

## Consonantal Variation in Syrian Refugees' Speech in Jordan

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### Abstract

The study aims at investigating some aspects of phonological variation in Syrian refugees' speech in Jordan taking into consideration the variables of gender and age. It specifically examines four Modern Standard Arabic phonological sounds, namely (Q), (Ḍ), (Ṫ) and (Ḍ), their pronunciation in Damascene Arabic and how this pronunciation is affected by the rural Jordanian speech. For this purpose, a Phonological and Social Completion Task (PST) was employed to collect the data. One hundred Syrian participants' responses to 25 phonological and social situations were examined to show the use of rural Jordanian variables by Syrian refugees. The collected data were categorized into four major categories. The results of the study show that the Damascene phonological variables were sometimes shifted to the rural Jordanian variables. The results also show that the variant /g/ was frequently used by Syrian refugees while the variant /Ḍ/ was rarely used in Syrian refugees' speech. Regarding gender and age, women were less willing to switch to the Jordanian pronunciation, in contrast to middle-aged men who tended to switch more to the Jordanian pronunciation than other groups.

**Keywords:** age; consonants; gender; phonological variation; syrian dialect

### INTRODUCTION

The present study is concerned with how Syrian refugees in Jordan accommodate their speech –at the phonological level- to the Jordanian dialect, and how they adjust their individual dialect to a new linguistic environment. This requires shedding light on linguistic and phonological integration.

Linguistic integration is an approach that aims at developing a general theory of linguistic accommodation. The most significant representation of integrational linguistics is Lieb's work (1983) which developed two major linguistic theories: integrational theory of language, and integrational theory of grammars. The theory of language covered all language systems including the phonological, syntactic, and morphological components. It also dealt with language-internal variability and was subjected to all major aspects of language as it was concerned with a number of different unrelated languages of the world (Olson, 1985; Sackmann, 2008).

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This research is partially funded by the Deanship of Scientific Research and Higher Studies at Yarmouk University, Irbid, Jordan.

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Many studies have dealt with linguistic integration, which is considered as an important factor affecting immigrants' speech. For instance, Colling & Karsenti (2012) studied the state of linguistic integration in North America and Europe and focused on how to facilitate linguistic integration of immigrants through contribution of information and communications technologies. For that purpose, the Council of Europe launched a website about linguistic integration of immigrants ([www.coe.int](http://www.coe.int)). This website illustrates the effects of the integration of migrants into their new society and the efforts to adapt linguistically to the host society. From the point of view of migrant speakers, linguistic integration refers to the adjustment to their new communication environment. Some of the migrants accept to use the host dialect and some find it hard to accept a new form of diversity that replaces their dialect. As a result, some forms of integration are due to the different degrees of integration: 1) low level integration of the language: in this level migrants find difficulties in doing some activities by using a new language or even change some sounds in their language; 2) functional integration of the language: the migrants deal easily with some situations in social and personal contact; 3) integration of the language: the migrants incorporate the majority language, i.e. the language of host society. (*Council of Europe website*)

As is known, linguistic integration covers a number of levels: morphology, phonology, and syntax of language. Morphological integration focuses on the changes that happen to the form of the words due to the integration between two different languages. Miller (1997) studied morphological integration and examined the combination of French derivational suffixes and English roots. For example, (-age and -able) are two significant French suffixes that are added to English roots in words like "vicarage" and "drinkable". Some scholars studied the addition of inflectional morphology such as the formation of plurals of borrowed words (Poplack, 1988). For example, French plurals "tableaux" and "bureaux" are used in English besides "tableaus" and "bureaus" (Quirk and Greenbaum, 1973).

Hafiz (2008) investigated morphological integration of loanwords from three areas: derivation of a fully-fledged paradigm from a loanword from two areas: 1) adding a feminine suffix to loanword. For example, Egyptian Arabic (EA) has the loanword /kwafeera/ from "coiffeur" and /kašyeera/ from "cashier". Moreover, loanwords with inanimate referents showed a preference for the feminine suffix /a/. For example, /balakoona/ is from "balcony" and /lamba/ from "lamp". 2) Plural inflections of nouns: EA has two plural inflections: sound and broken. Sound plural has one realization: /-aat/ for the feminine. For example, /vaz-aat/ "vases" and /ġarafatt-aat/ "cravates"; broken plural applies to words like "film" /ʔaflaam/.

Chang (2008) explores the role of phonetics and phonology in English loanwords adaptation in Burmese and suggests a model incorporating both language-independent phonetics and language-specific phonology. For their part, Beel and Felder (2013) show the influence of Turkish syllable structure in adapting English loanwords. They also indicate that substitution, deletion and epenthesis play a role in adaptation or integration. Al-Athwary (2017) indicates that modifications made to English loanwords in Modern Standard Arabic (MSA) are a response to cope with phonetic and phonological constraints

in MSA. He adds that syllable structure, declusterization, consonant lengthening and vocalic glide insertion also play a role in the adaptation of the 300 words investigated. Frank et al. (2017) find that in children's developmental vocabulary acquisition various phonetic and phonological processes come into play to modify difficult words. Nguyen and Dulta (2017) find that Vietnamese speakers select repair strategies such as deletion and epenthesis when modifying borrowed French words. Segmental, phonotactic, supra-segmental and morphological restrictions appear to play a role in integration. Sadeghi and Biggali (2018) show how English vowels are adapted into Persian according to a process of acoustic assimilation which reflects maximal acoustic similarity. Garmann et al. (2019) indicate that children's first words depend on their communicative needs, and also on their phonetic repertoire and phonological constraints they acquire from parents and other adults. Robinson (2019), finally, finds both "positive and negative" attitudes towards phonological language variation and integration in Great Britain.

Syntactic integration focuses on the changes that happen to the structure of the word or sentence when two languages are integrated, like in code-switching when the speaker alternates between two languages or dialects. Zheng (2005) discussed the role of grammatical structures in code-switching among Chinese-Australian bilingual children. He mentioned many examples when code-switching is accompanied by syntactic convergence towards English word order. For example, in Chinese, the word order of date is opposite to that of English, and Chinese children in Australia found it difficult to adapt to the English order of mentioning date.

The present study centers around phonological integration involving phonemes that are most affected by contact-induced dialect change. Phonological changes' influence is connected to the changes in the sociolinguistic contact. The most relevant study to the present one is Hafiz (2010), who studied the phonological and morphological integration of loanwords into Egyptian Arabic. She maintained that adaptations of the phonological patterns of EA loanwords are subjected to the processes of sound alteration, addition, omission, and shifting. Some of these processes are discussed in the following paragraphs.

Consonant alteration is one of the processes of sound that Hafiz (2010) investigated. For example, affricate sounds /dʒ/ and /tʃ/, not very common in EA, are often replaced in loanwords by their fricative counterparts /ʒ/ and /ʃ/. Instead of pronouncing "jeep" with an affricate as /dʒiip/, it is often pronounced in EA as /ʒebb/. The affricate /tʃ/ is also replaced by the fricative /ʃ/ in such loanwords as /tʃips/, rendered as /ʃebs/ or /ʃibs/. Hafiz (2010) also examined two types of vowel alteration: substitution and/or lengthening. An example from her study is the French vowel \eu\ which is often rendered as \ee\ as in \kwafeer\ for "coiffeur" (Hafiz, 2008).

In Hafiz's study, addition is examined to illustrate that EA syllable cannot begin with a vowel. Hence, loanword models beginning with a vowel are often integrated by adding a glottal stop /ʔ/ before the vowel at the beginning of the word. For example, "accessory" is pronounced /ʔekseswââr/, and "hotel" /ʔoteel/.

Gemination and shifting are other sound processes that Hafiz examined in her study. Hafiz pointed out that some loanwords undergo gemination to approximate EA patterns. For example, /fanella/ is from "flannel", and/danteel/ from "dentelle". Vowels are lengthened when they are in a stressed syllable. This is clarified in the transformation of /o/ to /oo/ in words like /galloon/ for "gallon" and /saloon/ for "salon". Both of them are tri-consonant words receiving stress on the final syllable. With regard to shifting, Hafiz points out that loanwords follow the same stress rules of Arabic. Stress is placed on the last syllable in bi-syllabic words following the pattern (cv(c) - 'cvvc) when the last syllable is long. For example, /dok-'toor/ "doctor" and /bas-'boor/ "passport".

## SYRIAN EMIGRATION

The armed conflict in Syria in the past years (since 2011) has forced the emigration of a large number of Syrian families for various reasons. Hundreds of thousands of such people moved to Jordan, and many of them lived among Jordanians in various villages and towns, in addition to a few separate camps. As a result of this coexistence, there were some changes in the pronunciation of some sounds by the refugees in order to facilitate understanding between Jordanians and Syrians.

By early 2013, the UNHCR announced that the number of refugees who escaped to Jordan had topped 1 million, and by March 2013 had risen to 1,204,707 people. On 9 July 2015, the UNHCR announced that the number of Syrian refugees in Jordan had risen to 1.5 million people. As of February 2015, over 622,000 Syrians had registered with UNHCR in Jordan. (*the Syrian Refugees Website*). Since the opening of border crossings between Jordan and Syria in late 2018, only a few tens of thousands of these refugees have returned to Syria so far.

Approximately 80 percent of Syrian refugees in Jordan live in urban and rural areas in Jordan, while the remaining 20 percent live in the Za'atari, Marjeeb al-Fahood, Cyber City and Al-Azraq camps. About 25% of Syrian refugees in Jordan reside in the northern areas: Irbid, Jerash, and Ajloun governorates. The number of registered Syrian refugees in Irbid is 139, 647, but the exact number is assumed to be much higher. (*Jordanian Security Directorate*). About 13,000 come from the Damascus area and are presumed to speak the Damascene dialect, whose main phonetic characteristics are shown in the next section.

## CHARACTERISTICS OF THE SYRIAN DIALECT

According to Cantineau (1956), Colloquial Arabic has about 24 to 35 consonant phonemes, three to five long vowels, three to six short vowels, and at least two diphthongs. The Spoken Arabic in Syria (depending on the area of dialect) has between 25 and 29 consonants, six short vowels, five long vowels, and two diphthongs. Syrian Arabic, the focus of this study, is considered part of Levantine Arabic. Unlike Jordanian Arabic which consists of three major dialects (urban, rural, and bedouin), SA has many dialects that are spoken in the various districts of Syria; these include the dialect spoken in Jabal al-Druze (Jabal Al-Arab) mountains, the eastern dialect group (Al-Hasakah and Deirez-zor), the bedouin dialect, Aleppo dialect, Dara'a dialect which is similar to the rural

dialect of north Jordan, and Damascene dialect (DA), which is the focus of the present study due to its marked differences from rural Jordanian.

Al- Sugheyer (1990) clarifies that the accent of Damascus is considered melodic and soft, and the ends of the sentences are stretched obviously especially the phrases that the speakers need to stress. The vocabulary distinction is minor and small due to the fact that Damascus dialect is no more than an accent. French has influences on Damascus dialect; for example, it uses the soft /ʒ / like French, e.g., /dʒamal/ is pronounced /ʒamal/. The speakers also use the soft /ʒ / when they speak English or borrow an English word in their speech.

Bergstrasser (1925) was the first scholar who wrote the full phonetic description of DA. Bergstrasser's was followed by other scholars' descriptions of its phonetics, morphology, and syntax (Ferguson and Al-Ani, 1960; Grotzfeld, 1965). Damascene dialect has 29 consonants, six short vowels, five long vowels and two diphthongs. DA writers (Ferguson and Al-Ani, 1961; Grotzfeld, 1965; Ambros, 1977) noted that the phonemic vowel inventory of SA is generally retained in DA. However, DA developed two mid vowels /e:/ and /o:/ out of the diphthongs /ai/ and /au/. Damascus dialect has two diphthongs /aw/and /ay/, five long vowels: ī, ō, ū, ā, ē, and six short vowels a-e-o-i-u-ə. (Holes, 1995)

The table below shows the DA sounds and symbols for their transliterations. The symbols are taken from Daher (1998).

**Table (1):** Damascus Arabic sounds inventory with symbols

Description	Symbol	Arabic Consonant
glottal plosive	ʔ	ء
voiced bilabial stop	b	ب
voiceless dental stop	t	ت
interdental fricative	t,s	ث/ث
voiced palatal affricate	ʒ	ج
pharyngeal fricative	ħ	ح
voiceless velar fricative	x	خ
voiced dental stop	d	د
voiced interdental fricative	z	ذ/ذ
voiced alveolar liquid	r	ر
voiced alveolar fricative	z	ز
voiceless alveolar fricative	s	س
voiceless palato-alveolar fricative	ʃ	ش
voiceless emphatic alveolar fricative	ʂ	ص
voiced emphatic dental stop	ḏ	ض
voiceless emphatic dental stop	ṭ	ط
voiced emphatic interdental fricative	ʒ	ظ/ظ
voiced pharyngeal fricative	ʕ	ع
voiced uvular fricative	ʁ	غ
voiceless labiodental fricative	f	ف
voiceless uvular stop	q	ق/ق
voiceless velar stop	k	ك
voiced alveolar lateral	l	ل
voiced bilabial nasal	m	م

voiced alveolar nasal	n	ن	
voiceless glottal fricative	h	ه	
voiced labio-velar glide	w	و	
voiced palatal glide	y	ي	
Diphthongs	Long Vowels	Description	Vowels
/ay/	/i:/	high front short unrounded	/i/
/aw/	/a:/	open front short unrounded	/a/
	/u:/	high back short rounded	/u/
	/o:/	mid front short unrounded	/o/
	/e:/	mid back short unrounded	/e/

One can notice that five sounds, namely, /θ/, /ð/, /dʒ/, /ð/ and /q/ are replaced by /t/, /s/, /z/, /d/ and /ʔ/ respectively in DA. This is essential to notice because JA is different from DA regarding these five consonants (see table 2 below).

## CHARACTERISTICS OF JORDANIAN DIALECT

Jordanian Arabic is also a variety of Levantine Arabic. Cleveland (1963) was the first to classify the dialects of Jordan (when Jordan included also the West Bank of the River Jordan) into four groups according to the way those dialects express certain sounds. For instance, 'he says' can be /yigūl/ (bedouin), /bigūl/ (rural) , /bikūl/ (rural dialects around Jerusalem), and /biʔūl/ (some urban centers). This terminology highlights two features. The first one is the use of the prefix *b* to express the indicative imperfective, and the second is the realization of old Arabic /q/ as /g/, /k/, and /ʔ/.

According to Al- Sugheyer (1990), there are three local varieties in Jordan: urban dialect, rural dialect, and bedouin dialect. Madani(urban) dialect is used in some urban centers, while Fallaḥi is used in rural areas. Bedouin dialect is widespread in the eastern and southern parts of Jordan, and this dialect is used exclusively by the nomadic or semi-nomadic tribes of the country. This dialect is similar to the dialects of Arabia's northern parts, and can be considered as an extension of them. At the phonological level, the commonest phonological feature of urban dialect is its use of the glottal stop /ʔ/ for the classical Arabic /q/. Meanwhile, in bedouin and rural dialects the variable /q/ is pronounced as /g/. This study is concerned mainly with the rural dialect, which will be the only dialect compared to DA, due to the fact that it is the variety used in the areas in which Syrian refugees have settled in north Jordan.

Jordanian Arabic has twenty- eight consonant phonemes: six stops / b, t, d, k, g, ʔ/, one emphatic stop /t̤/, two nasals /m, n/, eleven fricatives /f, ð, θ, ḥ, ʁ, ʕ, h, x, Ŝ, s, z /, two affricates / ʃ, ʈ /, two emphatic fricatives /ʂ, ð̤ /, one lateral / l/ , one flap / r/, and two semivowels /y, w/. Jordanian Arabic has three short vowels: /i/, /u/, /a/, and three long ones: /ii/, /uu/, and /aa/. It has also the phones [e:] and [o:]. (Al-Sugheyer, 1990)

Table (2) below shows JA sounds and the symbols for their transliterations; the symbols are taken from Al-Sugheyer (1990).

**Table (2):** Jordanian Arabic sound inventory with symbols

Description	Symbol	Arabic Consonant	
voiceless glottal plosive	ʔ	ء	
voiced bilabial stop	b	ب	
voiceless dental stop	t	ت	
voiceless interdental fricative	θ	ث	
Voiced palato-alveolar affricate	ɟʒ	ج	
voiceless palato-alveolar affricate	č		
pharyngeal fricative	ħ	ح	
voiceless velar fricative	x	خ	
voiced dental stop	d	د	
voiced interdental fricative	ð	ذ	
voiced alveolar liquid	r	ر	
voiced alveolar fricative	z	ز	
voiceless alveolar fricative	s	س	
voiceless palato-alveolar fricative	š	ش	
voiceless emphatic alveolar fricative	ṣ	ص	
voiceless emphatic dental stop	ṭ	ط	
voiced emphatic interdental fricative	ḏ	ظ	
voiced pharyngeal fricative	ʕ	ع	
voiced uvular fricative	ʁ	غ	
voiceless labiodental fricative	f	ف	
voiced velar stop	g	ق (العامية)	
voiceless uvular stop	q	ق	
voiceless velar stop	k	ك	
voiced alveolar lateral	l	ل	
voiced bilabial nasal	m	م	
voiced alveolar nasal	n	ن	
voiceless glottal fricative	h	هـ	
voiced labio-velar glide	w	و	
voiced palatal glide	y	ي	
Diphthongs	Long Vowels	Description	Vowels
/ay/	/i:/	high front short unrounded	/i/
/aw/	/a:/	open front short unrounded	/a/
	/u:/	high back short rounded	/u/
	/o:/	Mid front unrounded	
	/e:/	mid back unrounded	

One can notice that JA has two sounds, /č/ substituted for /k/ next to front vowels and /g/ substituted for /q/, which do not exist in DA, but does not have the sound /ʒ/ that exists in DA. The JA sound /θ/ is pronounced as /t/ or /s/ in DA, and JA /ð/ is pronounced as /z/. In DA /ð/ is pronounced as /z/, and emphatic /D/ is pronounced as /ḏ/ in JA. The sound /q/ is pronounced as /ʔ/ in DA. JA has three short vowels, compared to five in DA.

It has been noticed that many Syrian refugees from the city of Damascus have difficulties in producing some sounds of Jordanian Arabic due to differences between the two dialects of Arabic. This study addresses these differences and investigates some factors contributing to the adoption of a certain phonological variant rather than another.

Specifically, this study comes as an attempt to shed light on the sociolinguistic factors of age and gender, considered significant in phonological variation.

It is worth mentioning that many studies have dealt with phonological variation, including Labov (1963) on the distribution of /r/ and the diphthongs /ay/ and /aw/ in Martha's Vineyard. Salam (1980) and Abdel-Jawad (1981) studied the distribution of the various pronunciations of the /q/ in relation to social class and gender. Moreover, Holes (1987) investigated phonological variations of /dz/ in the Arabian Gulf region. Other studies followed, including Jassem (1987) and Daher (1998) on variation among residents of Damascus, Al-Tamimi (2001) on consonantal distribution among various Palestinian and Jordanian dialects, Hafiz (2010) on variations in the pronunciation of loanwords in Egyptian Arabic, and Taqi (2010) on consonantal distribution in two Kuwaiti dialects of Arabic. Most studies have concluded that phonological variation is related to social factors like class, gender, age and education level.

### SAMPLE AND PROCEDURES

The participants of the study were 100 Syrian refugees (55 males and 45 females between the ages of 18 and 60 years) who spoke the Damascene dialect and lived in Irbid city, north Jordan. The participants worked in different places and locations like schools, shopping malls, hospitals and restaurants. Prior acquaintance with the researchers made them more cooperative in providing explicit information about their speech in Jordan, which helped in gathering more reliable data and findings. The decision to have participants from various age and gender groups was consciously made to underscore the phonological variables affected by Jordanian dialect. As already mentioned, many researchers like Labov (1963), Salam (1980), Abdel-Jawad (1981) and Jassem (1987) consider such factors as gender, age and education as determining factors in phonological variations and social interaction.

The phonological variables examined in this study were the sounds (Q), (ð), (Ð), and (Θ). The variants of (Q) are the standard [q], the rural Jordanian [g] and Damascene [ʔ]. The (Ð) variable is stratified into a standard (Ð), and (Z) which is used in Damascus dialect. The variable (Θ) has a standard (Θ), which is also used in rural Jordanian dialect and (s) or (t) in Damascus dialect. The variable (ð) has a standard (ð) and (z) in Damascus dialect.

**Table 3.** Distribution of the phonological variables of the study

Phonological variable	Standard variant	Rural Jordanian variant	Damascus variant
Q	Voiceless uvular stop	g	(ʔ)
Ð	Voiced emphatic interdental fricative	Ð	(Z)
Θ	Voiceless interdental fricative	Θ	(t), (s)
ð	Voiced interdental fricative	ð	(z)

The reasons behind choosing these linguistic variables are based on the informal investigation and the pilot study of this research. These phonological variables frequently occur in the natural speech of the Jordanian and Syrian people and they are distributed over the different social variables of the study. Labov (1972, p.8), stated that "First, we want an item that is frequent.... Second, it should be structural .... Third, the distribution of the feature should be highly stratified..."

To collect relevant data, a pilot study, which included 20 speakers, was first conducted. Through it, the researchers were able to determine the important phonological and social variables (gender and age) of this study. Then, the researchers distributed 25 task forms to the participants, explained the goals of the research and reassured them that the elicited data would be used for the research purpose only. The researchers tried to approach the participants in a friendly manner that allowed them to give accurate information about their speech. An English version of the survey is found in Appendix (A). As a result of all this, a total of 300 words that demonstrated the changes in pronunciation under analysis were gathered. A sample of these words is found in Appendix (B).

## FINDINGS AND DISCUSSION

This study is intended to investigate the phonological variation that occurs in the natural everyday speech of Damascene people who live with Jordanian people and the social factors that may affect the speakers' speech. As mentioned above, four linguistic variables were examined: (Q), (Ḍ), (Ṯ), and (Ḍ̣). A sample of the participants was randomly chosen to be as comprehensive as possible. The participants of the study were divided into different groups according to their age and gender. The correlation between the linguistic variables and the social variables were examined within the framework of the assumption that suggests that gender and age are the most prominent social variables that explain the reasons behind language variation in Jordan (Al-Tamimi, 2001).

One hundred participants responded to the research questions which comprised 25 phonological and social situations for the purpose of the study. All the responses were gathered and categorized with regard to the phonological variations used by Damascene people who live in the Irbid governorate. The comparison among the phonological variables is based on the speakers' gender and age. Most of the differences between the Jordanian and Damascus dialects lie in consonants especially (Q), (Ḍ), (Ṯ), and (Ḍ̣) as shown in table 2 above. It is worth mentioning here that many differences were noticed in vowel renditions, but these deserve a separate study.

### The Variable (Q)

In the Arabic dialect of Damascus, /q/ is replaced by /ʔ/, a glottal stop, while in rural Jordanian it is pronounced as /g/ (Ambros, 1977). For example, /qabil/ and /qalam/ in JA are pronounced /ʔabil/ 'before' and /ʔalam/ 'pen' in DA. The difference between the two pronunciations creates some changes or switching from one pronunciation to another. The following table shows the results of using the variable (Q) by Syrian refugees who immigrated to Jordan and live in Irbid city.

**Table 5:** The usage of (Q) variants by speakers

variable	Variants	Speakers' Number	Percent %
(Q)	g	34	34%
	ʔ	66	66%
		Total	100
			100%

It appears that 34% of the participants started to use /g/ instead of /ʔ/ while 66% of them kept using /ʔ/ during their stay in Jordan.

### The co-variation of (Q) with the social variables

Many studies show that the co-variation of /Q/ has a relation with social variables, namely, education, gender, social class and age. For example, Al- Tamimi (2001) reveals that gender and age have a significant correlation with /g/ and /ʔ/. The following table shows the relation between gender and the use of the variable (Q).

**Table 6:** The relation between gender and the variable (Q)

Variable	variant	Female Speakers	Percent	Total No.	Male Speakers	Percent	Total No.
		No.	45%	%	No.	55%	%
Q	g	0	0%	0%	34	61.8%	34%
	ʔ	45	100%	45%	21	38.2%	21%

The table shows that no women used the variable /g/ while 66% of the male sample used it. No women changed their pronunciation while most men did.

Table 7 below shows the relation between the variants of the variable (Q) and the age factor.

**Table 7.** The usage of the variable (Q) by each speaker age group's occurrences

variants	Speakers No. Group 1 (18-29)	%Group1 (18-29)	Speakers No. Group 2 (30-39)	%Group2 (30-39)	Speakers No. Group 3 (40-60)	%Group3 (40-60)	%Total
g	12	12%	19	19%	3	3%	34%
ʔ	21	21%	33	33%	12	12%	66%
Total	33	33%	52	52%	15	15%	100%

Table 7 shows that the Jordanian /g/ is used mostly by the middle age group (30-39) by a percentage of 19 %. With regard to the variant /ʔ/, it is used by 12% of the older speakers, 21 % of the younger speakers and 33% of the middle age speakers, still making up 66% of the total sample.

### The Variable Đ

In modern spoken standard Arabic, the phoneme corresponding to the letter (ض) is (ḍ). It is a voiced emphatic dental stop. The variants of (Ḍ) in this study are the Jordanian /Ḍ/ (ض) and /Z/. Most Jordanians merge /ḍ/ and /Ḍ/ into /Ḍ/, while DA speakers pronounce both as /Z/. The table below shows the number of Syrian participants who used the variants of the variable (Ḍ).

**Table 8.** The usage of variable (Ḍ) by speakers

Variable	Variants	Speakers Number	Percent %
(Ḍ)	Ḍ	14	14%
	Z	86	66%
	Total	100	100%

It appears that 86% of the participants still use the Damascene variant /Z/ while 14% of them switched to the rural Jordanian variant /Ð/ as a kind of accommodation. The table below shows the relation between gender and the variants of the variable (Ð).

**Table 9.** The relation between gender and the variable (Ð)

variable	variant	Female speakers No.	Percent 45%	Total No. %	Male speakers No.	Percent 55%	Total No.%
Ð	Ð	0	0%	0%	14	25.4%	14%
	Z	45	100%	45%	41	74.6%	41%

The table revealed that no women used the rural Jordanian variant /Ð/ while the participants who shifted their pronunciation to the rural Jordanian variant are 14% and all of them are men.

**Table 10.** The use of (Ð) by speakers' age.

variants	Speakers No. Group 1 (18-29)	%Group1 (18-29)	Speakers No. Group 2 (30-39)	%Group2 (30-39)	Speakers No. Group 3 (40-60)	%Group3 (40-60)	%Total
Ð	4	4%	7	7%	3	3%	14%
Z	29	29%	45	45%	12	12%	86%
Total	33	33%	52	52%	15	15%	100%

The table reveals that 7 persons of the middle age group shifted to /Ð/, compared to 4 and 3 from the young and old age group, respectively. The rest stuck to the original Damascene pronunciation (Z).

### The Variable (θ)

The third variable that is discussed in this study is (θ) which has two different variants in Damascene: /t/ and /s/, while it remains (θ) in rural Jordanian dialect. The table below shows how many speakers shifted their pronunciation of this phoneme.

**Table 11.** The usage of variable (θ) by speakers

Variable	Variants	speakers Number	Percent %
(θ)	θ	29	29%
	t,s	71	71%
	Total	100	100%

The table shows that 29% of the participants shifted their pronunciation and used the Jordanian variant /θ/, whereas 71% of them used the Damascene variants /t/ and /s/. The table below shows the effect of gender on the variation of (θ). Further investigation shows that all persons who shifted to the Jordanian pronunciation were males (29), and that no females changed their Damascene pronunciation.

**Table 12:** The relation between gender and the usage of variable (θ)

variable	Variant	Female speakers No.	Percent 45%	Total No. %	Male speakers No.	Percent 55%	Total No.%
(θ)	θ	0	0%	0%	29	52.7%	29%
	t,s	45	100%	45%	26	47.3	26%

The table below shows the effects of age factor on using the variants of the variable ( $\theta$ ).

**Table 13.** The use of ( $\theta$ ) by speakers' age

Variants	Speakers No.	%Group1	Speakers No.	%Group2	Speakers No.	%Group3	%Total
	Group 1 (18-29)	(18-29)	Group 2 (30-39)	(30-39)	Group 3 (40-60)	(40-60)	
$\theta$	8	8%	18	18%	3	3%	29%
t, s	25	25%	34	34%	12	12%	71%
Total	33	33%	52	52%	15	15%	100%

This table reveals that 18 persons from the middle-age group switched to the Jordanian pronunciation, compared to only 8 and 3 from the young and old age group, respectively.

### The Variable ( $\delta$ )

The last variable discussed in this study is ( $\delta$ ) which has two variants / $\delta$ / and /z/. Rural Jordanians use the variant / $\delta$ / while Damascus people use the variant /z/. The table below shows the distribution of both realizations of the phoneme by Syrian speakers in Jordan.

**Table 14.** The usage of variable ( $\delta$ ) by Syrian speakers

Variable	Variants	speakers Number	Percent %
( $\delta$ )	$\delta$	20	20%
	z	80	80%
	Total	100	100%

The table above shows that 20% of Syrian refugees used the rural Jordanian variant / $\delta$ /, while 80% of them used their original variant /z/.

Table 15 below shows the relation between gender and the use of the variable ( $\delta$ ).

**Table 15.** The relation between gender and the usage of variable ( $\delta$ )

variable	variant	Female		Total No. %	Male		Total No.%
		speakers No.	Percent 45%		speakers No.	Percent 55%	
( $\delta$ )	$\delta$	0	0%	0%	20	36.4%	20%
	z	45	100%	45%	35	63.6%	35%

This table shows that female speakers did not use the rural Jordanian variant / $\delta$ /. However, 20 men used the variant / $\delta$ / and 35 of them used their own variant /z/.

The second social factor discussed in this study is age. The table below shows the relation between the use of the variable ( $\delta$ ) and gender.

**Table 16.** The use of ( $\delta$ ) by speakers' age

variants	Speakers No.	%Group1	Speakers No.	%Group2	Speakers No.	%Group3	%Total
	Group 1 (18-29)	(18-29)	Group 2 (30-39)	(30-39)	Group 3 (40-60)	(40-60)	
$\delta$	6	6%	10	10%	4	4%	20%
z	27	27%	42	42%	11	11%	80%
Total	33	33%	52	52%	15	15%	100%

The table shows that 10 persons of the middle-age group shifted their own variant to the rural Jordanian variant /ð/, compared to only 6 and 4 from the young and old group, respectively.

In sum, the results show that most Syrian refugees, particularly female speakers, did not change their original pronunciation when they interacted with rural Jordanians. However, some Syrian refugees tended to use the rural Jordanian sounds when they interacted with rural Jordanians. The reason why most DA speakers retained their original pronunciation may have to do with prestige. These speakers may have felt that their pronunciation is widely used in TV shows on many Arabic channels and is preferable to JA.

The reason why 34% of the participants started using the Jordanian variant /g/ instead of /ʔ/ may be regarded as dialectal accommodation (Lieb, 1983) or an attempt to feel more connected to the host country (Daher, 1998; Al-Tamimi, 2001). Still, younger people and females mostly refused to change their Damascene pronunciation, reflecting the tendency of the young generation and women to stick to a dialect they perceive more prestigious and more socially elevating (Suleiman, 1985; Jassem, 1987; Daher, 1998).

Findings in other studies confirm those in the present research. In a survey on the distribution of the /θ/ variants, namely /θ/, /s/ and /t/ among urban Jordanians, Al-Wer (1991) shows that the young generation and females are more inclined to use /t/ or /s/ instead of /θ/ than the middle-aged, old and male population. Similarly, Daher (1998) found that women and men treat differently the variable (ð). His study's results showed that 67% of men used /ð/, and 77 % of women used its variant /z/. He justified this by saying that men favoured using the standard Arabic variant /ð/, while women preferred using the prestigious variant /z/. His results correspond with those of the current study. Regarding the fourth variable discussed in this study, i.e. (Ḍ), Al-Tamimi (2001) states that old Arab philologists (like IbnYa'eesh and Sibaway) considered the (Ḍ) as a difficult sound to be pronounced. Hence, it was collapsed with /Ḍ/ in Jordanian and pronounced as /Z/ in Damascene. Jassem (1993) and Al-Tamimi (2001) indicate that there is a significant correlation between gender and the variable (Ḍ). He finds that young people and females use /Z/ and /Ḍ/ more than the rural /Ḍ/, while older people and males maintain the original rural (Ḍ). The reason is that the first category of persons is more influenced by the prestige factor, the Damascene dialect being the prestige dialect used on most popular Arab TV channels like MBC and all Syrian channels for both Arabic shows and those dubbed or translated from foreign shows.

### **Conclusions and Recommendations**

The current study has investigated some aspects of consonantal variation in Syrian refugees' speech in Jordan especially in Irbid city and the effects of some social variables on this variation. This phonological variation seems to be the result of the social integration consisting of the attempt by the immigrants to integrate themselves into the locals' social structure by adopting their speech, style, and habits. Immigrant populations suddenly find themselves in a new area cut off from their homeland. In order to live in the new community, they need to master the local means of communication as much as possible. Participants in the study were of various groups of age and different genders. It

was found that a considerable number of, especially male, Syrian refugees from the Damascus area adapted their pronunciation of the four consonants (Q, ḏ, Ṭ, and Ḍ) to the Jordanian pronunciation. However, women and people belonging to the young generation were reluctant to change their DA pronunciation.

This study highlighted the overt exposure (Jassem, 1998) that led some of the Syrian refugees to shift their pronunciation and adopt the Jordanian one. Also, this study exposed the reasons, mainly prestige and less exposure, behind many Syrian refugees maintaining the use of the Damascene variants. It was remarkably noticed that all women maintained their own dialect and didn't change their pronunciation for the rural Jordanian one. Women head towards what suit their social image and status and this is achieved linguistically through keeping the dialect of their country. In Jordan, the female rural speakers are the innovators in Jordanian speech community. They acquire the urban dialect (similar to DA) since they regard it as more modern and prestigious. As a result, the Damascus women realize that their dialect is a prestigious one that even Jordanian female rural speakers tend to use it.

According to Al-Tamimi (2001), rural females seek to use a dialect to improve their social image. Moreover, Jassem (1998) revealed that immigrant women who moved to Damascus from other Syrian areas favoured changing their dialect and acquired the Damascus dialect to look more prestigious and modern. According to the same author, immigrant people try to accommodate and adjust their speech to live and interact with the new community.

With regard to age influence, the study found that the middle-age group included the majority of Syrians who shifted their pronunciation more towards the rural Jordanian one. This can be explained by taking into consideration that this is the group that interacts the most with rural Jordanian speakers whom they work and share life with (overt exposure). The old people is the group that changed their pronunciation the least. This result is similar to that of Jassem (1998) who showed that the old group were unable to adapt to local pronunciation speakers while the young did.

The findings provide useful implications for immigrant language variation. They might be innovatory for non-native speakers of Arabic, as they can help them develop their linguistic competence in Arabic. In addition to that, this study might be the first one to examine the role of social factors on Syrian refugees' speech in Jordan. This would provide an analytical framework for studying further phonological variation in Syrian refugees' speech in Jordan or elsewhere, e.g., Lebanon. The results of this study are hoped to help public and private organizations by providing some vital information on Syrian immigrants and their behaviour regarding Jordanian rural dialect. It is recommended that future studies on the topic should include more phonological variables, especially vowels. More specifically, it would be useful for further studies to investigate:

- 1 - Other factors like social class and education that may affect the Syrian immigrants' speech.
- 2 - Vocalic variation in Syrian refugees' speech.
- 3 - Other linguistic aspects of language variation in Syrian refugees' speech in Jordan (i.e. vocabulary, syntax and morphology).

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## APPENDIX A

### (PST) - The Questionnaire

The present survey is a part of a research study entitled "A study of Phonological Variation in Syrian Refugees' Speech in Jordan. The survey attempts to investigate the effect of two variables: age and gender on the dialect of Syrian refugees in Jordan. It consists of a group of words containing letters or sounds that might be shifted in refugees' dialect when moved to Jordan and interacted with Jordanians. Please provide a Yes/No answer to the questions included in the survey. Your answers should be based on the type of social interaction in which the word is used. The phrase (inside the house) means interaction with family members whereas the phrase (outside the house) refers to your interaction with Jordanians. Your answers will be treated confidentially, and will be used for research purposes only.

Thank you for your cooperation.

#### part one

Gender:     female     male                    Age: ....  
 Education:   Primary   High School       B.A Master Degree  
 Address:     village     city  
 Social status: Bachelor   married

#### Part two: questionnaire's Questions

- 1- Since you came to Jordan, have you noticed a difference between the word itself between the Jordanian and the Shami dialects. Yes - No
- 2- Do you think that the Jordanian dialect is more difficult than the Shami(Damascene) dialect in terms of pronunciation? Yes -No
- 3- Do you feel it is difficult to use the Jordanian dialect when using it? Yes - No
- 4- Did the Jordanian accent affect your dialect? Yes- No
- 5- Out of the house, when dealing with Jordanians whether in the scope of work or other Do you replace the voice of /t/ to θ? Yes -No
- 6- Inside the house, do you replace the letter/ t/ to θ? Yes -No
- 7-Inside the house, do you replace the letter /ð/ to letter /z/? Yes - No
- 8 - Out of the house, are you replacing a letter (ð) to a letter (z)? Yes-No
- 9- Inside the house, do you replace the letter (s) to the letter (θ)? Yes-No
- 10-Out of the house, are you replacing the letter (s) to letter (θ)? Yes-No
- 11-inside the house, are you replacing the letter /ð/ to /d/? Yes- No
- 12- Out of the house, are you replacing the letter /ð/ to /d/? Yes- No
- 13- Inside the house, are you replacing the letter /ʔ/ to /g/? Yes- No
- 14- Out of the house, are you replacing the letter /ʔ/ to /g/? Yes- No

## APPENDIX B

## Words Demonstrating the Changes in Pronunciation (CWP)

JA pronunciation	DA pronunciation	Meaning
fundug	fondoʔ	Hotel
ga:l	ʔa:l	Said
gamar	ʔamar	Moon
galb	ʔalb	Heart
yigsim	yiʔsim	divide
gabil	ʔabil	Before
garyeh	ʔaryeh	Village
gabur	ʔabir	Tomb
guddam	ʔiddam	in front
galam	ʔalam	Pen
ħadiiθ	Hadiis	Talk
θu:m	Tu:m	Garlic
θalaθih	Talatih	Three
θaqafah	saʔafah	Culture
θo:b	To:b	Dress
θaʔlab	Taʔlab	Fox
θumm	Tumm	Mouth
θamar	Tamar	fruit
ðe:l	Zeil	tail
it-ðakarit	It-zakrit	remember
ðabuʃ	dabiʃ	hyena
ðihik	Dihik	laugh
ðimin	Zimin	within
ðuhur	Duhir	noon
ðau	Dau	light
ðarab	Darab	hit
ðill	Zill	shadow
ðami:r	Dami:r	conscience
ðulum	Zulum	unfairness