of language change.

At the macro level, the sociolinguistic situation in the Arab World can simplistically be explained in relation to Diglossia, the co-existence of an inherited stable superposed variety (H-variety) and regional varieties (L-varieties) whose functions are strictly specialised (Ferguson, 1959). At the micro-level, however, there is variation within each regional variety. Over the past few decades, a number of sociolinguistic studies have been conducted to investigate some salient linguistic features in the regional varieties in Jordan, such as (Q) (Abdel-Jawad, 1981; Al-Khatib, 1988; Al-Wer, 1991; Al-Tamimi, 2001; El Salman, 2003), (K) (Abdel-Jawad, 1981; Al-Khatib, 1988; El Salman, 2003; Al-Hawamdeh, 2016), (D and Ď) (Al-Khatib, 1988; Al-Wer, 1991; Al-Tamimi, 2001), (d3) (Al-Khatib, 1988; Al-Wer, 1991; Al-Tamimi, 2001), (θ) (Al-Khatib, 1988; Al-Wer, 1991; Al-Tamimi, 2001), (L) (Abu Ain, 2016; Al-Hawamdeh, 2016), (a) (Al-Khatib, 1988), (Vki) (El Salman, 2003) and (U) (Abu Ain, 2016), amongst others. The great majority of the aforementioned studies focused on the effect of the urban Jordanian varieties on the rural ones after coming into contact with each other (see Abdel-Jawad, 1986).

2. The Aim of the Study

This study sheds light on the (āʔ) variable in the Horani variety of Hatim. In this variety, as it is the case in most other Horani varieties, Arabic words, especially female names, ending with /āʔ/ are pronounced without the final glottal stop /ʔ/. Nowadays, a new pronunciation can be observed by some members of this speech community. In other words, some speakers have been observed pronouncing the final glottal stop in the words in question. To illustrate, the traditional Horani pronunciation of the Arabic female name *Wafāʔ* is *Wafā*, i.e., without the final glottal stop. Recently, however, in some Horani regions (in the variety of Hatim, for instance), the final glottal stop in such words (especially female names) seems to be slowly coming back. To make it clearer, in the variety of Hatim, words ending in /āʔ/ are pronounced in two different ways: with and without the final glottal stop. In variationist sociolinguistic conventions, the variable (āʔ) has two variants: the traditional [ā] and the innovative [āʔ]. In order to identify the reasons behind this variation, this study investigates the variable (āʔ) in relation to various social factors, such as age, gender, contact and education. As for the linguistic factors, the following environment is coded for in order to see if connected speech has an impact on the use of the variable. Specifically, the study tries to answer the following research questions: 1) "What are the effects of gender, age, contact and education on the use of the variable (āʔ)?", 2) "What are the reasons behind this variation?" and 3) "Is there any effect of the linguistic following environment on this variation?"

Although the glottal stop is very hard to pronounce word finally, probably the reason why it is often dropped in the traditional Horani dialect, it is making a comeback triggered by various reasons, such as prestige, contact with urban dialects, etc. This study intends to highlight this variation statistically using an adequate statistical package, namely Rbrul. To the best of our knowledge, no previous studies have tackled the variable (āʔ); therefore, it is hoped that this study will fill a gap in the literature.

3. Review of Literature

Al-Khatib (1988) and Al-Wer (1991) agree that prior to Abdel-Jawad (1981), the sociolinguistic literature on Jordanian Arabic focused mainly on dialectal descriptions, i.e., dialectology (see

Cantineau, 1940, 1946; Palva, 1969, 1970; Bani Yasin, 1980). Abdel-Jawad was, in many ways, a pioneer in the sociolinguistics of Jordan, especially Jordanian variationist sociolinguistics. Abdel-Jawad (1981) investigated variation and change in the speech of 170 speakers in Amman, the capital city of Jordan. He followed the Labovian method of collecting spoken speech. The focus was on two main phonological variables, namely (Q) and (K), as well as on some lexical variation. The findings show that lexical and phonological variation in Amman is not linguistically constrained, but rather socially and extralinguistically conditioned. One of the most controversial finding was that “sex differentiation plays a major role in the linguistic variation and change and that unlike in Western communities, women in the Arab world use the standard prestigious form less often than men, but they use the Urban variants more often than men” (p. xvii). Unfortunately, the latter finding was misinterpreted as a “reversal of the position of men and women predicted by principle 2” (Labov, 2001, p. 270), i.e., it was posited that Arab women’s linguistic behaviour is quite the opposite of that in most speech communities in the world where women adopt the prestigious standard varieties. However, Ibrahim (1986) reinterpreted the afore-mentioned finding. He argued that unlike in Western societies, the prestigious norm does not coincide with the standard norm in the Arab world. Therefore, women in the Arab world, like women in Western societies, follow the prestigious forms, but these norms are often associated with non-standard norms.

Al-Khatib (1988) conducted a similar study in the city of Irbid, Jordan. He collected the data from 38 participants focusing on six linguistic variables: (Q), (d₃), (D), (θ), (K) and (a). The results show that only (d₃) is phonetically conditioned while the other five variables are lexically conditioned. At the same time, social factors are found to play a crucial role in the variation under investigation, especially gender. The origin of the speaker, i.e., to the West vs. East of River Jordan, also influences the linguistic behaviour of the speakers where the former favour innovative forms while the latter favour the traditional forms.

Al-Wer (1991) investigated the speech of 116 women in three different areas in Jordan, namely Sult, Ajloun and Karak. The focus was on the following phonological variables: (Q), (θ), (D) and (d₃). She convincingly argues that variation in these three Jordanian cities can be best studied in relation to two competing forces, namely gender and origin of the speakers. The results show that speakers in Sult are not as conservative as the speakers in Ajloun and Karak. Al-Wer explained this innovative linguistic behaviour of the speakers in Sult in relation to geography and contact with other speech communities. Specifically, Sult is closer to Amman, the capital city of Jordan, so “Sult people have considerably more frequent contacts...with people from Amman” (pp. 161-162).

Al-Tamimi (2001) studied the phonetic and phonological variation spoken by the Fallahi rural group who migrated to Irbid city in the North of Jordan. He investigated the variables: (Q), (D), (θ), and (d₃) in relation to four social factors: age, gender, education, and social class. Data were collected by interviewing 72 speakers from different social classes, genders, age groups, and levels of education. The results of this study show that high class speakers use the prestigious urban variants more. In addition, gender and social class were the most important factors in explaining the linguistic variation in Jordan, unlike education. Generally speaking, females preferred to use the urban forms more than males did.

El Salman (2003) explored the linguistic variation of Fallahi speakers in Karak. The study aimed to examine three variables (Q), (K) and the 2nd person feminine suffix pronoun (Vki). Data were obtained by interviewing 38 informants from rural Palestinians who migrated to Karak after the 1948 war. The participants were divided in terms of their age, gender, and education. With regard to the (Q) variable, the findings show that young males use the local [g] variant more, young females adopt the non-local urban [ʔ] variant in order to identify themselves with prestige, while old females use the [k] variant. As for the (K) variable, El Salman found that its variant [tʃ] was not used by the young age group who used the [k] variant instead. Furthermore, the [tʃ] variant was rarely used by the middle age group and commonly used by the old age group. Finally, the non-local [ik] variant of the variable (Vki) was used more by the old age group.

Al-Shawashreh (2016) investigated word order variation and pro(noun)-drop variation in

Jordanian Arabic. Data were collected by interviewing 30 speakers (males and females) from Irbid city and were discussed according to different social factors: age, gender, area of residence and education. Speakers were divided into two age groups: 18-40 and 41-90. Regarding the word order, the researcher found that the VS (Verb Subject) order was less common than the SV order. It is worth mentioning that the young female urban speakers are the leaders for the use of SV order. As for the pro(noun)-drop variation, the results show that education is the only social factor that has an effect on the expression of subject pronouns. Thus, the choice of the subject pronouns was affected by word order; the overt subject pronoun was more common with the SV(O) rather than the VS(O).

Abu Ain (2016) studied two sociolinguistic variables in the dialect of Saham in Jordan; the first variable was (U), and the second one was (L). These variables were studied in terms of three social factors: age, gender, and amount of contact with other speech communities. Data were collected via sociolinguistic informal interviews. In order to reach the aim of this study, 60 participants from three different age groups took part (30 males, 30 females). The results show that the leaders of the change in these two variables are the young female speakers. Regarding the first variable (U), as in the word /zubdeh/ 'butter', female speakers often change the [u] into [i] as /zibdeh/ more than male speakers, especially young females. As for the second variable (L), the findings show that dark [ɫ] is more common after back vowels and it is preferred by males more than females.

Al-Hawamdeh (2016) examined two variables in the traditional dialect of Suf in the North of Jordan: (K) and (L). Data were collected by spontaneously interviewing 24 participants (12 males, 12 females) who were born and raised in Suf. The participants were divided into three age groups: under 18, 20-50 and +60. The researcher found that when the variable (K) in the stem -k is preceded and followed by high front vowels, the traditional variant [tʃ] is favoured, especially by female speakers. In other words, the female speakers tended to maintain the traditional variant [tʃ] instead of the innovative [k]. Similarly, female speakers were found to use the traditional variant dark [ɫ] more than the innovative light [l] which confirmed that females in Suf were more conservative than males. These results need to be taken with caution because they oppose most of the available literature, especially with such a small sample of speakers.

Darwish and Abu Ain (2020) examined how the names of female relatives are stored by males in Jordan in the contact lists of their mobile phones. In order to reach the aim of the study, data were collected from 90 Jordanian males divided into three age groups: young (18-35), middle (36-49) and old (+50) using a small-scale survey. Data were studied in relation to two social factors: age and place of residence. The findings of this study via Rbrul show that not all males in Jordan store the real names of their female relatives. In other words, males in cities use the real names of their female relatives more than males in villages. With regard to age, the researchers found that middle-age males use the real names less than young and old males. Darwish and Abu Ain (2020) interpreted the results regarding the middle age group in relation to social pressure.

Al-Deaibes, Al-Shawashreh and Jarrah (2021) looked into the variation of secondary emphasis in two major Jordanian Arabic dialects: urban and rural. They focused on the emphatic variation of the secondary emphatic consonant (W) in relation to gender. Data were collected from a group of 24 speakers divided equally between gender and the dialect spoken. The results show that secondary emphasis is stronger when produced by males, especially by those who speak rural varieties. Furthermore, the results "suggest that emphasis, whether primary or secondary, tend to have the same acoustic correlates" (p. 1).

Alshaboul, Jarrah, Alghazo and Al-Shawashreh (2022) explored the use of intensifiers in the urban Jordanian variety spoken in Amman. Data were collected from a sample of 32 speakers and were coded for gender, age, education and various linguistic factors, such as position, semantic class and polarity. Statistically, data were analysed via Goldvarb x, a statistical package suitable for analysing and testing sociolinguistic data. The results show that some intensifiers are used more often than others, and that their distribution is not influenced by gender, age and education. As for the linguistic factors, the results show that the most frequent intensifiers "significantly correlate with the semantic class of adjectives of 'human propensity' and to occur more often predicatively in the

sentence" (p. 1).

Darwish, Abu Ain and Bader (in press) probed the potential impact of religion as a factor on the variation of the phonological variable (δ^h) in a small town in Jordan. The population of this town is estimated at 8,000, almost the fifth of which are Christian, and the rest are Muslim. They coexisted since the nineteenth century and have been living in peace and harmony ever since. Data were collected via informal recorded sociolinguistic interviews and were analysed by Rbrul. The findings of the study show no statistically significant influence of religion on the use of the variable under investigation. The researchers interpreted the findings in terms of nationality and identity, i.e., both Christians and Muslims in the town view themselves as Jordanian Arabs in spite of their different faiths.

This selected literature review shows that the variable under investigation has not been studied yet; therefore, this study is indeed significant and bridges a gap in the literature. In addition, it may pave the way for more similar studies in other speech communities.

4. Methods and Procedures

This section expounds the methodology used in this study, namely the locale, sample, instrument, data collection and analysis.

4.1 Locale

This study focuses on the speech community in Hatim village. Hatim is one of the villages in Bani Kenanah district. This village is located in north-west Jordan. It is about 16 kilometres from Irbid city. It is bordered from the north by Ibdar, Samar, and Kofor-Soam; from the west by Malka; from the south by Al-Borz and Foa'ara, and by Sama-Alrosan and Kufor-Jayez from the east. People in Hatim belong to different tribes, such as Al-Gananwah, Al-Odat, Al-Damen, Al-Rawashdeh, Al-Younis, and Al-Bakkar. They work in agriculture, government, and other jobs. They mainly grow olives, grapes, and figs. So, Hatim is known as a farm not as a village (Hatamleh, 2018). Its population is around 12,000 (Al-Tamimi, 2020). Hatim's history goes thousands of years back witnessed by an archaeological area called Al-Kherbeh; it was peopled by the Romans. There is a good number of educated people in Hatim. A large number of them immigrated to the United States of America, Australia, and Europe. Hatim society is considered conservative as other villages in the area. They still preserve old customs and traditions, such as Al-Oneh (helping each other) and social solidarity. As a speech community, they speak the traditional Horani dialect of Arabic prevalent to the people living across the Horan plains.

4.2 Sample and Coding Procedures

The sample of this study consists of 64 participants who were born and raised in Hatim. They were divided into three age groups: young participants are 18-29, middle-aged ones are 30-49, whereas old ones are +50. Thus, each group contains 10 males and 10-12 females who were categorized into four levels of education: 1) School, 2) Diploma, 3) Undergraduate studies and 4) Graduate studies. In addition, the amount of contact between the participants and other speech communities has been taken into consideration; therefore, the participants were divided into three groups: 1) Low contact, 2) Medium contact and 3) High contact. As for the linguistic factors, the following environment was coded for as follows: (P)=pause, i.e., when there is a pause after the token and (C)=continuous speech, i.e., when there is a continuity in the speech directly after the token. The sample was purposefully selected in order to give opportunities to members affiliated to all social factors to participate. Furthermore, the second author is well-acquainted with the speech community in question as she was born and raised in Hatim; therefore, she used a similar procedure to that of Milroy and Milroy (1978), i.e., she approached the participants as a friend or as a 'friend of a friend'.

4.3 Instrument

Data were collected via recorded informal interviews. Prior to each interview, permission to record was taken from the participants who were assured that recordings will be only used for academic purposes. All sociolinguistic interviews were conducted in the participants' houses and they were very co-operative. Some of them even invited their neighbours, relatives, and friends to help. All interviews were informal and spontaneous with native speakers of the variety of Hatim. They were recorded using a smart phone and its recording application (Voice Memos). Each interview lasted from 30 to 60 minutes.

4.4 Data Analysis

Data were organized using Microsoft Excel and were analysed using Rbrul software. The Rbrul analysis was done with the help of an expert. Data were analysed in relation to four social factors: gender, age, education and amount of contact with other speech communities. Moreover, data were analysed in relation to the following linguistic environment: pause or connected speech.

5. Findings and Discussion

Table 1 shows the model generated by Rbrul after feeding it with the excel sheet with tokens coded for the aforementioned social and linguistic factors.

Table 1: Rbrul results for the variable (ā?)

					R ² 0.149
Outside connection	Logodds	Tokens	[i] mean	Centred factor weight	
3	0.857	407	0.651	0.702	
2	0.354	201	0.572	0.588	
1	-1.211	110	0.236	0.23	
(p< 9.58e-17)					
Gender	Logodds	Tokens	[i] mean	Centred factor weight	
F	0.3	402	0.595	0.574	
M	-0.3	316	0.528	0.426	
(p< 0.000419)					
Following environment	Logodds	Tokens	[i] mean	Centred factor weight	
C	0.25	286	0.640	0.562	
P	-0.25	432	0.516	0.438	
(p< 0.00254)					

Before discussing the model generated by Rbrul in Table 1, a simple Count Run returned that the overall number of tokens in the excel sheet is 718. There is no doubt that this number is sufficient to highlight the variation of the variable in question, i.e., (ā?). A breakdown of the overall number of tokens (n=718) by the occurrence of each variant yields 406 tokens for the variant [ā?] and 312 tokens for the variant [ā]. In other words, the innovative variant [ā?] appears in the data more (percentage of occurrence=%56.5) than the traditional variant [ā] (percentage of occurrence=43.5%). This simple breakdown of the tokens is necessary to show that the variation concerning the variable (ā?) and its two variants ([ā?] and [ā]) is genuine and deserves to be sociolinguistically investigated in the speech community in question. Table 1 displays the model retrieved from Rbrul with the innovative variant [ā?] as the application value. The results in Table 1 show that the 'outside connection', 'gender', and 'following environment' are statistically significant factors in the use of the variable (ā?) in the variety of Hatim. As shown in the table, the order of the significant factors starts with the 'outside

connection' as the highest influential factor with a p-value of ($p < 9.58e-17$), then 'gender' ($p < 0.000419$), and at the end the 'following environment' ($p < 0.00254$) which is the least influential factor.

5.1 The Effect of Contact on the Use of (*ā*?)

With respect to 'contact with other speech communities' as a social factor, and as shown in Table 1, it is the most statistically significant factor with a p-value of ($p < 9.58e-17$). The results show that people with high contact (3) use the variant [*ā*?] the most (factor weight (FW) = 0.702). People with medium contact (2) (FW=0.588) use this variant less than the first group (3) but more than people with low contact (1) (FW=0.23, i.e., below 0.5). Accordingly, people with more contact use the [*ā*?] variant more than others with a percentage of 65%. Put differently, contact with other speech communities has a significant effect on the use of the variant [*ā*?]. Hence, the higher the contact with other speech communities, the higher the use of the innovative variant is. This goes hand in hand with other variationist studies conducted on Arabic in Jordan (see Abu Ain, 2016) and Saudi Arabia (see Alessa, 2008). Abu Ain (2016) found that linguistic change in the village of Saham is directly proportional to the amount of contact with other speech communities, i.e., the more contact speakers have, the more they are likely to use innovative features at the expense of traditional ones. Alessa (2008) investigated the linguistic outcome between two varieties: the Najdi variety and the Urban Hijazi variety. She analysed the variation in the speech of 61 Najdi speakers living in Jeddah (29 speakers from cities in the central region of Washm and Sudair and 32 speakers from Hijaz). This study examined ten linguistic variables: 5 variables at the phonological level and 5 variables at the morpho-phonemic level. Alessa found that "diffusion of the urban Hijazi features is higher among high contact speakers who are engaged in frequent and intimate interaction with members of the Hijazi community" (p. 239). Indeed, members of isolated speech communities do not often lead linguistic change because they often live in closed social networks interacting with speakers using the same linguistic features. Once contact with other speech communities occurs, some changes are often spotted due to the natural linguistic phenomenon of accommodation. Communication Accommodation Theory stipulates that when speakers from different speech communities come into contact, they make adjustments to their speech in order to narrow down the differences between their varieties (see Giles, 2008).

5.2 The Effect of Gender on the Use of (*ā*?)

With respect to 'gender' as a social factor, it is the second most significant factor with a p-value of ($p < 0.000419$) compared with the most significant social factor 'contact' ($p < 9.58e-17$). As shown in Table 1, females use the variant [*ā*?] (FW=0.574) more frequently than males (FW=0.426). These results show that female speakers are the leaders of this change with a percentage of 59.9% compared to males with a percentage of 52.8%. To illustrate, a known singer was identified by most females as *Haifā? Wahbi* using the innovative variant [*ā*?] and as *Haifā Wahbi*, with the tradition variant [*ā*], by most males. It can be argued that prestige is playing its role in the speech community in Hatim; the pronunciation of females is similar to the urban varieties than males. Abdel-Jawad (1986) predicted that a number of linguistic features in rural Jordan will be replaced by prestigious forms associated with the urban Jordanian varieties. Furthermore, the results confirm previous results (see Al-Khatib, 1988; Al-Tamimi, 2001; Abu Ain, 2016) where females were found to be leading the linguistic change towards the urban and prestigious variants.

5.3 The Effect of the Linguistic Following Environment on the Use of (*ā*?)

The 'following environment' is returned as a significant factor (see Table 1), but it has the weakest effect with a p-value of ($p < 0.00254$) compared with the aforementioned social factors. The analysis

shows that the glottal stop at the end of words is pronounced more in the variety of Hatim when it is followed by speech. On the other hand, it is less pronounced when it occurs before a pause. In other words, the variant [āʔ] is pronounced more when it is followed by a continuous speech with a percentage of 64% compared with 51.6% when it is followed by a pause. These results are surprising because one expects speakers to drop the final glottal stop in connected speech more than at utterance boundaries. In the same vein, it is possible that it is harder to pronounce the glottal stop at the end of one's utterances. Nevertheless, these results agree with previous studies where the traditional variant was more favoured before a pause (see Abu Ain, 2016).

To further explore the following linguistic environment, a new column was added to the original excel sheet. The following environment was re-coded with three factors: pause (P), consonant (C) and vowel (V). Rbrul run returned that statistically the new innovative feature is mostly favoured when followed by a consonant with a centred factor weight (=0.599, i.e., above 0.5). The centred factor weights for following vowels (=0.484) and pauses (=0.417) are below 0.5 which means they are statistically insignificant.

5.4 Cross Tabulations

Cross-tabulating different factors via Rbrul gives a clearer picture about the change in progress as it shows how factors interact with each other. Table 2 shows how 'age' and 'gender' impact the use of the innovative variant.

Table 2: Cross Tabulation of 'age' and 'gender'

Age	M	F	Total
Old	0.402	0.410	0.609
Middle	0.556	0.655	0.407
Young	0.612	0.686	0.655
Total	0.528	0.595	0.565

As mentioned at the beginning of this section, the age-group factor is insignificant, but after cross-tabulating it with gender, new insights have come up. Table 2 shows that old males use the innovative variant less than old females. Clearly, old females use the innovative variant with higher frequency 0.410 compared to their male counterparts 0.402. In respect to the middle generation, middle-aged females use the innovative variant more than middle-aged males. This is also shown within the young generation, which means that in all generations females are more innovative. The younger the female is, the more innovative she is. In other words, young females use the innovative variant with higher frequency 0.686 compared to females in middle and old age: 0.655 and 0.410, respectively. Males exhibit similar behaviour; the younger the male is, the higher the use of the innovative variant is. In short, the leaders of this linguistic change in the variety of Hatim are females, especially young ones.

Table 3 shows how cross tabulating 'outside contact' and 'gender' can better explain the variation in Hatim. In other words, the table shows how 'contact' and 'gender' impact the use of the innovative variant.

Table 3: Cross Tabulation of 'outside contact' and 'gender'

Outside connection	M	F	Total
1	0.208	0.244	0.236
2	0.344	0.679	0.572
3	0.614	0.698	0.651
Total	0.528	0.595	0.565

Table 3 shows that 'contact' with other speech communities positively impacts the use of the innovative variant within both gender groups. Put differently, the higher the 'contact with other speech communities', the higher the use of the innovative variant is by both males and females.

6. Conclusion

This study ascertains the importance of using the adequate instruments, data collection procedures and statistical analysis software in variationist sociolinguistic studies. The use of Rbrul in analysing the data has helped in highlighting the interplay between the linguistic and social factors based on naturally occurring tokens of the variation under investigation. The findings show that only two social factors ('contact with other speech communities' and 'gender') and one linguistic factor (when the variable is not at utterance boundaries) are statistically significant in the variation of (āʔ) in Hatim. On the other hand, 'education' and 'age' are not statistically significant social factors in relation to the variation of (āʔ). In other words, the use of the innovative variant is favoured by females who have contact with other speech communities. The findings can be interpreted in relation to language 'diffusion', i.e., the urban linguistic norms in Jordan might be spreading to neighbouring rural speech communities due to constant contact caused by daily commutes to the city to study and/or work. However, we might argue that prestige is the driving force for the linguistic innovation in the speech community under investigation. In order to arrive at the real reasons behind such variation in the speech of the people of Hatim, similar studies are recommended with larger samples recorded in various formal and informal settings.

References

- Abdel-Jawad, H. (1981). *Lexical and phonological variation in spoken Arabic in Amman* (Unpublished doctoral dissertation). University of Pennsylvania, USA.
- Abdel-Jawad, H. (1986). The emergence of an urban dialect in the Jordanian urban centers. *International Journal of the Sociology of Language*, 61(5), 53-63.
- Abu Ain, N. (2016). *A sociolinguistic study in Saham, Northern Jordan* (Unpublished doctoral dissertation). University of Essex, UK.
- Al-Deaibes, M., Al-Shawashreh, E., & Jarrah, M. (2021). Emphatic variation of the labio-velar /w/ in two Jordanian Arabic dialects. *Heliyon*, 7(11), 1-18.
- Alessa, A. (2008). *Najdi speakers in Hijaz: A sociolinguistic investigation of dialect contact in Jeddah* (Unpublished doctoral dissertation). University of Essex, UK.
- Al-Hawamdeh, A. (2016). *A sociolinguistic investigation of two Horani features in Suf, Jordan* (Unpublished doctoral dissertation). University of Essex, UK.
- Al-Khatib, M. (1988). *Sociolinguistic change in an expanding urban context: A case study of Irbid City, Jordan* (Unpublished doctoral dissertation). University of Duhram, UK.
- Alshaboul, A., Jarrah, M., Alghazo, S., & Al-Shawashreh, E. (2022). A sociolinguistic analysis of intensifiers in Ammani Arabic. *Ampersand*, 9, 1-10.
- Al-Shawashreh, E. (2016). *Aspects of grammatical variation in Jordanian Arabic* (unpublished doctoral dissertation). University of Ottawa, USA.
- Al-Tamimi, F. (2001). *Phonetic and phonological variation in the speech of rural migrants in a Jordanian city* (Unpublished doctoral dissertation). University of Leeds, UK.
- Al-Wer, E. (1991). *Phonological variation in the speech of women from three urban areas in Jordan* (Unpublished doctoral dissertation). University of Essex, UK.
- Bani Yasin, R. (1980). *A critical and comparative study of the dialectal speech of the Ghawarna community in the Jordan Valley in Jordan* (Unpublished doctoral dissertation). University of Leeds, UK.
- Burki, A. (2018). Variation in the speech signal as a window into the cognitive architecture of language production. *Psychonomic Bulletin & Review*, 25, 1973-2004. <https://doi.org/10.3758/s13423-017-1423-4>
- Canineau, J. (1940). *Les parles arabes du Horan*. Atlas. Paris: Klincksieck.
- Cantineau, J. (1946). *Les parles arabes du Horan: Notions generales, grammaire*. Paris: Klincksieck.
- Crystal, D., & Ivić, P. (2014). Dialect. *Encyclopedia Britannica*. <https://www.britannica.com/topic/dialect>

- Darwish, I., & Abu Ain, N. (2020). Words on screens: Women's names in mobile phone contact lists in Jordan. *The Arab Journal For Arts*, 17(2), 737-746.
- Darwish, I., Abu Ain, N., & Bader, S. (in press). Is Religion a Social Factor in the Variation of (ðʕ)? The Case of Khirbit Al-Wahadneh, Jordan. *Jordan Journal of Modern Languages & Literature*.
- El Salman, M. (2003). Phonological and morphological variation in the speech of Fallahis in Karak (Unpublished doctoral dissertation). University of Durham, UK.
- Ferguson, C. (1959). Diglossia. *Word*, 15(2), 325-340.
- Giles, H. (2008). Communication accommodation theory. In L. A. Baxter & D. O. Braithewaite (Eds.), *Engaging theories in interpersonal communication: Multiple perspectives* (pp. 161-173). Sage Publications, Inc.
- Hatamleh, M. (2018). Hatim, a farm of olive, grape, and fig, not a village. Retrieved from <https://alrai.com/article/10421619>
- Hudson, R. (1996). *Sociolinguistics*. Cambridge: Cambridge University Press.
- Ibrahim, M. (1986). Standard and prestige language: A problem in Arabic sociolinguistics. *Anthropological Linguistics*, 28(1), 115-126.
- Labov, W. (1966). *The social stratification of English in New York city*. Washington DC: Centre for applied linguistics.
- Labov, W. (2001). *Principles of linguistic change. Volume II: Social Factors*. Oxford: Blackwell.
- Milroy, J., & Milroy, L. (1978). Belfast: Change and variation in an urban vernacular. In P. Trudgill (Ed.), *Sociolinguistic Patterns in British English* (pp. 19-36). London: Edwin Arnold.
- Palva, H. (1969). Balgawi Arabic. 2. Texts in the dialect of the yigul group. *Studia Orientalia*, 40(2), 3-15.
- Palva, H. (1970). Balgawi Arabic. 3. Texts from Safut. *Studia Orientalia*, 43(1), 3-26.
- Spolsky, B. (1998). *Sociolinguistics*. Oxford: Oxford University Press.