

**Social Network Integration and Language Change in Progress in Iraqi
Arabic: A Sociophonetic Study of Dialect Levelling in the Hīti Dialect**

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II

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Dedication

To my late mother, may Allah have mercy on her, whose words of farewell guided me to this day, and to my beloved father, for his prayers.

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Abstract

This study investigates the linguistic outcomes of war-induced dialect contact between speakers of two dialects of Iraqi Arabic (IA): the *qiltu* dialect spoken in Hīt (HIA) and the *gilit* dialect spoken by migrants from the *gilit* areas to Hīt. It differs from previous contact-based studies on Arabic dialects in that it investigates dialect change in the speech of the local residents rather than in the speech of the migrants. The HIA dialect has been noted for the loss of certain local linguistic features at the expense of *gilit* features with a wider areal distribution (Al-Ani, 1978; Khan, 1997). The thesis provides a quantitative sociophonetic description of the speech of 36 male and female HIA speakers and of their accommodation to the *gilit* dialect by examining the impact of four independent variables (age, gender, Social Network Integration (SNI), and speakers' attitudes) on the use of four phonological variables (two consonantal and two vocalic). At the consonantal level, variation in the use of the uvular stop (q) and the velar stop (k) are examined. At the vocalic level, the variation in the insertion of the epenthetic vowel [i] within onset consonant clusters in word initial positions and the lowering of the short high vowel /i/ into [a] in the context of pharyngeal consonants is examined. This is the first quantitative sociophonetic study of its kind to be conducted on HIA to examine whether dialect levelling is taking place and to compare the findings to those of other sociolinguistic studies on IA *qiltu* dialects (e.g. Mosuli Iraqi Arabic) spoken in communities that have undergone similar sociodemographic changes as Hīt.

Over the course of the last three decades, Hīt has seen high levels of internal migration of people from *gilit*-speaking cities, namely the capital Baghdad. Previous research has suggested that as a consequence of spatial mobility and dialect contact, language features with a wider socio-spatial currency become more widely used at the expense of more locally specific features (Britain, 2009). This mobility disrupts large-scale close-knit

localised networks, which have over time retained highly systematic and intricate sets of socially built linguistic standards (Milroy, 2002).

This study shows that speakers' age, gender and SNI have an important impact on the acquisition of *gilit* features, with SNI being the most important independent variable. HIA speakers with more open friendship networks i.e. high scorers on the SNI scale were the leaders in adopting *gilit* features. There is sound change in progress and *gilit* features spread faster among the younger generation. In all age groups, male speakers produced more *gilit* features than female speakers did. The results suggest that the spread of the *gilit* features at the expense of the HIA local features is determined by social, linguistic and social-psychological factors. It was shown that speakers' attitudes play an important role in their linguistic behaviour. Socially salient phonological variables such as (k) are levelled only minimally and the vocalic features are levelled more and adopted more frequently than the consonantal features. Epenthesis of the vowel [i] is restricted to monosyllabic words. Vowel lowering is not limited to the context of velar and pharyngeal consonants. The outcome of dialect contact is levelling, which involves the replacement of local linguistic forms with other linguistic features with a wider geographical spread (Cheshire et al., 1999:1) and motivated by individuals having open networks to people outside their community.

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List of Abbreviations

ANOVA	Analysis of Variance
BA	The <i>gilit</i> dialect of the Muslims of Basra
C	Consonant
CA	Classical Arabic
CAT	Communication Accommodation Theory
CB	The <i>qiltu</i> dialect of the Christians of Baghdad
CoP	Community of Practice Approach
DL	Dialect Levelling
f.	Feminine
HIA	The <i>qiltu</i> dialect spoken in Hīt
IA	Iraqi Arabic
Interview (I)	Interview One
Interview (II)	Interview Two
IPA	International Phonetic Alphabet
JB	The <i>qiltu</i> dialect of the Jews of Baghdad
KBA	Kordofan Baggara Arabic
KH	The <i>qiltu</i> dialect of the Karaite Jews of Hīt
m.	Masculine
MA	The <i>qiltu</i> dialect of Muslims in Mosul
MB	The <i>gilit</i> dialect of the Muslims of Baghdad
NSS	Network Strength Scale
OA	Old Arabic
QA	The dialect spoken in Al Qassim area in Saudi Arabia
RA	The <i>qiltu</i> dialect of Muslims in Rabia
RDL	Regional Dialect Levelling

RP	Received Pronunciation
SA	Standard Arabic
SCA	Social Class Approach
Sig.	Significance
SNI	Social Network Integration
SNII	Social Network Integration Index
SPSS	Statistical Package for the Social Sciences
SNT	Social Network Theory
Trans.	Transliteration
UIS	Urbanization Integration Scale
UK	United Kingdom
USA	United States of America
V	Short vowel
VCI	Vernacular Culture Index
VV	Long vowel

Phonetic symbols

The IPA symbols are used in the thesis for Arabic transcription. The transliterations are used when the examples cited from Arabic references. Below is the list of symbols used in this thesis for transcription; Arabic letters, transliteration symbols, and IPA symbols are used in the table to make comparisons easier for the reader.

Consonants

Arabic Letter	Trans.	IPA	Sound Description	Example and English gloss	
أ	hamza	ʾ	ʔ	Voiced glottal plosive	/ʔinfa:ʔ/ ‘composition’
ب	<i>bāʾ</i>	b	b	Voiced bilabial plosive	/be:t/ ‘house’
ت	<i>tāʾ</i>	t	t	Voiceless denti-alveolar plosive	/tamur/ ‘dates’
ث	<i>ṯāʾ</i>	ṯ	θ	Voiceless interdental fricative	/θo:r/ ‘ox’
ج	<i>ǧīm</i>	ǧ	dʒ	Voiced post-alveolar fricative	/dʒi:r/ ‘tar’
ح	<i>ḥāʾ</i>	ḥ	ħ	Voiceless pharyngeal fricative	/ħarr/ ‘heat’
خ	<i>xāʾ</i>	x	x	Voiceless velar fricative	/xe:r/ ‘goodness’
د	<i>dāl</i>	d	d	Voiced denti-alveolar plosive	/du:f/ ‘shower’
ذ	<i>ḏāl</i>	ḏ	ð	Voiced interdental fricative	/ði:b/ ‘wolf’
ر	<i>rāʾ</i>	r	r	Voiced alveolar trill	/ra:s/ ‘head’
ز	<i>zāy</i>	z	z	Voiced denti-alveolar fricative	/za:r/ ‘dice’
س	<i>sīn</i>	s	s	Voiceless dental fricative	/sinn/ ‘tooth’
ش	<i>šīn</i>	š	ʃ	Voiceless palate-alveolar fricative	/ʃa:riʃ/ ‘street’
ص	<i>ṣād</i>	ṣ	s ^ʕ	Voiceless velarised/emphatic alveolar fricative	/s ^ʕ e:f/ ‘Summer’
ض	<i>ḏād</i>	ḏ	d ^ʕ	Voiced velarised/emphatic denti-alveolar plosive	/d ^ʕ ayit ^ʕ / ‘pressure’
ط	<i>ṭāʾ</i>	ṭ	t ^ʕ	Voiceless velarised denti-alveolar plosive	/t ^ʕ ajja:ra/ ‘airplane’
ظ	<i>ḏāʾ</i>	ḏ	ð ^ʕ	Voiced velarised interdental fricative	/ħað ^ʕ ð ^ʕ / ‘luck’

ع	' <i>ayn</i>	ʿ	ʕ	Voiced pharyngeal fricative	/ʕu:d/ 'stick'
غ	<i>ḡayn</i>	ḡ	ɣ	Voiced uvular fricative	/ɣani/ 'rich'
ف	<i>fā'</i>	f	f	Voiceless labio-dental fricative	/flu:s/ 'money'
ق	<i>qāf</i>	q	q	Voiceless uvular plosive	/qara:ba/ 'relatives'
ك	<i>kāf</i>	k	k	Voiceless velar plosive	/kinit/ 'I was'
ل	<i>lām</i>	l	l	Voiced alveolar lateral	/le:l/ 'night'
م	<i>mīm</i>	m	m	Voiced bilabial nasal	/manu/ 'Who?'
ن	<i>nūn</i>	n	n	Voiced alveolar nasal	/niswa:n/ 'women'
ه	<i>hā'</i>	h	h	Voiceless glottal fricative	/hawa/ 'air'
و	<i>wāw</i>	w	w	Voiced bilabial approximant	/watan/ 'homeland'
ي	<i>yā'</i>	y	j	Voiced palatal approximant	/jo:m/ 'day'

Vowels

Trans.	IPA	Sound Description
ɪ	i	Short, close, front unrounded
ī	i:	Long, close, front unrounded
a	a	Short, open, front unrounded
ā	a:	Long, open, front unrounded
u	ʊ	Short close, back rounded
ū	u:	Long, close, back rounded
ē	ɛ:	Long, mid, front unrounded
ō	ɔ:	Long, mid, back rounded

Important Note 1: The transliteration symbols used in the Encyclopaedia of Arabic Language and Linguistics were followed for the quoted examples and words, i.e., each quoted word is italicised followed by the IPA between square brackets and the English gloss, when required between single inverted commas. This does not apply to Proper Names.

Important Note 2: The symbols and descriptions for vowels are adopted from Alsiraih (2013: 23-24).

Chapter One: Introduction

1.1 Arabic Language

In this introductory chapter, I provide an account of Arabic language and some information about the linguistic situation in Iraq. I also present a sketch of the historical background of Hīt and a description of the phonological system of HIA. My aim in this chapter is to guide the reader to the research site, the importance of the present study, and the research questions addressed in the present study.

Arabic, spoken today by approximately 250 million people, is the official language in the eighteen countries that make up the Arab world, extending from Iraq in the east to Mauritania in the west (Watson, 2011: 1). It is also spoken in Arabic-speaking enclave communities in other areas of the world, such as Turkey, Iran, Cyprus, some areas of sub-Saharan Africa, and in some parts of Khuzestan, Uzbekistan, and Khorasan. Arabic-speaking migrant communities in, for example, the USA, Europe and Australia, also use it.

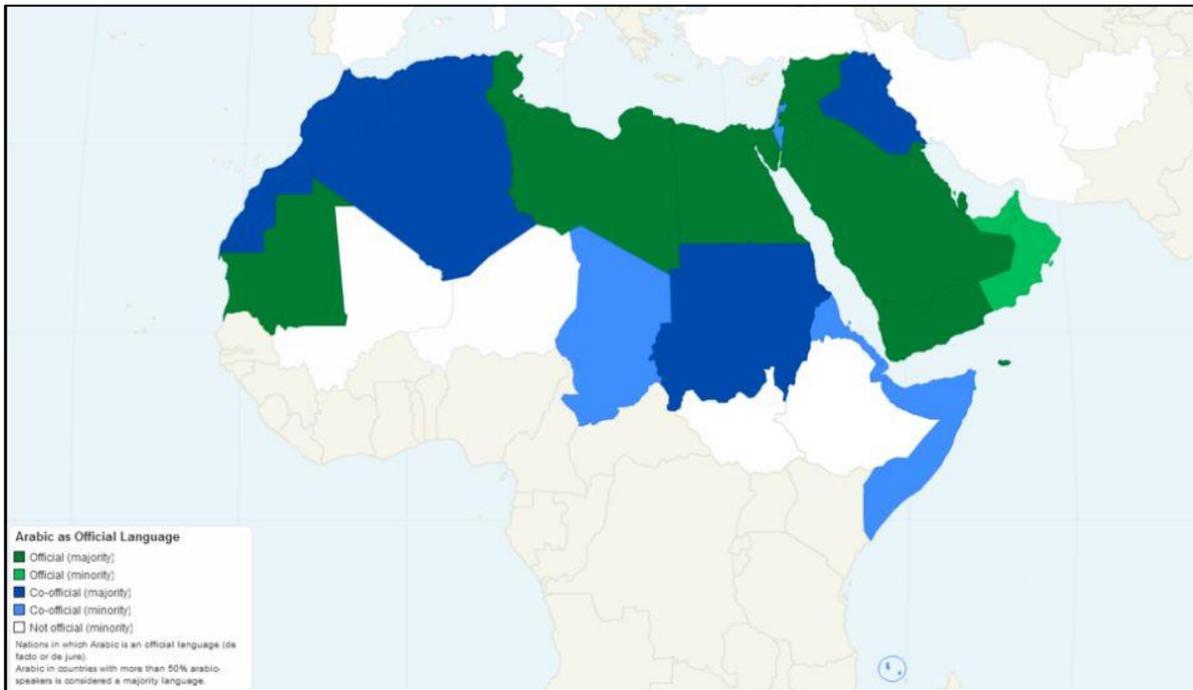


Figure1.1 Countries with Arabic as a majority language.¹

Arabic is a member of the Semitic languages family, which is a member of a broader group of languages, called Hamito-Semitic (Ryding, 2005: 1). It shares with many other Semitic languages a rich consonantal, but poorer vocalic system. Two standard varieties of Arabic are recognised, Classical Arabic (CA) and Standard Arabic (SA). In the pre-Islamic era, CA was used mostly in literature, especially in poetry. From the rise of Islam, CA began to be connected with the Qur'an. Conversely, SA arose as a result of the spread of education in the Arab world and is nowadays the official variety of the Arab world, being the language of education, media and newspapers (Al-Wer, 1997: 254).

SA is not used in informal speech in Arab countries or in other Arabic-speaking territories, where dialects are used in everyday life. While SA is used in formal situations such as teaching, religious talks, news broadcasts and sports commentaries, there are various spoken

¹Map available online from: https://en.wikipedia.org/wiki/List_of_countries_where_Arabic_is_an_official_language

dialects used by speakers at home and in informal situations in the Arabic-speaking areas mentioned above. This sociolinguistic situation, which is known as ‘diglossia’ (Ferguson, 1959), is characteristic of the Arabic language. Eisele (2002: 3) relates Arabic diglossia to prestige. He argues that Arabic diglossia has been viewed in the vertical dimension: that is, one of a distinction between prestige and stigmatised dialects.² According to Nevat et al (2014), LA differs from SA in that it is homogeneous across the Arabic-speaking region, while there are considerable differences between SA dialects. Owing to contact with other languages, such as Greek, Turkish, French, and English, mainly during invasions, these dialects underwent change

Arabic dialects are traditionally classified in three ways. The first is the geographical distribution, according to which they fall into *mašriqi* i.e. Eastern region of the Arab world and *magribi* i.e. Western part of the Arab world dialect groups. The former includes the Arabic dialects spoken in Saudi Arabia, Oman, Yemen, Kuwait, Qatar, Bahrain, United Arab Emirates, Iraq, Syria, Jordan, Palestine, Lebanon, Sudan and Egypt. The latter includes the Arabic varieties spoken in Libya, Tunisia, Algeria, Morocco, and Mauritania. This classification is based on overall linguistic features that recognise one group from another (Palva, 2006: 605-6).

The second classification is the Bedouin versus Sedentary dialects, which is based on a sociological stratification. Bedouin communities are found to be more conservative, while sedentary communities are more innovative due to their openness to contact which leads to change (Watson, 2011: 50). The third classification is based on religious and communal affiliation according to which Arabic dialects are divided depending on the religious background of their users. Examples of this division are the Arabic dialects of Muslim, Jewish

² Eisele (2002:3) viewed language variation in terms of certain **dimensions**: a ‘horizontal’ one, which is concerned with the geographical spread and contact, a ‘vertical’ one, which follows a prestige vs. prestige concept, and a ‘temporal’ one, which is concerned with the historical change and ‘rise and fall’ of prestige forms.

and Christian communities in Iraq (Blanc, 1964), and the dialects of the Sunni and Shi'a groups in Bahrain (Holes, 1983).

1.2 The linguistic situation in Iraq

Iraq is an Arab country, situated in Southwest Asia, south of Turkey, north of Kuwait and Saudi Arabia, west of Iran and east of Syria and Jordan. The ancient name of Iraq is Mesopotamia, which means 'the land between the rivers' (Al-Ani and Al-Birazy, 1979). Politically, the area where Iraq is located has also been referred to in the English literature as the Middle East. Iraq is considered as a hybrid of three types of environments: mountains, desert, and a fertile river valley. Two main rivers run through most of the country, the Euphrates and Tigris, the rest of which run through neighbouring countries: Turkey and Syria. The desert area is located in the west bank of the Euphrates and covers wide areas in Al-Anbar, Karbala and Najaf provinces, the fertile valley is between the two rivers, and the mountains are in the northeast part of the country (Al-Ani and Al-Birazy, 1979).

Iraq has a diversified population, owing to which there is considerable linguistic variation. Its geographical domain is the location for a range of spoken and written languages and dialects. A number of languages are spoken in Iraq, with Arabic as the majority language; the main minority languages are Kurdish, Neo-Aramaic, and Turkman. Iraqi Arabic (SA) falls into two spoken dialect groups: the *gilit*³ group and the *qiltu*⁴ group based on the different pronunciations of the verb *qultu* 'I said' (Blanc, 1964). The *gilit* group is of Bedouin origin and shares many features with Gulf Arabic and with Syrian dialects spoken on the Iraq-Syria border (Abu-Haidar, 2006: 222). This dialect is spoken by the Bedouin, and by the sedentary populations of the Muslim majority in Baghdad and the southern region of Iraq (Abu-Haidar,

³ Also referred to as *galat* or *gelet* in some references.

⁴ Also referred to as *qaltu* or *qeltu* in some references.

1991). Religious minorities, such as the Christians and Jews of Baghdad, Muslims and Jewish communities in Mosul, Tikrit, Anah and Hit, mainly speak the *qiltu* group. It has been claimed that the *qiltu* dialects in Iraq, especially the dialect in Hit, are being influenced by the *gilit* dialects (Al-Ani, 1978; Mansour, 1991; Khan, 1997). It has been assumed that the *qiltu* dialects are ‘direct descendants of the dialects spoken by the urban population of the Abbasid Iraq (Blanc, 1964: 166-167). There are no valid census figures for numbers of speakers of each dialect group.

Until the 20th century, no studies had been conducted on the dialects of IA. The earliest studies were conducted in the 1960s and 1970s, and were carried out by Blanc (1964), Malaika (1963), and Jastrow (1978). These studies investigated IA in terms of regional distribution and religious affiliation. Several works were conducted on IA in the 1980s, 1990s, and 2000s. Among these works are those of Jastrow (1978), Al-Ani (1978), Bakir (1986), Abu-Haidar (1989, 1991, and 2004), Mansour (1991), Ingham (1997), Khan (1997), Al-Abdely (2002), Tawfiq (2010), and Ahmed (2012).

The approach that Blanc (1964) adopted to study vernacular dialects has become the standard for many subsequent studies that investigated the Arabic dialects of Iraq, and his study tends to be a source of inspiration for generations of studies conducted on these dialects. Although he investigated the dialects spoken in Baghdad only, the *qiltu-gilit* dichotomy he used is still the concept upon which all following studies, which followed a traditional dialectological frame, relied (Abu Haidar, 1991; Mansour, 1991; Khan, 1997, Abu-Haidar, 2004). The major focus of these studies is directed to establishing typological descriptions of the dialects, rather than looking for change in progress, or providing profound sociolinguistic interpretations, which underline potential variations. Furthermore, a criticism that may be directed to these studies is that they aimed to investigate the general linguistic status of the communities, rather than attempt to establish a specific description of potential phonological changes. The unstable political situation that Iraq has witnessed during the last three decades

has affected the progress of dialectal and sociolinguistic research, especially with regard to difficulties for researchers in conducting fieldwork.

1.3 Previous Studies on IA

Despite the large number of sociolinguistic studies that have examined Arabic dialects, most of the studies that were conducted on IA mainly relied on investigating language variation and change between colloquial and standard language use at the level of lexicon (e.g. Bakir, 1986; Khan, 1997). Some other studies focused on the concept of gender (e.g. Abu Haidar, 1989, 1991), while others concentrated on specific independent variables, such as level of education and spatial mobility (e.g., Al-Ani, 1978). Some studies examined particular dialects (e.g. Jastrow, 1978; Ingham, 1997). Many of these attempts did not go beyond the limits of religiously related dialects, such as the studies on the dialects of Muslim, Christian and Jewish communities in Baghdad (e.g., Abu Haidar, 1991; Mansour, 1991).

Blanc (1964), who classified the Mesopotamian i.e. Iraqi dialects into two main groups, conducted the earliest sociolinguistic study on IA. The first group includes the *qiltu* 'I said' dialects. They are spoken primarily in the towns of Mosul and Tikrit on the Tigris River and the towns of Anah and Hīt on the Euphrates River. The four towns are ancient urban sites and are located north of Baghdad. The second group is referred to as the *gilit* 'I said' group, which is used by the semi-nomadic rural areas in all areas other than the four *qiltu* towns, including the capital Baghdad (Al-Ani, 1978: 104). In addition to this geographical distribution, this division is also based on communal and social criteria. Sedentary Muslims mainly speak the *gilit* dialects, while the *qiltu* dialects are mostly related to the Jewish and Christian minorities (Abu-Haidar, 1991).

Blanc's 1964 study was an attempt to describe the IA dialects spoken in Baghdad by following a religious pattern. The speech of Baghdadi Muslims (MB), Christians of Baghdad

(CB), and Jews of Baghdad (JB) were investigated. For comparison purposes, informants from the towns of lower and northern Iraq were recorded as well. Blanc found that the three Arabic-speaking communities in Baghdad exhibited remarkable linguistic differences. For example, while the Muslim community realised (q) as /g/, the Christian and Jewish groups retained the /q/ variant. Nonetheless, the social distribution of such differences in the community and what that distribution informs us of the social relations between these communal groups is also involved. Religion has been found to be one of the social variables along which the IA dialects of Baghdad vary. The dialects and sample of Blanc's study are explained in Table 1.1.

Table 1.1. The sample of Blanc (1964)

Dialect	Place of origin	Religion	No. of informants	Place of interview
<i>gilit</i> and <i>qiltu</i>	Baghdad	Muslim	6 men.	USA
		Christian	2 men+ 1 woman.	USA
		Jews	4 men+ 3 women	USA
<i>qiltu</i>	Mosul	Muslim	2	USA
		Christian	1	Palestine
		Jews	1	Palestine
<i>qiltu</i>	Anah	Muslim	1	Anah
<i>qiltu</i>	Hīt	Muslim	1	N/A
<i>qiltu</i>	Tikrit	Muslim	1	Tikrit
<i>qiltu</i>	Anatolian	Jews	1	Turkey
<i>gilit</i>	Basra	Muslim	1	Basra
<i>gilit</i>	Qaryat sayyid	Muslim	1	USA
	Ṣali			
<i>gilit</i>	Amarah	Muslim	Radio speech	Iraq

Another of Blanc's findings is that MB, CB and JB differ in their consonant and vowel inventories. Noticeably, CB lacks interdentalals. Blanc shows the similarity of the *qiltu* dialects to the CB and JB dialects in having a /q/ variant of the SA (q), supporting his argument with some instances from Anah and Hīt, such as /θqi:l/ 'heavy' and /qahwa/ 'coffee' (1964: 27).

Bakir (1986) investigated gender-related differences in the speech of Basra Iraqi dialect speakers. He found that men used standard or literary Arabic forms more frequently than women did. Women spoke a more prestigious variety when they adopted a variety of Arabic approximating the socially prestigious Baghdadi dialect. In sociolinguistics, linguistic prestige is the degree of status and social value attached by members of a speech community to certain language varieties or language features (Trudgill, 1986). Speakers tend to use a particular language variety or feature because that variety or feature is socially accepted and highly regarded. In most cases linguistic prestige is directly associated with socially and politically dominant groups. Labov (1966) makes a distinction between overt and covert prestige. In overt prestige, non-standard language varieties are usually considered low-prestige, but in some situations these varieties are stigmatised by the education system and therefore enjoy a covert prestige among working-class men for the same reason that they are considered incorrect. For example, the Christians of Baghdad accommodate to Muslims' speech by abandoning /q/ in favour of /g/, which they consider being a feature of power characteristic of the Muslim majority (Abu-Haidar, 1991). An example for covert prestige in English is the case where Americans say *who did you ask?* Instead of *whom did you ask?*. On the other hand, in overt prestige speakers attach significance to a variety or feature that is, say, non-standard to achieve specific goals. For example, speakers of Standard English who deliberately switches to use of social markers such as *ain't* and *he don't* in downward style-shifting are said to seek covert prestige. An example of linguistic prestige in Arabic is when speakers of lower status or minority dialects adopt language features spoken in big cities, namely capitals even if such features are close to standard Arabic. In most cases, such features

are evaluated positively by these speakers. In Bahrain, /y/ which is used by the Sunni community (e.g. [rayyal]) was replaced with /j/ (e.g. [rajjal]), a feature associated with the Shi'a community because Sunnis consider the Shi'a community and dialect as more prestigious (Holes, 1983).

Jastrow (1978) followed Blanc's division, but with more detail. He divided the *qiltu* dialects into three groups. The first group is the Tigris group spoken in Mosul, Tikrit, and Baghdad. The second group is the Euphrates group spoken in Anah and Hit. The third group is the Kurdistan group that covers Sendor, Aqrah, and Erbil (1978: 415). Blanc (1964) reported that the *qiltu* dialects are characterised by the retention of the SA (q) and (k), interdental and the reflexes of (r) as /ʁ/.

In the same year, Al-Ani (1978) studied the reflexes of the SA (q) by Baghdadi inhabitants. His study is based on two assumptions. The first assumption is the noticeable increase in the reflexes of this variable among Baghdadi inhabitants. The second assumption is that the *qiltu* dialects are spreading towards Baghdad. This change is attributed to two main factors. The first factor is the large influx of people from the other *qiltu* city areas, mainly Mosul, into Baghdad. The second factor is the increase in education. Consequently, there was a noticeable increase in the number of words pronounced with /g/ instead of (q) (Al-Ani, 1978:106). The main reason was thought to be the spread of compulsory education in Iraq. In order not to rely on guesswork, a study was conducted. His data came from 1323 dictionary words containing (q) in initial, medial and final positions. By means of applying an x-ray sound film, the results revealed that out of the total number, 672 words had the /q/ variant while 630 words had the variant /g/. A first impression of this finding, reflected a levelling of /g/ in favour of the *qiltu* variant, but the researcher ascribed this to the influence of the literary dialect, that is SA, and not to the spread of the *qiltu* dialects (Al-Ani, 1978:108).

Ten years later, Abdul-Hassan (1988) conducted a sociolinguistic study to examine the impact of speakers' attitudes, gender, and region of living in Iraq on their use of five linguistic variables i.e. (q), (k), [ana:], /u/, /i/, and [ma:]. He found that attitudes play an important role in the linguistic behaviour of speakers. Abu-Haidar (1989) investigated whether women in Baghdad are more prestigious than men in the use of SA. Her prediction was that men in Baghdad are using more SA variables than vernacular ones because they are more prestigious than women in their life styles, including their language usage. She believes that the reason is that women have less access to sources of SA. Two years later, Abu-Haidar (1991) conducted a synchronic study surveying CB on phonological, morphological and syntactic levels.

The main findings were:

1. Interdentals are lacking in CB and cognates of the SA interdentals are dental stops.
2. In CB (r) variable was realised as /ʁ/.
3. The (q) variable was realised as /q/ in other *qiltu* dialects.
4. CB speakers were considered as bidialectal, that is CB speakers use CB with their fellow Christians only, but they use MB with those from other communities, such as Muslims.

Finding 4 might support the prediction that HIA speakers behave similarly in that they use HIA when they communicate with HIA speakers, but may use the *gilit* dialect when they communicate with *gilit* speakers.

Mansour (1991) conducted a synchronic study of the speech of Palestinians, originally born in Iraq i.e. Baghdadi Jews who migrated to Palestine in the early fifties. He collected part of his data from recorded, transcribed, but not taped speech of his mother in 1950. The rest of the data were collected twenty years later and showed the noticeable influence that Hebrew had on JB. Mansour had given a profound phonological analysis of JB; while Blanc showed the occurrence of unstressed long syllables in MB and CB, Mansour found that this feature does not exist in JB. In addition to the four vowels that Blanc identified in JB i.e. /i/, /u/, /ə/ and /a/, Mansour identified two other vowels i.e. /e/ and /o/. Also, in contrast to MB and CB,

JB does not exhibit the possession particle [ma:l]. This study may suggest a change, which this dialect is thought to undergo. In her review of Mansour's (1991) study, Abu-Haidar claims that it can be inferred from the features, especially the voiceless ones that JB is in a state of change, given that Mansour's data were collected before Blanc's data.

Ingham (1997) investigated the distribution of a number of IA dialects in relation to geographical and demographical groups of southern Iraq. The investigation concentrated on phonological variables (1997: 30). He surveyed the speech community of the area stretching around the waterway area, that is the Tigris River, the Euphrates River, Shatt-al-Arab River, and Karun. This wide area is represented by four dialects: 1- the Shatt-al-Arab and lower Karun, 2- Amarah and surrounding marshes, 3- the Zubayr and 4- parts of Faw. All these, with the exception of the fourth dialect, fell into the *gilit* dialect of Mesopotamia (Ingham, 1997:39). The findings fell into two main categories; the differences in syllabification were ascribed to the occupational group contrasts, while the differences in inventory and incidence were ascribed to regional contrasts. An occupational contrast is made between nomads and the town dwellers, referred to as Arab and Ḥaḍar, respectively (Ingham, 1997:29), which is termed by the researcher as degrees of sedentarisation, as a wider classification in addition to the basic rural-to-urban classification.

Khan (1997) conducted the first dialectological description in Hīt by investigating the *qiltu* dialect spoken by Jews (KH). He collected his data in 1991 from a number of families living in the Beersheba area of Palestine. Those families are originally descended from the Jewish community who had been, until the early 1950s, living in Hīt, before they migrated to Palestine. One of Khan's research questions was whether the dialect of the Jews in Hīt differs from that of the Muslims in the town (Khan, 1997: 54). This study included a comprehensive description of the phonology, morphology, and syntax used by the Jewish community of Hīt. One of Khan's assumptions was the potentially high degree of bedouinisation in which the *gilit* group was influencing the dialect spoken in Hīt. His results showed that this dialect

combines a hybrid of features from the *qiltu* and the *gilit* dialects. Although the dialect is one of the *qiltu* dialect groups, no evidence of *imāla* was found.

In the 2000s, many studies were conducted on the *qiltu* dialects of Hīt, Rabia, and Mosul. Al-Abdely (2002) investigated the syllable structure and syllabification in HIA with reference to Received Pronunciation in English (RP). His study is pedagogically oriented in that he aimed to analyse potential differences in the syllable structure in HIA and RP English, which are thought to influence the ability to learn them as foreign language varieties. Data for HIA came from words that were elicited from recorded individual interviews, obtained from HIA native speakers. The researcher gave no details of the number of informants, or of their ages and genders. The English data were extracted from some studies in English. The study has shown that the two varieties differ from each other in syllable structure, type, phonotactics, and stress placement (Al-Abdely, 2002: 124-126). This study did not extend to give a wider description of the phonological system of HA. Furthermore, it did not relate the dialect to other *qiltu* dialects. This study falls under the heading of comparative and pedagogically oriented studies.

Following Jastrow's descriptions of some *qiltu* dialects and his attempts to collect data in situ, Abu-Haidar (2004) had as an objective to survey some points of the phonology and morphology of the *qiltu* dialect spoken in Rabia (RA). The data were collected between October 2000 and August 2001, and consisted of five recorded hours of speech from seven one-time inhabitants of Rabia. These recordings included individual interviews. The choice of informants (2 women and 5 men) was limited to those living out of Iraq; a couple living in Turkey, a married couple living in Switzerland, and five informants living in Germany, of which two women are homemakers. All were under the age of forty. Comparing the variety to Mosul Arabic (MA), her findings revealed some differences on the phonological and morphological levels. Phonologically, while MA reflexes (r) as /ʁ/, RA preserves the variant /r/. Morphologically, RA has the bound morpheme ending in /n/ instead of /m/ in pronominal

morphemes. For example, compare the RA /bəntən/ the MA /bəntəm/ ‘their daughter’ (see Abu-Haidar, 2004:11). The study implied religion as a social factor among inhabitants of the town, but not enough details about a dialect change were provided.

Tawfiq (2010) conducted a phono-pragmatic study of (r) in MA. He analysed the speech of fifty native speakers of this dialect, aged between 15 and 70. He obtained his data by following two methods: in the first method, informants were given passages, which they were asked to read in their dialect; while the second method was to use individual interviews through which the researcher elicited his informants’ pronunciation of /r/. No exception from other studies, Tawfiq found that speakers of MA realise (r) as /ʁ/. Interestingly, they do not have this variant when they utter religious names, especially the ‘Ḥusna names of Allah’ (Tawfiq, 2010: 35). For example: [rabb] ‘Lord’, [satta:r] ‘The Veiler’. It also applies when dealing with the names of the lunar months. However, it was not open for all of them. Thus, compare to [ʁamaðʕa:n] ‘the month of fasting’ to [muḥarram] ‘the first lunar month’, and [radʒab] ‘the seventh lunar month’.

Ahmed (2012) conducted an ethnographic study of HIA. He attempted to investigate the processes of intrusion, elision, and *imāla* in HIA, with reference to Standard Arabic. His most significant aim was to know how close HIA forms are to other SA ones. No information was given about the number of informants. However, they are recognised as male and female HIA native speakers who were born in Hīt and aged between 10 and 65 years old. In contrast to Khan (1997), Ahmed (2012: 23) claimed that HIA exhibits *imāla*. Interestingly, he has noted that uneducated older male and female speakers tended to use the original variety of pronunciation, that is, HA, more than their peers (Ahmed, 2012: 3).

1.4 The research site

As Milroy (2002: 4) remarks, ‘The classic procedure in describing a speech community is for the analyst to specify a particular geographical location and then to identify a series of relevant social categories such as class, ethnicity, gender, or generation’. There is no doubt that this procedure is the starting point for most, if not all, sociolinguistic studies, and the present study is no exception. In this section, I provide a geographical description of the potential research site.

The original target research site of the present study was Hīt, which at the time of planning my fieldwork trip was considered safe. However, owing to a sudden worsening of the security situation in Hīt the University of Leeds did not grant me permission to carry out fieldwork there, this led to change my plans and identify a new fieldwork site. As will be described in more detail later in the thesis (§ 4.4), the study was carried out in Baghdad by analysing the linguistic behaviour of a group of migrants from Hīt.

Hīt, a town on the Euphrates River (33°N, 42°E),⁵ is one of the oldest cities in Iraq. It is located in the west of Iraq approximately 190 km to the west of Baghdad, the capital of the Republic of Iraq, and 450km to the east of Al-Qaim town on the Iraq-Syria border. It belongs to Al-Anbar province and covers an area of roughly 466 km² (Al-Hiti, 2010: 24) (see Figure 1.2).

⁵ Latitude and longitude information are obtained from: <https://myasadata.larc.nasa.gov/latitude-longitude-finder/>

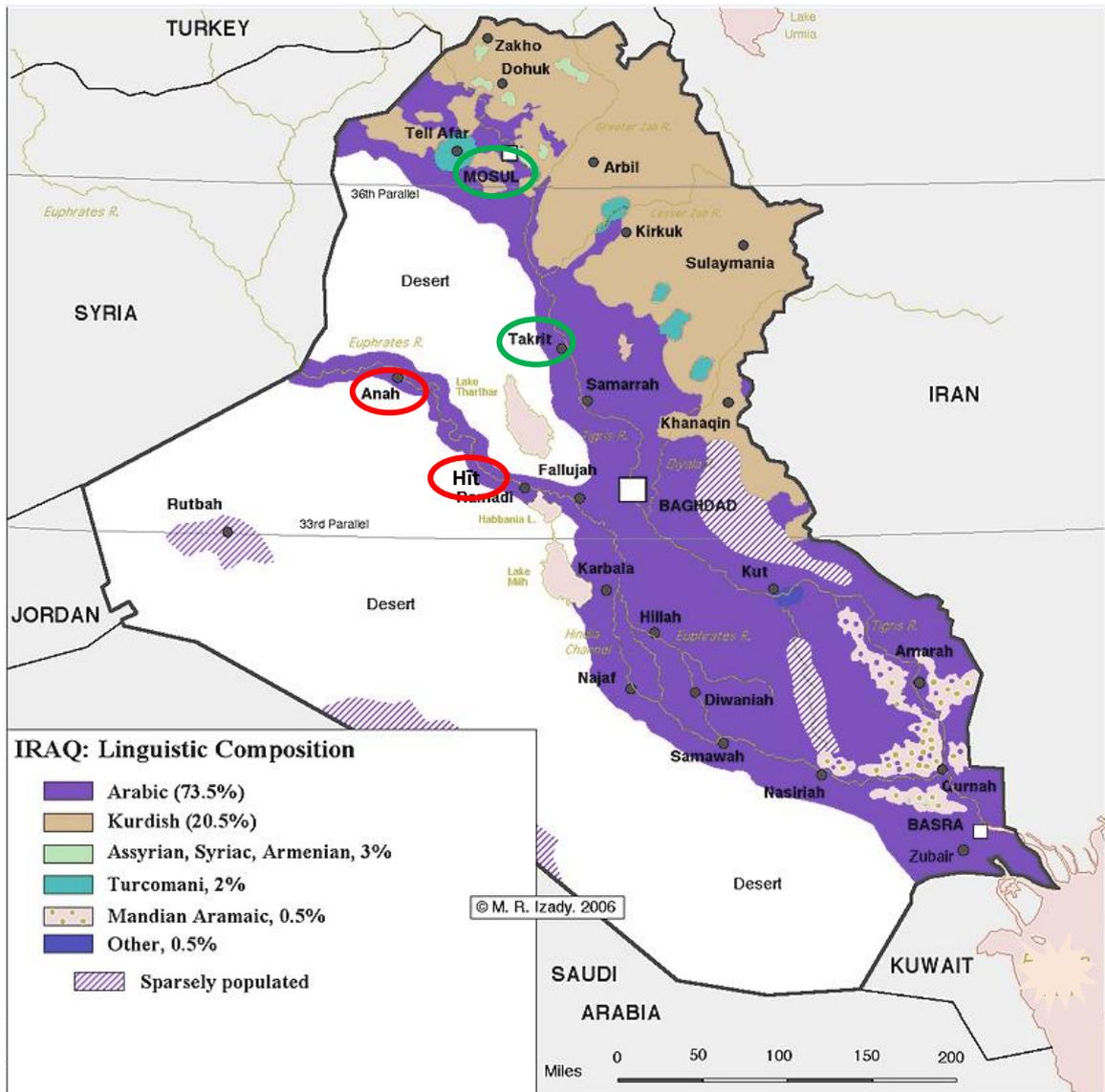


Figure 1.2 The linguistic composition of Iraq. The green ovals indicate Tigris *qiltu* dialects of Mosul and Tikrit and the the red arrows indicate the Euphrates *qiltu* dialects of Anah and

Hīt⁶

1.5 The historical background and socioeconomic development in Hīt

Hīt is a town of considerable historical importance and has played a significant role in the rise of Iraqi civilization and culture. It was one of the other towns on the Euphrates, which

⁶Map cited, with modification, from: <https://borderlessblogger.wordpress.com/2014/05/03/arabic-dialectics-muslim-baghdadi-arabic-2/>.

functioned as frontier fortresses for Assyria (U.S. Department of Defence. U.S, 2018). The original inhabitants of Hīt can be classified as sedentary Sunni Muslims, whose livelihood has depended for generations on agriculture, fishing, and sheep rearing. This population is an early urban settlement that can be traced back to the Sumerian era (5500 and 4000 BC). It was a village that the Sumerian King Sargon of Akkad (2334-2279 BC) settled with his army, when he marched from Babylonia to the land of Kanaan (Syria). He called it Total, which means the place of buckets (Abdel-Salam, 2005: 151). During the Babylonian and Assyrian eras, Hīt was named 'īto' or 'Hīto', which means 'bitumen', a product for which Hīt is famous. Reports state that King Nebuchadnezzar (604-516 BC) probably brought bitumen from Hīt, which was used in rebuilding Babylon and for paving its roads. Therefore, the city has played an important role in the construction of the civilization of Mesopotamia because it was the main source of bitumen, which was transported to the central and southern cities of Iraq, and used by the Babylonians as a construction material with mortar, burnt bricks and clay and for cementing the walls of Babylon. Hīt remained part of the Sumerian Empire until its decline in around 539 BC. Ever since Islam spread to Mesopotamia (Iraq) in about 636 AD, Hīt was used as one of the most important axes, due to its location, which links Mesopotamia to the Levant (Syria). Commercial convoys and military campaigns would pass through Hīt on their way both eastwards and westwards.

It has been agreed upon by many historians that the castle of Hīt is one of the oldest castles in Iraq (Abdel-Salam, 2005): other historical castles were built in Erbil, Mosul and Kirkuk. The ancient mosque, named Al-Farooq mosque after Caliph Umar bin al-Khattab, who was known as Al-Farooq, has the second highest minaret in Iraq after Al-Hadba minaret in Mosul. This mosque was rebuilt several times. Its minaret was used as an observation tower before the spread of Islam to Hīt. Until the late 1940s, Hīt was home to sedentary Sunni Muslim and Jewish populations. All the Jewish citizens, however, migrated to Palestine after the Israeli

occupation in 1948. Nowadays, the population in Hīt is entirely Sunni Muslim. Research on the social and linguistic history of Hīt is still in progress.

Hīt is famous for extensive farms on both banks of the Euphrates River. It was a suburb belonging to Dulaim (Al-Anbar) province. It is famous for fruit production, such as dates and oranges, which are highly prized and in demand by people in other parts of Iraq. This town is also famous for local industries, such as boat building, water wheels, natural salt collection, knitting, gathering asphalt and the limestone industry. It is also famous among other Iraqi cities for some of its food industries, such as date molasses and Tahenia industries, a product which is made of sesame seed paste. Until the early 1920s, the majority of Hīt citizens were either farmers or sailors. The first primary schools for boys and girls in Hīt were built in 1921 and 1932, respectively. Hīt had a population of 2000 in 1903. Due to converting Hīt to a town in 1958 and the expansion of the railways, the population increased to 4,830 in 1912. According to the national census of 1947, Hīt had a population of 5000 people, which had grown to 6,808 in 1957. It then raised to reach 9.131 in 1965, and to 14.884 in 1977. In the 1987 calculation, the population in the city increased to 26.402 and to 37.394 in 1997. The population grew to 50.677 in 2008 and jumped to 84.569 in 2016 (Ghudheb, 2005: 234).

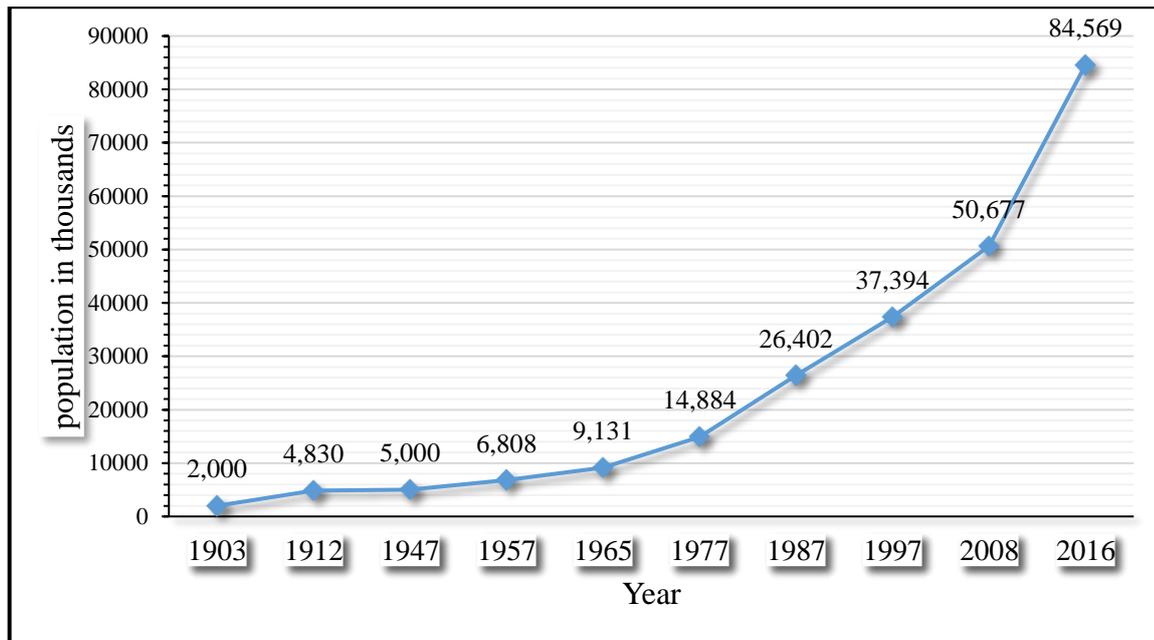


Figure 1.3 Population growth in Hīt 1903-2016 (Based on Census 2016, Republic of Iraq, Ministry of Planning, Central Bureau of Statistics, Population of Al-Anbar Province)

1.6 Causes of dialect levelling (DL) in HIA

Over the course of the last three decades, Iraq has witnessed massive socio-economic and demographic changes. The socio-economic changes are represented by industrial development and expansion and increase in the levels of education and economy. Forms of the demographic changes, such as internal migration, which is identified as one of the leading forces behind DL (Trudgill, 1986; Kerswill and Williams, 2000b; Evans, 2004), tends to affect the linguistic situation in Hīt.

Hīt has a homogeneous social composition, which is however subject to disruption by high degrees of mobility into the town from the *gilit*-speaking areas. As Milroy (2002: 7) argues, mobility is an effective cause of the disruption of large-scale, close-knit localised networks, which have over time retained highly systematic and intricate sets of socially built linguistic standards. It is claimed that recently the migration trend is no longer playing a crucial role in the evolution of the urban vernacular and does not participate in formulating new mechanisms

of DL or koineization and that the development of the urban vernaculars is more motivated by the influence of *fushā* or by linguistic factors (Miller, 2003: 13). However, it was reported that one type of migration-induced dialect change is represented by the spread of the dialects of the capital cities, such as Baghdad into neighbouring cities (Abu-Haidar, 1991).

Hīt was the target for internal migration of people from most cities of Iraq, mainly the *gilit*-speaking cities, such as Baghdad, Hillah, and Basra. Since the early 1980s, families migrated there in large numbers. The level of migration has noticeably increased from 500 families in the early 1990s to more than 1200 families in 2013 (Al- Hiti, 2010: 171). As a result, the HIA dialect is noted to be in a state of levelling, where some of its salient features are being lost in favour of *gilit* features. The three sequential wars, globally termed ‘the Gulf Wars’, based on the Arabian Gulf, in 1980, 1991, and 2003 reformulated the composition of culture-specific expressions, lifestyles, dialect, and behavioural orientation. That reformulation began to threaten the overall phonological structure of the socially tightly coherent community of this town.

During the First Gulf War between Iraq and Iran in the years 1980-1988, one of the largest military camps was located in Hīt. Hundreds of officers and soldiers served in this camp, and they later brought their families and settled in Hīt (Al- Hiti, 2010: 182). They are originally from the *gilit*-speaking cities, such as Baghdad, Hillah, and Basra and speak the *gilit* dialect.

When the Second Gulf War took place in 1991, hundreds of families sought refuge in Hīt in fear of the military operations, and most of them stayed there.

After the Third Gulf War in 2003, Hīt welcomed a massive influx of displaced employees, academics and army officers with their families from different parts of Iraq (Al- Hiti, 2010: 185). These displaced people came from the cities of Baghdad, Kirkuk, Basra, Hillah and Ramadi, where the *gilit* dialect is spoken. They were all educated Muslims who had, until their migration, been living in the city centres. That has put HIA speakers in direct everyday contact with the *gilit* speakers. Consequently, some phonological variables began to be

replaced by *gilit* variants. The contact between Hīt and the *gilit* areas caused by internal migration to Hīt is shown in Figure 1.4.



Figure 1.4 A map of Iraq showing the internal migration from the *gilit* area to Hīt and registered numbers of inflows for 2007 (Data were adopted from Al-Hiti, 2010).

1.7 Importance of the study

Most of the previous variationist studies on Arabic dialects focused on the speech of mobile populations in Trudgill's terms i.e. migrants (e.g. Jassem, 1987; Miller, 2005; and Hachimi, 2007). This study will be different in that it targets potential change in the speech of the non-mobile populations (local residents).

There is no strong variationist tradition on IA dialects and most empirical works on them are written in the framework of traditional dialectology. Moreover, the linguistic behaviour of speakers of the *qiltu* dialects, represented by HIA speakers and the *gilit* speakers has not attracted any attention from Iraqi linguists and therefore no hypothesis for the outcomes of dialect contact between these two groups is proposed. IA has not yet been studied in SNI research despite its large population and the demographic changes represented by waves of internal migration in Iraq.

Guy et al. (1996, reported in Bassiouney, 2009: 90) claim that irregularities provide evidence of linguistic change in progress. Taking this claim as a key point, therefore, there is reason to believe that HIA is witnessing a change in progress. Two pieces of evidence in the literature come from Al-Ani (1978) and Khan (1997) to support this prediction. Al-Ani (1978: 105) mentioned that 'the dialect in Anah and Hīt seems to have a change in progress, where a large number of words are pronounced with/g/instead of (q)'. Likewise, Khan (1997: 54) reported that 'one of the distinctive features of the *qiltu* dialects of the Euphrates is a high degree of Bedouinisation... extensive influence from the *gilit* dialects...which seems far advanced...'. However, Khan investigated the *qiltu* dialect of the Karaite Jews of Hīt (KH) and concluded that KH was still exhibiting some of its urban features, namely (q) and (k), which were realised in the *gilit* dialects as /g/ and /tʃ/, respectively Khan, 1997: 94). While Khan investigated the dialect of the Jewish community of Hīt, there is still a descriptive and methodological gap between his study and one of a Muslims dialect in terms of description and also potential change in progress due to the noticeable recent migration from the *gilit* -

speaking cities to Hīt. Irregularities in the realisation of some phonological variables in HIA provide evidence of linguistic change in progress, and from the references made by some researchers (Al-Ani, 1978; Khan, 1997), who claim that HIA is in a state of change toward the *gilit* group, there is reason to believe that DL is occurring in this dialect. These studies were conducted before or during the *gilit* migration waves to Hīt. In the late 1970s, Al-Ani reported that in Hīt, (q) was realised as /g/. In the mid-1990s, Khan reported a Bedouinization state, whereby the dialect in Hīt was in a state of change in progress. As an HIA native speaker myself, I noticed that HIA native speakers, especially younger speakers are using the *gilit* dialect features more than the HIA ones by replacing some of their own dialect features, such as (q) and (k) with features from the *gilit* dialect. Furthermore, a number of my informants have reported that they observe that the (q) is realised as /g/ namely by younger speakers.

1.8 Aims and scope of the study

The principal theoretical aim of the present study is to determine whether Social Network Theory (SNT) (Milroy, 1980) is an effective model for explaining DL in a local urban community in Iraq. It is hoped that it contributes to contemporary Arabic dialects as well as general (socio)linguistic theory. The method adopted here follows Torgersen and Kerswill's (2004) pattern and combines geographical diffusion, which involves language features spreading out from an economically and culturally pre-dominant centre to the surrounding regions, levelling, a process limited to smaller towns, and extra-linguistic factors, such as identity and attitudes.⁷ To achieve this goal, the speech of members of the local speech community in Hīt were explored to examine whether they acquired specific features of the

⁷ See Torgersen and Kerswill (2004: 26) for more details.

gilit-speaking groups, and the degree to which their SNI with the *gilit* community has affected their linguistic behaviour.

Academic literature on the *qiltu* dialects of Iraq covers studies conducted on the dialects of the Jewish and Christian minorities in Baghdad and of migrants who originally lived in Baghdad (Blanc, 1964; Abu-Haidar, 1991; Mansour, 1991), on the *qiltu* dialect of Muslims in Mosul (MA) (Tawfiq, 2003), on the dialect of Muslims in Rabia (Abu-Haidar, 2004), and on the dialect of the Jews in Hīt (Khan, 1997). These studies referred to HIA only marginally. Moreover, no study has attempted to investigate the existence of potential change, trace the path of change, or interpret the causes behind it. Therefore, part of the present study attempts to describe the phonology of this *qiltu* dialect, while a considerable part of it seeks to interpret DL in terms of SNI.

The present study aims to investigate variation and change in HIA in relation to geographical mobility, more specifically migration and commuting (Neil, 2011). It examines the role of Social Network Integration (SNI) and tests how informants' use of the linguistic variables is affected by their level of integration into the *gilit* community. In addition, it determines the role of age and gender in formulating change and seeks secondarily to identify the importance of informants' attitudes towards the *gilit* dialect and community in DL.

This study highlights the direction of change; that is, whether language change moves towards or away from the local dialect. All informants are HIA native speakers, who were born and lived most of their life in Hīt. They are stratified into three age groups (20-39, 40-59, and over 60).

The present study is based on the analysis of four phonological variables⁸ and features; two consonants i.e. (q) velarisation and (k) affrication, and two vocalic features i.e. vowel

⁸ Details on the linguistic variables are given in § 4.8 of the thesis.

lowering and vowel epenthesis. It attempts to identify possible correlations of this variation with social factors, such as informants' age, gender, SNI, and attitudes.

Table 1.2 The linguistic variables investigated in this study

Variable		HIA	Example	English gloss	<i>gilit</i> variant	Example
Consonants	(q)	/q/	/qa:l/	to say	/g/	/ga:l/
	(k)	/k/	/kalbi/	dog	/tʃ/	/tʃalib/
Vowels	[i]	[i]	[misdu:d]	closed	vowel lowering	[masdu:d]
	[i]	[i]	[bsati:n]	farms	[i]	[bisa:ti:n]

1.9 Research questions

To date, as far as I am aware, no other empirical studies of dialect contact were conducted on IA. This is due to the fluctuating situation in Iraq during the last three decades, which has restricted opportunities to carry out fieldwork in situ. The findings of the present study are to be compared to those of other varieties in the literature on languages within larger communities. I hereby address the following research questions:

1. What *gilit* forms do HIA speakers acquire and to what extent?
2. Is the assimilation of the *gilit* forms innovated by male or female speakers?
3. How does informants' levels of SNI within the *gilit* community influence their linguistic behaviour?
4. How do informants' attitudes towards the *gilit* dialect and community affect their linguistic behaviour?

1.10 The phonology of HIA

There is very little information about the historical formation and the evolution of this dialect or its linguistic situation in terms of present-day use. HIA has not been studied previously within the variationist framework. However, some of its phonological features were investigated (e.g. Al-Abdely, 2002; Ahmed, 2012.). The only reports available concerning this dialect are sporadic references by Blanc (1964) and Jastrow (1978), who assigned it to the Euphrates *qiltu* dialects and Khan (1997), who described the dialect of the Karaite Jewish populations living in Hit i.e. KH. I conducted a description of the phonology of HIA, which covered the consonantal and vocalic systems. In this study, I interviewed six native *gilit* speakers (three male and three female) to allow for a comparison of the four phonological variables under investigation.⁹ In her study of dialect contact between Palestinian and Jordanian dialects, Al-Wer (2002) interviewed a similar number of informants for comparison purposes. I examine whether the two dialects are in a convergent or divergent state.

In this section, I present a short description of the phonology of HIA to examine how it relates to other Arabic dialects in Iraq. I limit my description to the reflexes of consonants and vowels and do not go beyond the scope of the present study. To my knowledge, Khan (1997), whose description showed to a certain extent a convergence state between KH and the *gilit* group, conducted the first description on this dialect. For knowing in what aspects HIA differs from other *qiltu* dialects, I cite instances from Khan (1997), Abu-Haidar (1991), and Abu-Haidar (2004). These researchers investigated the KH *qiltu* dialect, the *qiltu* dialects used by the Jews (JB) and Christians (CB) in Baghdad, and the *qiltu* dialect of Muslims in Rabia (RA). These four dialects are classified as *qiltu* dialects (Blanc, 1964; Abu-Haidar, 2004).

⁹ The reflexes of the phonological variables as used by these informants are used when comparing *gilit* to HIA.

1.10.1 Consonants

Table 1.3 shows the inventory of consonants of HIA. It includes all of the consonants of both *qiltu* and *gilit* dialects of Iraq. The bracketed phonemes, such as [p] are realised in some loanwords in HIA from other languages, such as Persian, Turkish and English (Blanc, 1964: 18), as well as words borrowed from the *gilit* dialects (Abu-Haidar, 1991: 13). The consonant inventory includes nine plosives, twelve fricatives, two affricates, two approximants, two nasals, one trill, one lateral, and four pharyngealised. In terms of place of articulation, HIA has twelve places of articulation: bilabial, labiodental, dental, interdental, denti-alveolar, alveolar, palate-alveolar, palatal, velar, uvular, pharyngeal, and glottal.

Table 1.3 The inventory of the HIA consonants¹⁰

Place \longleftrightarrow	Bilabial	Labio-dental	Dental	Inter-dental	Denti-alveolar	Alveolar	Palato-Alveolar	Palatal	Velar	Uvular	Pharyngeal	Glottal
Manner \Downarrow												
Plosive	b (p)				d t				g k	q	ʕ	ʔ
Fricative		(v) f		ð θ	z s		(ʒ) ʃ			ɣ x	ħ	h
Affricate							dʒ (tʃ)					
Approximant	w							j				
Nasal	m					n						
Trill						r						
Lateral						l						
Pharyngealised				ð ^ʕ	d ^ʕ t ^ʕ	s ^ʕ						

¹⁰ This table is adopted, with modification, from Alsiraih (2013: 19).

Like in all other *qiltu* dialects, such as Christian and Jewish dialects (Abu-Haidar, 1991), the realisation of the SA (q) is the voiceless uvular plosive /q/. In the *gilit* dialects, it is realised as /g/. Examples of words showing this distinction are Christian and Jewish *qāl* ‘he said’ and Muslim *gāl* ‘he said’; Christian *qalib* ‘heart’, Jewish *qalb* ‘heart’ and Muslim *galub* ‘heart’ (Blanc, 1964: 26). It has been reported that this variable is realised as /g/ in the *qiltu* dialect spoken in Anah (Al-Ani, 1978). This phoneme is sometimes realised as /k/or /dʒ/ in the *gilit* dialects. For example, /waket/ ‘time’ for /waqet/ ‘time’ and /dʒiθθa/ ‘cucumber’ for /qiθθa/ ‘cucumber’. However, /g/ is used in a number of loan words, such as /glob/ ‘light bulb’, and /gubba/ ‘dome’; or from English, such as: /gla:s/ ‘glass, and /bantʃar/ ‘puncture’. HIA exhibits the process of h-dropping. This process also exists in KH (Khan, 1997: 55). Compare /waxaḏhum/ to /waxaḏum/, ‘and he picked them’, and /xilli:ha/ to /xilli:ja/ ‘leave her’.

The *qiltu* dialects are characterised by the retention of the SA velar plosive (k) (Abu-Haidar, 1991), while the *gilit* speakers realise it as /tʃ/, e.g. /ki:s/ ‘carry bag’ for Christian and Jewish dialects and /tʃi:s/ for Muslim dialect; Christian /kaleb/ ‘dog’, Jewish /kalb/ and Muslim /faleb/ (Blanc, 1964: 25). As is the case with /g/, /tʃ/ occurs in non-Arabic loanwords, such as those borrowed from Turkish, examples being: /tʃa:dir/ ‘tent’, /tʃarix/ ‘wheel’, /tʃamtʃa/ ‘ladle’.

In contrast to KH, where the glides (w) and (j) are realised as the homorganic vowels /u/ and /i/, HIA does not have this process. Compare KH /ule:d/ to HIA /wle:d/ ‘boy’, and the KH /idaḥḥaq/ to HIA /jdaḥḥaq/ ‘he looks’.

In some *qiltu* dialects of Iraq, such as CB (Abu-Haidar, 1991), and the Tigris *qiltu* dialects in Mosul (MA) and Tikrit (Jastrow 1978), (r) is realised as a uvular fricative /ʁ/. However, HIA speakers realise it as a trill /r/ consonant, e.g. /ʃahar/ ‘month’ in KH and HIA compared to /ʃahar/ ‘month’ in CB and MA.

Like KH, MB, and MA, HIA is characterised by the retention of the interdental (θ) and (ð), which are replaced by the dentals /t/ and /d/ respectively in CB and RA (Abu-Haidar, 1991:

2004). For example, /tla:θa/ ‘three’ in RA, /θla:θa/ ‘three’ in HIA, /di:b/ ‘wolf’ in CB, but /ði:b/ ‘wolf’ in HIA.

1.10.2 Vowels

It is argued that ‘the major lexical contrasts in Arabic are indicated through the consonants’ (Watson, 2002: 21). This is because the consonantal system of Arabic, including IA, is richer than the vocalic system. With regard to the *qiltu–gilit* dichotomy of IA, the same may in part be true. However, if we look more deeply at the phonology of HIA, this fact is to a certain extent rejected, as this dialect is distinguished by its vocalic differences from other Iraqi dialects, including *qiltu* ones, more than by the consonantal differences. HIA has three short vowel phonemes and five long vowel phonemes:

Short vowels: /a/, /i/ and /u/

Long vowels: /a:/, /i:/, /u:/, /ɔ:/ and /ɛ:/

In order to concentrate on the similarities and differences that HIA shows with respect to the *qiltu* dialects, instances from these two dialects with their counterparts from HIA are cited.

1.10.2.1 Long vowels

It can be seen that HIA exhibits five long vowels: /a:/, /i:/, /u:/, /ɔ:/ and /ɛ:/. They occur in initial, medial, and final positions. Below are the observable contexts in which long vowels of HIA occur:

Like in KH, in HIA, /u:/ in stressed syllables is realised as /o:/ when preceded by back consonants, such as velar and uvular consonants. Compare, for example, /jqu:l/ to /jqo:l/ ‘to say’. This process does not exist in other Iraqi dialects, to the best of my knowledge, and therefore appears to be unique to the dialects of Hīt i.e. HIA and KH.

One of the most characteristic features in the phonology of the *qiltu* dialects in Iraq i.e. MA, RA, CB and JB is the process of *'imāla*. In CB, it is closer to that of the Anatolian dialects than that in MA (Blanc, 1964: 47). This phonological process, which is described by the Arab grammarians of the Middle Ages, occurs in the context where /a/ and /a:/ vowels are changed to [e:] or [i], a sound shift sometimes triggered by the presence of an /i/ or /i:/ vowel, in the preceding or the following syllable. However, neither KH nor HIA exhibits this process. For example, the SA /kila:b/ 'dogs' is realised as /kla:b/ in KH and HIA, /tʃla:b/ in MB, but /kle:b/ in CB and MA.

HIA exhibits vowel shortening, a process found in JB (Blanc, 1964: 33), and KH (Khan, 1997: 59). In HIA, this process occurs in the following contexts:

1. In HIA, the long vowels /a:/ and /i:/ in unstressed open final syllables are replaced by [a] and [i], respectively. Compare, for example, /ʔasa:mɪ:/ to /ʔasa:mi/ 'names', and /kaða:/ to /kaða/ 'thus'.
2. HIA shortens long vowels in non-final stressed closed syllables. This contrasts to KH, which retains the long vowels. Thus, compare KH /ðʕa:mni:lu:/ to HIA version /ðʕamni:lu:/ 'We guarantee for him'.
3. While KH retains long vowels in non-final unstressed open syllables, HIA shortens unstressed long vowels. See, for example, the KH /qa:lo:li:/ and the HIA /qalo:li:/ 'They told me'.
4. While the *gilit* dialect of the Muslims of Baghdad (MB) retains the long vowel /a:/ in pre-stressed open syllables, HA, KH, and JB all shorten it in this context. Compare the MB /bsa:ti:n/ to the HIA /bsati:n/ 'farms'. This long vowel is also shortened in HIA when it occurs in initial stressed open syllables, which is similar to its realisation in KH. Compare, for example, the MB /ma:ku:/ to both KH and HIA /maku:/ 'Nothing left'.

1.10.2.2 Short vowels

HIA shares with other Iraqi dialects the three short vowels (/a/, /i/, /u/). They occur in the following contexts:

1. In word-medial position, /a/ occurs in stressed open syllables as in /qabil/ ‘before’, and /rafiʕ/ ‘present’.
2. In word-final position, /a/ occurs in unstressed open syllables as in /be:ðʕa/ ‘egg’, and /hilla/ ‘Hila city’.
3. In medial position, /i/ occurs in unstressed closed syllables as in /jizraʕ/ ‘he implants’, and stressed closed syllables as in /filla:ħ/ ‘farmer’.
4. In final position, /i/ occurs in unstressed open syllables as in /jiʕtari/ ‘to buy’, and /sijja:li/ ‘tar’.
5. In non-final position, /u/ is restricted to unstressed open syllables as in /fura:t/ ‘Euphrates River’.
6. In final position, /u/ occurs in stressed and unstressed open and closed syllables as in /naxiðu/ ‘we take it, m.’, and /jsimmu/ ‘they name him’.

1.10.2.3 Diphthongs

Like all Arabic dialects of Iraq, the HIA reflexes of the diphthongs (aw) and (ay) are /o:/ and /e:/, respectively (see Abu-Haidar, 1991:18; 2004: 9).

1.10.3 General phonological processes

HIA exhibits a number of phonological processes. They are explained below:

1.10.3.1 Vowel rising

One noticeable feature in both KH and HIA is vowel rising. As the data of the present study showed, HIA speakers at least the younger, exhibiting vowel lowering, which is a reverse process. This has various forms:

1. The shift from /a/ to [i] takes place almost consistently. The vowel /a/ is usually realised as [i] in unstressed closed syllables. An example of this is the MB /masdu:d/ compared to the KH and HIA /misdu:d/ ‘closed’.
2. Both KH and MB retain /a/ in pre-stressed closed syllables in the environment of back consonants and emphatics (Khan, 1997: 63). In contrast, in HIA this vowel is realised as [i]. In addition, a few cases of the shift in the environment of front consonants are observed. Compare MB /xabba:z/ to HIA /xibba:z/ ‘baker’.
3. As in the *qiltu* dialect of Rabia (Abu-Haidar, 2004: 8), HIA has in /i/ to [a] shift, which takes place in initial stressed closed syllables. Compare the MB /ħilbat/ to the RA and HIA realisation /ħalbat/ ‘she milked’. Similar to the case in CB (Abu-Haidar, 1991: 14), this shift also occurs in initial stressed open syllables. Therefore, the MB /tifa/ is realised as tafal ‘to spit’ in both CB and HIA. Likewise, /sɪzəl/ is realised as saʒal ‘to ask’.
4. In both HIA and KH, /u/ occurs in the same environments. However, it is occasionally shifted to [i]. Such instances contrast to those reported by Khan (1997:60) either as a result of KH being influenced by SA as in /mudi:r/, or as a result of [u]-colouring under the influence of MB, as in [xubza] ‘slice of bread’. Compare, for example, /fɪrtʕa/ in MB to /firtʕa/ in HIA and KH ‘police’. Also /mudi:r/ in MB to /midi:r/ in HIA ‘manager’.

1.10.3.2 Elision

One feature that has not been reported to exist in either the *qiltu* or *gilit* dialects is the process of elision. This process involves the deletion of a single phoneme and occasionally a whole syllable for reasons of economy of effort. Crystal (2008:158) defines elision as ‘the omission of sounds in connected speech’. To Clark (2008:90), these circumstances may include the sounds that are ‘[so] weakly articulated that they no longer have auditory significance or they may be omitted altogether in the stream of running speech’. This process occurs in HIA in two contexts:

1. Like KH (Khan, 1997: 62), RA (Abu-Haidar, 2004: 8), and CB (Blanc, 1964: 38), short vowels in HIA in initial and medial unstressed open syllables are sometimes elided. Compare the MB /ħama:ja/ to the HIA /ħma:ja/ ‘my brother-in-law’; and likewise, /θigi:l/ to /θqi:l/ ‘heavy’.
2. Occasionally, as in CB (Abu-Haidar, 1991: 17), and KH (Khan, 1997: 59), a whole syllable may be elided. Compare, for example, /didʒa:dʒa/ in MB to /dʒa:dʒa/ ‘hen’.

1.10.3.3 Metathesis

HIA exhibits a feature, which has not been reported in the literature to exist in other Arabic dialects of Iraq. This feature is metathesis, which involves the change from a VC to a CV sequence. For example: the MB /jiðbaħu:n/ is realised as /jðibħu:n/ ‘they slaughter’.

1.11 Structure of the Thesis

In this first chapter, I presented a general overview of Arabic as a Semitic language followed by a sketch of the linguistic situation in Iraq. I then discussed the specific issues of interest in conducting a sociolinguistic study on IA dialects in general followed by a justification of the need to investigate HIA dialect in particular. I provided a geographical and historical

overview of the potential location of the study, socioeconomic background of the community under investigation, followed by a description of the phonology of HIA dialect. The importance, focus, aims of the study and the research questions were also provided in this chapter. Finally, I described the phonology of HIA. It seems that the socioeconomic developments in Hīt played a significant role in its linguistic situation, which has, over the last three decades, been witnessing type of convergence towards the *gilit* dialect. Most importantly, the community individuals being integrated into the *gilit* speakers might disrupt the homogeneous composition of the city. I think that any sociolinguistic investigation in Hīt should take into consideration the homogeneous history of its community and the social openness represented by individuals getting more integrated into more dominating social groups, such as the *gilit* community. The rest of the thesis is organised as follows:

Chapter Two presents a general account of the phenomenon of Dialect Levelling (DL) and other forms of dialect variation and change, followed by a discussion of the theoretical framework and justification for adopting the SNT as a model to investigate DL in HIA. The chapter also provides an account of the war-induced dialect change with reference to the situation in Iraq. Approaches to studying dialect variation and change are also reviewed in the chapter. A special section of the chapter is devoted to the SNT, its history, development, and the pioneering studies within its framework.

Chapter Three is an overview of the accommodation theory and dialect contact. It first presents the Communication Accommodation Theory, the strategies of accommodation used by informants, i.e. convergence, divergence, and maintenance, followed by two separate literature review sections of the relevant studies that are conducted under the accommodation theory and dialect contact framework.

Chapter Four is a detailed account of the methodology applied in the present study. It presents the steps and procedures adopted in the study with reference to a number of specific issues that faced the author and how they are overcome. It starts with an overview of the

ethical issues, followed by sampling methods and sample design. A special section is devoted to the concept of the observer's paradox in relation to the nature of the present study. Data collection methods, measuring informants' SNI and attitudes scores and statistical analysis procedures are also provided in this chapter. The social as well as the linguistic variables are discussed in this chapter as well.

Chapter Five is the first discussion chapter. It covers results obtained in the present study. The chapter is divided into three main sections and a number of sub-sections. In § 5.2, I examine the correlation between the four linguistic variables and age. Firstly in § 5.2.1, I present how the new linguistic variants progressed across time by HIA speakers in the three age groups with reference to individual differences in the use of the linguistic variants in relation to age. All results are supplemented by statistical analyses obtained by using descriptive as well as inferential techniques. Then in § 5.2.2, I examine the correlation between the four linguistic variables and gender and describe the linguistic constraints determining the variation in the use of these variables. In § 5.2.3 a lengthy discussion is dedicated to examine the relation between language behaviour and SNI at the individual and group levels with a special account given to the social network sub-variables, such as friendship and work relations and leisure time activities. In § 5.2.4 I examine the language behaviour of HIA speakers in relation to speakers' attitudes.

Chapter Six is the second discussion chapter. It covers results related to the interactions between the independent variables and is divided into six sections. All results are supplemented by tests of cross-tabulation obtained via SPSS statistics software. In § 6.2 I focus on the interactions related to Social Network Integration. It first discusses the interaction between SNI and gender, followed by a discussion of correlation between SNI and age, and finally the interaction between SNI and attitudes. A special account is given to friendship networks as the most important SNI sub-variable. In § 6.3 I examine the interaction in relation to friendship networks. In the first part, the interaction between friendship networks age is

discussed, while the interaction between friendship networks and gender is examined. I examine in § 6.4 the interaction between speakers' age and gender. In § 6.5 I discuss the variations in the use of the linguistic variables among four families representing the three age groups. The chapter is summarised in § 6.6.

Chapter Seven concludes the results arrived at and suggests recommendations for future research.

Chapter Two: Dialect Levelling

2.1 Introduction

In this chapter, I review the theoretical framework of the study and justification for adopting the Social Network Theory (SNT) as a model to examine Dialect Levelling (DL) in the Iraqi *qiltu* dialect spoken in Hīt (HIA). First, I present the concept of supralocalisation and people's mobility as a motivation for DL. After that, I discuss the studies that are conducted to investigate dialect change in relation to direction of influence i.e. whether change is away or in favour of the standard variety. Later, I review the studies that examined dialect change in the Arabic region, including Iraq. In the last part of the chapter, I provide a brief discussion of approaches of language variation and change in general and DL in particular.

DL is a process which involves the replacement of local linguistic forms with others with a wider geographical spread (Cheshire et al., 1999:1). According to Kerswill (2003: 1), when DL is observed in a wide geographical area, it should be referred to as Regional Dialect Levelling (RDL). Therefore, the use of one indicates the other. According to Neil, (2011: 1). DL involves 'reduction of differences across a widening area'. Britain (2009) adopts a similar interpretation, but a different terminology, and he uses RDL and supralocalisation interchangeably. DL is one of the most widely considered aspects in the literature on traditional dialectology and variationist sociolinguistics (Trudgill, 1986; Kerswill 1993; Foulkes and Docherty, 1999; Williams and Kerswill, 1999; Kerswill and Williams, 2000b; Kerswill, 2003; and Neil, 2011). It also studies 'how, in dialect contact situations, one variant emerges victorious from the mixing of many different dialect variants of the same variable' (Britain, 2009: 3). Consequently, it becomes difficult for the speakers' dialect or accent to be identified (Cheshire et al., 1999:1). It has also been defined as a process characterised by a reduction in the differences between regional varieties, disappearance of features, which make distinctive varieties, and the emergence of new features, which are over

time adopted by speakers over a wide spatial zone (Williams and Kerswill, 1999: 149). One of the most socially considered definitions of DL is the one adopted by Milroy (2002: 7), who considers it to be a reflexion of the larger-scale disturbance of close-knit localised networks, where such a reflexion arises from internal and transitional migration caused by wars.

It has been shown that DL is the process which reduces linguistic differences, and is therefore a special type of language change (Hinskens, 1998: 36). Kerswill (2003:1), for instance, claims that this phenomenon is caused by two mechanisms. The first is geographical diffusion, which is defined as the process where ‘features spread out from a populous and economically and culturally dominant centre... where nearby towns and cities will adopt the feature, before the more rural parts in between’. The second mechanism is Levelling, which means the reduction or attrition of marked variants, where ‘marked’ refers to forms that are ‘unusual or in a minority’ (see also Trudgill, 1986: 98).

A number of factors form the basis for DL. These factors include people’s spatial mobility (Britain, 2002, 2009; Neil, 2011), linguistic convergence and divergence (Hinskens, 1998), speakers’ Social Network Integration (SNI) (Milroy, 1980, 2002), social class (Labov, 1966), and communities of practice (Eckert, 1988, 2000). Increased mobility may result in the diffusion of linguistic forms. The individual speaker’s integration into the same community (in-group) or outside it (out-group) might play a significant role in defining forms of change. These factors will be explored in more depth in the following sections.

2.2 Supralocalisation and spatial mobility

Language variation and change, and DL in particular, tends to correlate with location, whether it is geographical or social. This takes place when language forms with a wider socio-spatial popularity spread at the expense of more locally specific forms (Britain, 2009: 1). DL in this sense has been a good motivation for a series of sociolinguistic studies across the world

languages, such as English (Cheshire et al., 1999; Kerswill and Williams, 2000b; Milroy, 2002; Kerswill, 2003; Britain, 2009), French (Hornsby, 2007), Norwegian (Hilton, 2010), and Arabic (Versteegh, 1993; Al-Rojaie, 2013; Manfredi, 2013). For example, Milroy (2002) focuses on the role of the contact framework in revealing instances of DL, such as the treatment of the low front vowel /a/ in Belfast. While back-to-front vowel distinction is correlated with status, high status speakers in Belfast eliminate the extreme back and front vowels. Therefore, their orientation is more accurately described as ‘modified vernaculars than as modified standards’ (Milroy, 2002: 8). As Kerswill and Williams (2000b: 2) argue, the new linguistic forms spread more rapidly in socially and geographically mobile groups, such as migrants, than in groups with a strong local base and close-knit networks. They view levelling as an outcome of individuals having open networks to people outside of their community. In contrast, close-knit networks act as powerful maintenance mechanisms of local dialects (Milroy, 1980).

Britain (2009) presents the process of DL as an outcome of the increase in people’s mobility, long-term contact and routine day-to-day movement (Britain 2009:7). Britain views the notion of regions as a complex and unlimited network of realisation rather than sharply predefined restricted entities. He focuses on the role of attitudes and identities in the spread of linguistic forms. He also pays attention to physical and social space and refers to them as special practices. Spatial identities, which are drawn from daily social practices that people are engaged in, and the ways these practices are connected to those of others, are important in affecting the social networks. One of the special practices that could increase the spread of linguistic forms is increased migration. Hilton (2010: 87) pointed out that special practices are as significant as other social factors in decreasing or increasing dialect variation, and should be given further attention in the research on RDL.

Williams and Kerswill’s (1999) study is a good example of the empirical studies of linguistic diffusion in the UK. They investigated the spread of t-glottaling and th-fronting in

three cities in the UK: Hull, Reading, and Milton Keynes. They found that adolescents in these three cities follow similar rates in the use of the two features (Williams and Kerswill, 1999: 161). However, the social promise of adolescents played an effective role in the spread rate. For example, adolescents in Hull use the new features less than those in Reading and Milton Keynes do, and they retain local features (Williams and Kerswill, 1999: 162). This conservative performance is due to close-knit social networks and less exposure to education where RP-like features are available. More importantly, adolescents in Hull use local features as a symbol of a sense of identity.

Neil (2011) presents diffusion models that explain RDL in the UK, focusing on the increase in social and geographical mobility. Neil found that not all forms of linguistic features diffuse by the same pattern, i.e. one feature may spread from one region to another by a wave-like pattern, while another feature may spread more quickly by populations characterised by weak social networks, regardless of how distant they are from the central urban area. In his replication of Williams and Kerswill's (1999) study of migrants into Reading, Hull, and Milton Keynes, Neil (2011:1) explores DL in relation to internal migration, and concentrates on the fact that linguistic change results from complex factors derived from both diffusion and Levelling. His model accounts for DL depending on one of three mechanisms. The first mechanism is 'Wave-model diffusion', which depends on spatial contact between local regions. In this model, innovations spread from a central area to more remote locations, passing through closer areas. An example of this model is the diffusion of the non-salient feature /ʌ/ from London to East Anglia (Trudgill, 1986: 51-53). The second mechanism is the 'Urban Hierarchy model', where the spread of innovations is not an outcome of spatial mobility only, but of population density as well. In this model, innovative features spread and are acquired more quickly by populations characterised with weak social ties, regardless of being distant from the central urban area. For example, London tends to have a greater influence on Milton Keynes's than on Reading's adoption of new variants of [au] despite the

fact that, geographically speaking, the former city is more distant from London than Reading. The key reason is that, due to exposure to contact that is more special with Londoners, Milton Keynes' population has less close-knit networks in contrast to Reading (see also Kerswill, 2003). Opposite of this mechanism is the third one, the 'Contra-Urban model', which according to Neil is the rarest. Neil (2011: 12) exceeds the traditional research, which concentrates on the 'role of identities in face-to-face contact'. Although he agrees with Milroy's (2002) notion about the existence of the relationship between social class and mobility, Neil argues as to how exactly their interrelationships affect innovations, ascribing that to the direct relation between rate of change and social framing and the social-psychological factors resulting from contact. The arguments in Williams and Kerswill (1999), Britain (2009) and Neil (2011) concern the link between spatial practices and diffusion of linguistic forms and the role of individuals' structure in spreading and adopting such forms.

Supralocalisation in Arabic follows one of two mechanisms, neither of which gives a clear account for the factors underlying it. Although it has been claimed that migration does not play an effective role in the evolution of urban dialects and does not contribute in situations of DL and that the development of new vernaculars is determined by the impact of *fuṣḥā* (Miller, 2003: 193), a war-induced migration urban-urban diffusion model, where dialects spoken in the big cities, usually capital cities, spread out to surrounding regions, usually represents the first mechanism in several Arabic dialects (e.g., Abd-el-Jawad, 1986; Al-Rojaie, 2013). In the second mechanism, more prestigious dialects that are spoken by politically or socially dominant groups spread out to other local dialects regardless of the geographical distance (e.g., Holes, 1983, 1986; Abd-el-Jawad, 1987; Abu-Haidar, 1991). An example of this pattern is Versteegh's (1993) study on DL in the south of Sudan. He reports a case from Egypt and states that when Egyptians meet informants from Cairo, many of them tend to modify their speech by using the Cairene dialect more frequently than their local dialects (Versteegh, 1993: 70). DL in Arabic may follow a trend similar to that found

elsewhere, as in English (Neil, 2011). Owens (2003) follows the notion that linguistic features seem to disappear in one place and re-emerge in new areas and therefore immigrating groups transmit new linguistic features (2003: 718). His model is one of migration-induced dialect contact (Owens, 2003: 730). For example, the development of the first person singular and plural imperfect in North African Arabic dialects i.e. *n-iktib* for *s.*, and *n-iktibu* for *p.* into Egyptian dialects at the expense of the one originally used in Egypt i.e. *b-ə-ktob* for *s.*, and *m-n-əktob* for *p.* is interpreted by Owens as an outcome of three possibilities. The first possibility is the spread of this feature within local regions inside Egypt. The second possibility is the spread from North Africa into Egypt. The third possibility is likely to be a result of migration from Egypt to North Africa (Owens, 2003: 730). He focuses on one of the main questions arising in the Arabic dialectological studies: that is, whether reconstruction should be seen in terms of the whole dialect or as just a single linguistic feature. Owens (2003: 738) concludes that one can reconstruct the history of individual features in order to reconstruct the history of a whole dialect. It can be concluded from this section that the social structure of individuals and their spatial mobility must be taken into consideration in explaining the spread of new linguistic features.

2.3 Convergence and divergence

Sociolinguistic studies of dialects in contact often interpret findings in light of the direction of influence. In accordance with this, long-term contact between speakers of mutually related dialects or different languages is a key reason for DL. In long-term contact, the diffusion of linguistic forms from one dialect to another could give rise to noticeable variation within a dialect, and consequently result in a reduction and loss in the use of these forms. Some studies

investigated DL under the framework of accommodation theory (e.g. Kerswill, 1993; Auer and Hinskens, 1996; Hinskens, 1998).¹¹

Auer and Hinskens (1996) highlight the need to consider convergence in European dialects and standard varieties and argue that accommodation processes resulting from sociolinguistic developments in Europe justify future cross-linguistic research. According to them, the first reason why regional dialect convergence is not given considerable attention is that standardization is a recent concept (Auer and Hinskens, 1996: 1). The second is the paucity of educational opportunities before the 20th century, and third is high levels of external migration across Europe. Most importantly, traditional dialectologists were interested only in those individuals maintaining localised dialects and not in those who showed ‘innovative’ language use. The shift from traditional dialectology to modern-day variationist sociolinguistics brought such issues to the forefront of linguistic investigation. Dialect convergence in Europe is viewed to be an outcome of one of three social factors: influence of standard language, level of education, and spatial mobility. Auer and Hinskens (1996: 7, 11) present language change by adopting two different dimensions: horizontal and vertical. The horizontal dimension represents language varieties, while the vertical dimension includes the social importance of these varieties. According to Auer and Hinskens (1996: 4), two forms of convergence are common in Europe: the horizontal convergence, whereby homogeneity between dialects leads them to converge toward each other, and vertical convergence in which spoken dialects converge toward the standard language. It is stated that while convergence of socially related dialects is in progress, new linguistic forms may occur (Hinskens, 1998). Likewise, (Auer and Hinskens, 1996: 4) argue that horizontal dialect convergence is represented by convergence between local varieties and at the same time divergence between

¹¹ I will discuss the studies conducted under the dialect contact and accommodation theory framework in Chapter Three of the thesis.

varieties around political borders. An example for this trend of change is the case in Limburg city, located on the Netherlands-Germany borders, as reported in Hinskens (1998). Auer and Hinskens' (1996) model views language change as a two-dimensional process. Auer and Hinskens (1996: 10-12) state that on the vertical line, the standard language can have 'downward convergence' by becoming linguistically more similar to the non-standard varieties and results in a decline of status of the standard language and the emergence of regional standards. To explain this mechanism, they use examples from English, such as the emergence of Australian standards.

Central to Auer and Hinskens' (1996) model is their definition of dialect convergence as an outcome of large-scale migration. They give three types of migration in Europe, which have an impact on the status and structure of competing dialects. These types are work, war and tourism-induced waves of migration. Auer and Hinskens (1996: 20) mention that all of these three types of migration play an effective role in complicating the map of traditional dialectology.

Hinskens (1998) views DL in terms of direction of change. In other words, whether a potential change in a certain dialect goes in favour or away from another. Hinskens (1998: 36) defines DL as a process, which reduces language variation i.e. convergence. He also views the other possibility, where one variety tends to diverge from others i.e. divergence. In this case, Levelling is reported to be a two-dimensional process, which is the main assumption of his study (1998: 48). Convergence is the strategy where speakers adapt to each other's communicative behaviours, including linguistic settings, in order to reduce the differences (Coupland and Giles, 1988). The motivation for a speaker's convergence is to gain 'social reward, represented by increase of attraction and approval' (Boronti-Ricardo, 1985: 91-92). Divergence, on the other hand, takes place when speakers signal a psychological movement away from others, within the same social interaction (Coupland, 2010). Hinskens investigated DL in Limburg, a Dutch city located on the Netherlands-Germany borders, in relation to

accommodation. He focuses on the role of the standard language in DL. As there is no ‘standard language’ spoken in Limburg and due to having more out-group contact with German, than in-group contacts (with regional dialects), people adopt German as a standard variety. While this convergence is taking place, they diverge from their local dialects. This form of change is what Britain (2009: 4) terms as ‘innovation diffusion’, which implies the emergence of new features far away from the levelled and diffusing dialects, rather than ‘Levelling’, where the resulting variety still possesses pre-existing features. This tends to be due to the expectation that ‘out-group contact’ appears more than ‘in-group contact’, according to Britain (2009: 41).

Milroy (2002) adopts a model similar to that of Hinskens (1998). However, she looks at the process from another perspective, which is language input. As Milroy (2002: 9) argues, despite the fact that dialects, which are undergoing Levelling, are under the pressure of convergence, they do not necessarily lose their linguistic distinctiveness. She interprets this in terms of the social sense, which reduces their local linguistic distinctiveness, and she ends with relating this to the speakers’ ‘lack of input’. I predict that lack of input refers to the notion of the linguistic market adopted by the community of practice approach pioneered by Eckert (1988).¹²

2.4 Arabic variationist studies

Several studies have investigated sociolinguistic variation and change in a range of Arabic dialects in the Arab world, including Bahrain (Holes, 1981, 1983, 1986, 1987), Egypt (e.g., Haeri, 1994, 1997), Jordan (e.g., Abd-el-Jawad, 1986, 1987; Al-Wer, 1997, 2002), Saudi Arabia (e.g., Al-Essa, 2008; Al-Rojaie, 2013), and Sudan (e.g., Versteegh, 1993; Manfredi,

¹² See sections 3.2 and 3.3 for details of the concept of linguistic market.

2013). The traditional dialectological approach is still prevalent in that the majority of Arabic sociolinguistic studies aimed at investigating the general linguistic status of speech communities rather than attempting to establish a specific description of potential phonological variations, or to interpret underlying reasons for such variation and change. In this section, I give a short description of some relevant Arabic sociolinguistic studies and explain their findings. I also give a sketch of the studies that examined variation and change in Iraqi Arabic (IA). This section deals chronologically with studies of Arabic dialects, including IA, that describe the current state of affairs and may be directly relevant to the changes taking place in Hīt.

The linguistic situation in Bahrain, one of the Arab Gulf countries, received a considerable amount of attention in the 1980s (e.g., Holes, 1981, 1983, 1986, 1987). The dialect variation in this country is basically one of communal differentiation represented by the Sunni-Shi'a dialect distinction in phonology and grammar which correlates with community membership (Blanc, 1964: 12-16). This communal variation also follows a regional distribution in that each of the two communal dialects is spoken in areas where the other is not used (Holes, 1983: 435). Holes (1983) explains change-in-progress in Bahraini Arabic as an outcome of exposure to more prestigious varieties. The socioeconomic changes that Bahrain witnessed in the early 1980s, such as the building of Isa Town in the capital Manama caused speakers of the Sunni dialect to have exposure to the more prestigious dialect, that is, the dialect of the Shi'a majority. Sunnis having work, friendship and marriage relations with Shi'as, who were almost a majority in Manama before the building of Isa Town, represented this exposure. In his (1983) study on the communal dialects in Bahrain, Holes also investigated the influence of Standard Arabic (SA), sect, and urban-rural origin on dialect variation (Holes, 1983: 438). Among the phonological variables investigated in this study were the Old Arabic (OA) (q) and (k) as realised by Sunni and Shi'a speakers. The sample included seventy-two informants stratified into Sunnis, urban Shi'as and rural Shi'as and covering an age range of 13-70 years.

Results showed cross-dialectal variations, which are caused by prestige. Some phonological variation of culturally specific lexical items is attributed to a more prestigious variety i.e. Shi'a rather than to SA (Holes, 1983: 442). For example, the tendency of Shi'as to replace the Sunni /y/ with /j/ in non-SA lexical items, such as [rayyal]-to-[rajjal] is an outcome of 'pre-eminence of the influence of the high-status dialect in the dialect lexical domain' (Holes, 1983: 456).

Holes (1986) explains the change in terms of speakers' attitudes. He found a correlation between linguistic choice and social identity and that this correlation is determined by changes in patterns of employment and social activities (Holes, 1986: 34). In this study, the sense of prestige examined in Holes' (1983) research is explained in greater depth. Holes argued that the linguistic choice that the Arabs made is due to their positive attitudes towards the Baharna.¹³ The variants of SA (j) that Holes (1983) examined, were also selected in Holes (1986). Findings showed that social significance and evaluation of some linguistic variables is different, depending on attitudinal evaluations and forms of the social relations in which speakers are involved. Despite the fact that Arab and Baharna groups are socially and communally different, speakers of one of the Baharna groups (Baharna B) failed to maintain their norms by converging to the Arab group (considered as low status). For example, literate Baharna B speakers scored only 57 % maintenance of /y/ compared to 90.5 % scored by Baharna A. The reason is that those literate speakers were exposed to out-group contacts, such as exposure to standard forms used by the media and at work, than to in-group contacts (Holes, 1986: 40). However, motivated by their sense of social identity, they evaluated themselves as an odd linguistic minority within the Baharna group (Holes, 1986: 43).

¹³ Holes (1986: 33) used the term *Arab* to refer to the Sunnis, who are descendants of the Bedouin group which have been migrating to Bahrain since the late 18th century. The term *Baharna* is used to refer to the Shi'i, who form the original stratum in Bahrain.

In 1987, Holes attempted to shed some light on the mechanisms whereby the methods of theoretical sociolinguistics could be applied to Arabic-speaking communities, which are witnessing a 'rapid social and linguistic change', and to test the applicability of such methods to a socially-oriented Arabic linguistics by providing a practical example of the lack of Arabic sociolinguistics applied to a data-based study (Holes, 1987: 8). Holes aimed to put a barrier between the traditional and theoretical applications for some issues, such as the concept of prestige that he had focused on in early studies (e.g. Holes, 1983). For example, he claims that a linguistic variable, which is traditionally associated with 'low-status groups' be considered as 'prestigious' due to its similarity to the SA features. On the contrary, the variables, which are theoretically classified as high-status, are theoretically non-standard. His 1987 research on the case in Bahrain focused on the role of standardization and local prestige in language variation and found that the most distinguishable differences were found among older illiterate speakers. Interestingly, the majority of the group's population were literate, with more than 55 %, and the most noticeable changes occurred at the age of 25, which may be seen as supporting studies on the role of adolescents in language change

The majority of studies on language variation and change in Jordan have focused on selected phonological and sociolinguistic features. Motivated by the competition between some linguistic processes, such as urbanization, standardization and bedouinization in Amman and Irbid, Abd-el-Jawad (1986) aimed to investigate some linguistic features in the dialects spoken in these cities, find the mechanisms of dialectal convergence and diffusion, and discover the facts motivating the emergence of each process. This investigation focused on the age of family members and revealed the existence of three linguistic processes, which are motivated by a social pressure (Abd-el-Jawad, 1986: 62). The first process is standardization, which involves the emergence of a spoken dialect similar to the standard variety. This process is enhanced by the increase in the level of education and social and geographic mobility (Abd-el-Jawad, 1986: 57). The second process is urbanization, to which adolescents were more

aligned (Abd-el-Jawad, 1986: 58). The third process is bedouinization, for which parents and grandparents were more aligned, i.e. with more conservatives towards using the features characteristic of their rural variety motivated here by the ‘feelings of local identity and pride in origin’ (Abd-el-Jawad, 1986: 59). It is concluded that the emerging varieties follow the urban trend phonologically, but the standard ones lexically (Abd-el-Jawad, 1986: 61). This supports the two-dimensional process of DL proposed by Hinskens (1998) in that they move upwards and downwards in the vertical hierarchy.

In support of Ibrahim’s (1986) study of the notion of standard and prestigious, Abd-el-Jawad (1987) aimed to arrive at a description of linguistic variation within the informal settings in which the prestigious but non-standard variety is supposed to appear. He presented three findings about RDL of three Arabic dialects: West Bank Jordanian Arabic, Iraqi Arabic and Bahraini Arabic, where other, although marked as SA-identical, replaces some of their features under the influence of non-standard but prestigious features. The study was also seeking an answer to the [+SA] to [-SA] switch. The first evidence was from the Nablus dialect in Jordan, where (q) was observed to be replaced by /k/ and /g/. The second evidence comes from Iraq, where speakers from *qiltu* cities abandoned some of their traditional features, which are marked [+SA], in favour of dominant and prestigious features of the *gilit* dialect. A reference is here made to (q) and (k), which are replaced by /g/ and /tʃ/ respectively, where the most focus was placed on the city of Hīt. Further evidence was reported from Bahrain where Shi’as tend to switch away from variants which are marked [+Shi’a] and [+SA], like /y/ to ‘competing’ variants marked [+Sunni], but [-SA], which is non-standard but locally prestigious. Among these variants is /y/ (Abd-el-Jawad, 1987: 362). In all the three dialects, the local varieties, either of the big cities or dominating social groups, were found to compete the Standard Arabic and sometimes override it. It is argued that the motivation for this switching is the superiority of the ‘influence of the high-status dialect in the dialectal lexical domain’ (Holes, 1983:456).

In the Arab world, DL is viewed as an outcome of a number of social changes, such as the expansion of the urban centre and people's mobility. The first process is Levelling, which involves the elimination of much localised features in favour of more regional general ones (Holes, 1995: 39). The second process is urbanization, which involves the spread of spoken urban dialects (Abd-el-Jawad, 1986; Holes, 1995; Miller, 2003, 2007). Another process is bedouinization, in which urban dialects lose some of their features in favour of the Bedouin dialects. Owing to the concept of the Arabic diglossia, the majority of studies that examined language change in Arabic fall into the prestigious/ less prestigious dichotomy and agree that in most cases any potential change under this framework goes in favour of the more prestigious varieties (Holes, 1983; Abd-el-Jawad, 1987; Versteegh, 1993; Al-Wer, 2002, to mention but a few studies). According to Abd-el-Jawad (1986: 53), standardisation is 'the emergence of a spoken dialect drawing heavily on the standard variety, especially at the levels of phonology and lexicon'.

Among the studies that investigated DL in Arabic is Al-Rojaie's (2013) study on the dialect spoken in Al Qassim area in Saudi Arabia (QA). He examined the effect of linguistic factors and social factors, such as age, gender, and level of education on (k) affrication in QA, a local urban dialect spoken in Al Qassim area in Saudi Arabia. As a result of work and study-induced migration to the Saudi capital, Riyadh, speakers of QA are brought into contact with speakers of the dialect spoken in Riyadh. His data came from sociolinguistic informal interviews, which he conducted with 72 native speakers of QA, aged between 13 and 55+ years and born and raised in Al Qassim area. Results showed that (k) affrication is determined by linguistic as well as social constraints. One of the phonological contexts is adjacency to high and low front vowels, which contributes significantly to (k) affrication (Al-Rojaie, 2013: 51), a change emerging from inside the linguistic system itself (Labov, 2001:20). Older uneducated male and female speakers retained the use of the local affricated variant /tʃ/. Younger and middle-aged educated female speakers adopted the supra-local variant /k/ more than male speakers

did (Al-Rojaie, 2013: 53). Although the use of the supra-local variant correlated with educated speakers, it reflected a developed social meaning by the local community. The community perceived it as a symbol of new-fashioned, normal, and correct speech. Al-Rojaie (2013: 57) reported occasions related to this. For example, during data collection he heard a mother preventing her daughter from using the ‘old-fashioned’ variant /tʃ/. On another occasion, a younger female speaker linked the use of /k/ to the urban modern speech.

Research on DL in Sudanese Arabic has been given a fair amount of attention during the last two decades in relation to migration (e.g. Versteegh, 1993; Manfredi, 2013). In his study on DL in Sudan, Versteegh (1993) explains the results of contact-induced dialect change in the light of a ‘koineization’.¹⁴ The form of koine occurs through a borrowing and Levelling process among dialects (Ferguson, 1959: 619) and is defined as consisting of Levelling and simplification (1986: 107). Versteegh (1993: 68) views koineization as a process that involves the emergence of a supralocal regional standard at the expense of surrounding language varieties, where this emergence results from the influence of a prestigious variety, which is the Khartoum dialect. With regard to this, he examines DL in Juba Arabic, the Arabic dialect spoken in southern Sudan. Due to political and military tensions in Juba, Versteegh could not conduct any fieldwork there. Therefore, he used a dissertation as a source of data (Versteegh, 1993: 72).¹⁵ However, he could make some predictions depending on his real-time data as compared to Mahmud’s results. The findings that Versteegh obtained go in line with the findings arrived at elsewhere (e.g. Trudgill, 1986; Milroy, 2002; Auer and Hinskens, 1996), in that regional dialects experiencing influence from neighbouring urban dialects still retain some of their features (Versteegh, 1993: 75). Versteegh’s findings imply a reference to

¹⁴ Versteegh (1993) replaces the term ‘koineization’ with ‘levelling’.

¹⁵ The dissertation is written by Ushari Mahmud in 1979, and investigates trends of syntactic variation change in Juba Arabic, and more specifically aspectual markers.

attitudinal aspects. For example, he states that the change that is taking place in Juba Arabic is not due to regional mixture, but due to speakers' attitudes towards the Khartoum dialect.

In a more recent study, Manfredi (2013) conducted another study on Sudanese Arabic. It investigated dialect mixing and DL in Baggara Arabic, the Bedouin dialect spoken in Kordofan. According to Kerswill and Trudgill (2005: 197), dialect mixing involves the 'coexistence of features originated from different input dialects within a new community, usually because speakers have different dialect origins'. Manfredi aimed to describe the social grounds and structural outcomes of these two processes. His sample came from fifteen hours of spontaneous and semi-spontaneous speech of thirty-four male and female speakers of Kordofan Baggara Arabic (KBA), stratified into four age groups i.e. below 25, 26-45, 46-65, and 65+ years, two literacy classes i.e. literates and illiterates, and four socioeconomic categories i.e. rural pastorals, rural-sedentary, urban-pastorals, and urbans. Manfredi (2013: 152) examined three phonological features: 1- reflexes of the SA (q), and (ð), 2- reflexes of the SA /i/ in initial syllables and the SA /a/ in pre-pausal position, and 3- reduction of medial consonant clusters. In general, the results highlighted the role of Social Network Integration (SNI), levels of mobility and the sense of local identity in DL. The SNI of Ḥawāzma with speakers of eastern-like dialects, who are related with close-knit networks, played a significant role in the convergence of KBA towards such dialects. In relation to this, although speakers of KBA eliminate some of their phonological features in favour of SA, they still retain stigmatised features, such as pharyngeal consonants. It is noticed that dialects that are undergoing change do not become extinct (Milroy, 2002). Manfredi (2013: 160) explains this in relation to a sense of local identity. It is shown that Arabic Bedouin dialects are more conservative than sedentary dialects (Rosenhouse, 2006). Like Versteegh (1993), Manfredi considers DL from the perspective of the influence of local prestigious norms. The speech community investigated are the Arab semi-nomadic cattle herders living in Kordofan. The Baggara dialect is the dialect spoken by the Rawāwga, a branch of the Ḥawāzma tribe. Due

to a political clash between two Arab tribes in eastern Chad, the losing Arab tribes including the Baggara migrated to the Kordofan area and were brought into contact with Fulani pastoral groups. According to Manfredi (2013: 149-150), three socioeconomic factors contributed to DL in KBA. Firstly, a reduced mobility caused by the decrease in grazing lands forced many nomads including Ḥawāzma to settle in urban centres for work purposes. The second factor is the increased involvement of Ḥawāzma in formal education, which put the Baggara under the exposure of Standard Arabic. Thirdly, there is the return of Ḥawāzma migrants from some Arab Gulf states such as Saudi Arabia to Sudan. In these three contact situations, Ḥawāzma Arabs of Kordofan were exposed to three language inputs with different degrees of mobility ranging from no mobility as in situation 2, reduced mobility as in situation 1, to high levels of mobility as in situation 3. Manfredi (2013: 150) focuses on situation 1, and argues that urbanization represented by the rural-urban contact is the most significant factor that contributes to DL.

2.5 Approaches to studying language variation and change

The present study focuses on the notion of SNI, its application in variationist sociolinguistics and its role in DL. It is necessary to present a review of the main approaches followed by variationists. In this section, I discuss the main studies conducted under the different approaches of variationist sociolinguistics. These studies fall into three groups. The first includes the works within the framework of Social Class Approach (SCA). The second set is the social network studies. The third group relates to the Community of Practice approach (CoP). As the present study draws from the notion of the Social Network framework, I focus on studies that employed this approach.

2.5.1 Social Class studies

Language variation has been usually linked to variations in people's social class. In recent years, a large number of quantitative studies has proposed that social class is the main factor that influences language behaviour (e.g., Labov, 1966; Milroy, 1980; and Eckert, 2000). Moreover, they showed a noticeable interaction between a speaker's language usage and his or her location in a social class hierarchy. The first wave of variation studies is associated primarily with Labov in his (1966) study of New York City.¹⁶ This wave is represented by the SCA, which makes use of forms of demographic data extracted from a survey of individuals. Social class is defined and measured in different ways. Meyerhoff (2006: 156) reports two ways of defining social class. The first definition is Marx's distinction of individuals into working class and middle class, depending on their economic situations. A broader definition is the one adopted by Weber, who argues that individuals can be divided socially in terms of their social actions, such as life style and life chances. It is shown by some sociolinguistic studies that an individual's location in the social class hierarchy correlates to his or her linguistic choice. For example, users of standard language occupy the high positions in the hierarchy, such as upper and middle class (Labov, 1966). On the other hand, the use of vernacular forms are associated with lower classes, such as the working class (Milroy, 1980). In some cases, people may move upwards or downwards in the social class hierarchy due to changes in life styles and life chances. Meyerhoff (2006: 157) cites some instances. For example, Victoria Beckham, the former Spice Girl, names herself as 'the Second Queen of England' and asserts her right to move upwardly in the social class hierarchy. This movement, according to her, can be achieved by obtaining life styles characteristic of upper-class people,

¹⁶ In this study, Labov investigated five **linguistic** variables: 1- the presence or absence of final and pre-consonantal /r/ in words such as *ear* and *card*, 2- the the height of the vowel in *bad* and *ask*, 3- the realisation of the vowel in *caught* and *dog*, 4- the realisation of (th), and 5- the use of (dh) in word initial positions (see Labov, 1966: 33-38).

such as attending lavish parties and travelling by air. In terms of attitudes, this change is a two-directional one. In the first direction, it may involve an adoption of out-group linguistic forms, and in the second direction it involves abandonment of in-group linguistic forms; which illustrate how a change in a person's life may change his or her social class. This data have served to discover the leaders of linguistic change (Labov, 2001: 325).

This correlation between the location in the social hierarchy and choice of linguistic variety seems to be clear. The higher the persons' status in the social hierarchy, the closer is their linguistic choice of the standard variety. However, it occasionally overlaps, as it might jump from one social class to another and leave other classes in between. A few decades ago, people's social class and economic prosperity were interlinked; nowadays, the link between class and income is not clear. When class mobility is common and boundaries are not clear-cut, it is much harder to identify linguistic differentiation based on classes, and therefore other methods, such as SNT are preferable. In a few cases, speakers may move from 'above or below the level of conscious awareness' (Meyerhoff, 2006: 171). An example of a change from above is that speakers from the lower middle class may adopt forms characteristic of the group in the upper middle class. It corresponds to the concept of 'downward divergence' used by Giles and Williams (1992: 351). Haeri (1997: 183) views this form of change to be 'introduced by the dominant social class, which is often full with public awareness'. On the other hand, a change from below takes place when speakers located in the second lowest class adopt the linguistic norms of the class below them, such as the working class (Milroy, 1980: 110). This corresponds to 'upward divergence' (Giles and Williams, 1992: 348) in which speakers adopt the linguistic behaviour in the direction of the prestigious variety. Eckert (2012: 88) ascribes this to the method that Labov used to define the social class, which placed individuals within a structure, regardless of their access to standard language and their exposure to language change. This pitfall affects the adoption of this approach in the present study. In Iraq, for example, *gilit* and *qiltu* speakers are distinguished as using two different

dialects rather than belonging to different social classes. In other words, their speech is generally assumed to be homogeneous at the geographical, but not at the social level. Furthermore, there is no clear split among social classes of the speech community of Hīt, and limitations in placing individuals within a structure to which they fit may passively affect the chances of obtaining accurate description of the linguistic behaviour in terms of social divisions.

Labov (2001) proposed a procedure by depending on centrally and peripherally located groups, in terms of age and social class (Labov, 2001: 32) and he found that centrally-located social groups i.e. upper working class and lower middle class tend to innovate language change. Labov (1962) focused on the notion of regional identity and found that the heaviest users of centralised diphthongs /ay/ and /aw/ were younger men who resisted the values of the mainland and identified themselves as ‘Vineyarders’. Despite their adoption of non-standard varieties, local inhabitants do not lose their sense of regional identity, which emanate from the nature of their networks (Williams and Kerswill, 1999: 23). Labov noticed that the realisation of the two diphthongs is taking place away from Standard English vowels.

2.5.2 Social Network studies

Social class is an essential social variable in sociolinguistic studies. However, it should be noted that some social groups are not class-differentiated. In the Arabic-speaking communities, for instance, SC is not the only key social factor that defines patterns of language change. Owens (2001) argues that the concern in defining social class as a social variable stems from the way it is defined. He adds that one of the crucial factors in defining social class is the lack of solid economic and social data that researchers require to build their socio-economic profiles. It can be added to Owens’ debate that another problem in defining social class as an independent variable is the components to be considered in the definition.

For example, in Iraq, socio-economic profiles are composed of education and ethnicity (Abu-Haidar, 1989).

A more recent trend in the variationist studies is the notion of SN theory. SNs are defined as ‘the aggregate of relationships contracted with others, a boundless web of ties which relates out through social and geographical space linking individuals, sometimes remotely’ (Milroy and Gordon, 2003: 117). This concept was first introduced by Barnes (1954) to describe an order of social relationship, which he felt important to interpret the behaviour of the inhabitants of the Norwegian village of Hemnes. He predicted that depending on social status, place of origin and economic activity cannot provide enough information about social behaviour, and that in addition to forming members of social classes, and occupational groups, persons interact meaningfully as individuals. Meyerhoff (2006: 185) argues that it is essential to have some knowledge of the patterns of associations that may exist between individuals who have equal social relationships, such as friends. As regards this, she considers horizontal and vertical channels through which linguistic change spreads. Examples of horizontal channels are those relations linking individuals of the same social status, such as age groups and social class. Vertical channels are slow means of transmitting innovations, such as relations between two generations or across wider divisions.

Blom and Gumperz (reported in Milroy, 1980: 20) found that members of the same small town are divided into networks, each of which adopts different linguistic norms, and therefore carry different social meanings for such norms. Blom and Gumperz’s interpretation focused on the social and local networks, which determine such choices. As Milroy reports, in his study of the Gail Valley area of Kärnten in Austria Gumperz explicitly adopted the concept of social network a great deal, but did not use it quantitatively.

One of the first attempts to explore the SNT was Milroy’s (1980) sociolinguistic study in Belfast. In this study, Milroy adopted SNs of individuals as a means to gather information that can help to understand the linguistic behaviour of individuals. She found that the

linguistic behaviour of individuals should not be accounted for in terms of differentiation in their social class membership, but rather in terms of SNI (Milroy, 1980: 135).

Milroy claims that the findings of her Belfast study go in line with Labov's conclusions in his Harlem study, which investigated the structural and functional variations in the non-standard African American Vernacular English of northern ghetto areas and the Standard English required in the classroom in Central Harlem, New York USA. However, she highlights some of his weak points. Firstly, although his focal point of the network approach was to examine individual relationships without assuming their group membership, Labov examined relationships within bounded groups, with no clear-cut focus on individual SNs. Secondly, his analysis method depended on dividing his informants into centrally and peripherally located groups within the social class hierarchy. SNT was demonstrated as a good tool to examine the individuals' SNs and their linguistic behaviour. For example, Milroy found that the correlation between the informants' social network and their language use is better and more clear-cut than the correlation between their social status and the language features they adopt.

The techniques that Milroy used to measure the network ties of individuals are as follows. Each person's 'ego' is viewed as a focus, from which lines radiate to points, where points refer to the persons with whom they are in contact. The persons to whom an ego is linked directly, construct their first order network zone. Each of these has contacts with others, whom the focus does not necessarily know. They are, therefore, the ego's second network zone. The first and second zones are the most important zones in the individual's network, as they have direct effect on their accommodation. Milroy used the concepts of density and plexity as indicators to examine her informants' integration into the local communities. A quantitative approach would involve specifying speaker A's SNs as more or less dens speaker B's, rather than defining them as closed or open networks without a reference to different structures of personal networks. Density refers to the structure of an individual's contacts. A more dense

network is the one in which the large number of persons to whom the ego is linked, are also linked to each other. The more members within an individual's network who know each other, the denser his network tends to be. The less they know each other, the less dense his network is. Plexity relates to the relationship to members within an individual's social network. The social network may be uniplex or multiplex. Uniplex exists when individuals are connected in a single capacity, or having a single type of relationship, such as friendship. Multiplex, on the other hand, is the case where many members of a network are connected to each other by more than one form of relationship, such as kinship, neighborhood, friendship, and work. The concepts of density and plexity are 'good indicators of the pressure imposed on a person to adopt social values, including linguistic norms of his local community' (Milroy, 1980: 139-141) and good indicators of the individual's level of integration into the local community. However, they were not the only indicators, especially in cases where the relationships within the cluster or group are denser than those existing outside them, and then are considered as relationships of 'like content'.

The majority of sociolinguistic studies under the framework of SNT tend to follow the trend of investigating speakers with close-knit networks, who resist a change from outside the group (e.g. Milroy, 1980; Kerswill, 2003). However, there has been some attempts to tackle those groups whose social networks are loose-knit or have weak ties. In the literature so far, to my knowledge, Boronti-Ricardo's (1989) study tends to be the best-known study, which follows the weak tie model, proposed by Milroy and Milroy (1985). It has been shown that groups with dense and multiplex close-knit networks have high network strength (Stockwell 2007: 52) and resist change originating from outside the network. On the other hand, those whose networks are weak approximate closely to the language norms of the outside groups and are mostly exposed to language change (Milroy and Gordon, 2003: 128). Milroy and Milroy, 1985 (in Milroy and Gordon, 2003: 129) argue in support of this, and believe in the view that the loose-knit model is able to account for some languages, which are more exposed to

resisting change than others are. They also argue that the influence from outside the group tends to have a negative correlation to the strength of 'in-group ties'. It seems that examining those weak networks is profitable as they are likely to be important when they comprise a good portion of the community, and consequently build a 'bridge' which Granovtter (1973, reported in Milroy, 1980: 200) defines as 'the sole link between two close-knit groups' and he considers weak ties as significant channels, by which the change transits from one close-knit network to another.

The decision on whether the network is structured by strong or weak ties has extensively been related to the notion of mobility. Labov (1980) states that the innovators of change are located centrally in the social class hierarchy. If one looks at this from the point of view of which class members are more mobile, one is able to clarify the matter. Due to work requirements, members of the upper middle class move more than those located in the lower class. Consequently, they would have more contact with members from outside, rather than inside their social class or network. Motivated by this, Milroy and Milroy's (1992) account seems to fit to the point. They propose that, due to the likelihood of centrally-located social class members having more loose-knit SNs, they are then more likely to innovate changes. Their conclusion comes to support their argument that loose-knit networks encourage change, while close-knit networks resist it.

In this study I do not focus on individuals' SC status in locating leaders of change in Hīt. I make use of Kerswill and Williams' (1999) argument in considering SC and SNs separately. Sociolinguists rely on different strategies to measure SNI. These strategies will be reviewed in the methodology chapter (see Chapter 4).

2.5.3 Community of Practice studies

A more recent approach to the study of language variation and change is the community of practice approach (CoP), which is mainly pioneered by Eckert (1980) and is referred to as the ‘third wave’ approach. Central to this approach is the notion of the linguistic market, which emphasises ‘the relation between variation and the production of a self in a symbolic economy’ (Eckert, 2000:13), and constitutes the source of forms other than the global standard and the vernacular (Clark, 2008: 267). As Eckert, 2000: claims, this approach differs from the first and second waves studies in that it focuses on agency rather than structure. However, it does not ignore the significance of structure, but rather ‘emphasizes the role of structure in constraining practice and, in turn, the role of practice in producing and reproducing structure’. A good example of people’s practices is role of jocks and burnout social categories in the adolescent age group. These two social categories differ in ideological interests relating to their experiences over time and within a small social circle i.e. school.

In her (1988) study, Eckert employed the CoP as an idea related to the SNs of adolescents in the Detroit area. She focused on the idea that the spread of local phonological features among adolescents is driven by their SNs independently from their parents’ socioeconomic class. This idea was adopted to locate the interactional settings in which social meaning is indexed by language. The concepts employed in both SN theory and CoP differ from each other in some points; whereas SNT focuses on the personal networks, CoP focuses on particular network clusters of groups, with less reference to a particular individual. In this case, it follows a trend similar to that of SC approach. Moreover, it investigates social networks of specific age groups, such as adolescents in specific contexts, such as schools.

The CoP approach has not been applied in Arab sociolinguistic studies due to culture-specific factors. For example, in the Arab world, religion, ethnicity, and tribal affiliation are classified as fixed independent variables (Bassiouney, 2009: 123). When any of these

variables dominates in an area, it helps to create the community of practice. This approach is applicable in the speech communities, which are divided into groups under the same variable. In Bahrain, for example, the division of the population into Shi'ites and Sunnis, where the former group is politically dominant, obliges individuals of either group to select their community of practice from the other group. This does not apply to the case in Hīt, as the entire population falls under one communal group i.e. Sunni Muslims, ethnicity i.e. Arabs and extremely similar tribal traditions. Potential language change in this community is then to be tested adopting SNT. This provides more accurate explanations as to the social motivations and directions of the change.

Unlike SC and SNT, CoP studies variation as a source for the 'construction of social meaning' (Bassiouney, 2009: 94). In the light of this, an individual's adoption of the linguistic variables is motivated by his or her tendency to build an identity and select the community of practice.

2.6 Summary of Chapter Two

I started this chapter by presenting a general overview of the concept of DL and an exploration of different social and linguistic factors that can contribute to this phenomenon. I gave a review of the situations that can be described by an increased diffusion of linguistic forms as an outcome of people mobility. I then provided an overview of a number of processes that are identified in the literature on language variation and change to contribute to DL, such as supralocalisation, levelling, convergence, and feeling of self-identity. In conclusion, it is clear that the majority of sociolinguistic studies on DL in Arabic dialects identified factors similar to those highlighted worldwide. In the Iraqi context, social aspects leading to DL, such as spatial mobility and diffusion of linguistic forms did not receive as much attention as the typological mapping of IA dialects, which tend to be the only model adopted in previous sociolinguistic studies on these dialects. Despite the fact that Iraq has witnessed significant

social changes since the 1980s, the sociolinguistic situation in Iraq is still poorly understood. Understanding the importance of the social meaning of linguistic changes in a situation to DL could be crucial. No previous study demonstrated the degree to which the spread of linguistic features are based on social networks combining people of different regions or lifestyles in Iraq, a problem that may arise because each region comprises different sub-dialects that people evaluate being more prestigious, which do not have clearly defined as motivations for the acquisition of new dialect forms. Therefore, I aim through this study to use these factors in a comprehensive view of DL in HIA, combining a qualitative study of the social value of linguistic features and language attitudes with a quantitative study of linguistic data derived from spontaneous informal speech. The present study contributes to, and different from the previous literature in that: 1- it will highlight the effect of people's mobility on their language behaviour, and 2- a special attention will be given to particular kinds of social considerations that underlie people's language choices. A brief description of the phonology of HIA will also contribute to the dialect mapping of IA. By so doing, the present study will show how HIA is distinguished from other IA dialects, and try to put it somewhere in this mapping.

Chapter Three: Communication Accommodation Theory and Dialect

Contact

3.1 Introduction

In this chapter, I give an account to the main variationist studies conducted within the Communication Accommodation Theory (CAT) and dialect contact. Firstly in § 3.1, I present a sketch to the CAT as a theory adopted in variationist studies. Secondly in § 3.2, I provide an overview of the main studies conducted within the dialect contact framework. Thirdly in § 3.3, I discuss the studies that sociolinguists employed following the CAT theory. In § 3.4 I summarise the whole chapter.

Communication Accommodation Theory (CAT) investigates ‘motivation, communication strategies, and reactions to the behaviour of others that characterise communication across all kinds of intergroup encounters’ (Gallois et al., 1995: 116). In line with this theory, which is adopted by Giles (1973) and his associates, accommodation results from individuals adapting to the speech of others by reducing the differences between varieties and creating new forms. In contrast, speakers might move away from the speech of others by using linguistic features not found in their native variety. In situational settings of short-term accommodation between speakers of different social dialects (Giles, 1973), or long-term accommodation between speakers of different regional varieties (Trudgill, 1986), it is more likely that speakers adopt each other’s behaviour, including language patterns, to attain specific goals (Giles, 1973: 90). Prince (1988: 307) views accommodation as a change in the linguistic output of a speaker resulting from the linguistic output of the interlocutor.

Three strategies of accommodation are recognised as used by speakers: convergence, divergence, and maintenance. With regard to communicative principles, it is predicted that convergence strategies are psychologically positively evaluated by receivers. On the other hand, divergence and maintenance trigger negative evaluations due to ‘dislike’ (Coupland and

Coupland, 1988: 7). Convergence is the strategy where speakers adapt to each other's communicative behaviour, including linguistic settings, in order to reduce the differences with their interlocutor's behaviour (Coupland and Giles, 1988). The motivation for a speaker's convergence is to gain 'social reward, represented by increase of attraction and approval' (Boronti-Ricardo, 1985; Coupland, 2007). For example, Abd-el-Jawad (1987: 366) found that among the motivations of speakers' adoption of other local prestigious features is to 'share with those of other dominant groups, an act of integration and a desire for upward social mobility'. According to Giles and Smith (1979), Accommodation Theory is most closely concerned with how individuals modify their speech to gain social approval from other groups. The degree of convergence depends on the extent of one's need to seek approval. This process is what Giles and Smith (1979: 47) term the 'Similarity-Attraction Process', which follows the notion that 'the greater one's need for approval, the greater will be one's tendency to converge'.

The second strategy of accommodation is divergence. Speakers signal a psychological movement away from others within the same social interaction (Coupland, 2010). In contrast to convergence, divergence reflects individuals' desire to distance themselves from another group and to index their own identity. Therefore, the engagement in this form of accommodation can be motivated by the desire to assert identity. It was found that divergence involves extensive use of new language features, which speakers perceive to be modern. For example, Labov (1962) reported that in Martha's Vineyard, local inhabitants of the Vineyard resisted the values of the mainland and identified themselves as 'Vineyarders'.

The third general possibility of accommodation is speech maintenance, which refers to continuing in one's own style either away from parents' speech, or as a deliberate reaction to it (Gallois et al., 1995). It is the strategy in which a person 'persists in his or her original style, irrespective of the communication behaviour of the interlocutor' (Gallois et al., 1995: 127).

According to Coupland and Coupland (1988: 7), this strategy is able to indicate significant ‘psychologically dissociative interpersonal meanings’.

A distinction should be drawn between short-term and long-term accommodation (Trudgill, 1986: 3, 11). Short-term accommodation is a person’s adaptation to an interlocutor in a particular context and on a specific occasion. It takes place in various interactional situations, such as a discourse between a student and a teacher, between a worker and his boss, and a discourse, which takes place in public places and is typically motivated by social differences between parts of the contact situation, involving either single individuals or whole groups. An example of short-term accommodation is the case where, in inter-communal contexts, Christians in Baghdad, who use the *qiltu* dialect spoken by Christians in Baghdad (CB), accommodate to the speech of the *gilit* dialect of the spoken by Muslims in Baghdad (MB) by using it (Abu-Haidar, 1991). Likewise, Jews in Baghdad speak the *qiltu* dialect of the Jews in Baghdad (JB) at home and with same-religion peers i.e. in-group contexts, but they speak the MB dialect when they communicate with Muslims i.e. out-group contexts (Abu-Haidar, 2006: 231). Short-term accommodation is considered a transitory adjustment above the basic level in response to a particular social circumstance (Chambers, 1992: 675), but in contrast to long-term accommodation, it does not function as evidence of Dialect Levelling (Trudgill, 1986).

On the other hand, long-term accommodation, which refers to a change in an individual’s speech habits, appears to be a sort of certain degree of dialect adjustment maintained by the individual in all situations in the contact domain (Chambers, 1992: 675). Auer and Hinskens (2005: 335-336) propose a hierarchically ordered set of stages of accommodation. The early stage is represented by face-to-face communication, characterised by the adoption of new features, and/or the loss of older ones. The second stage involves short-term accommodation, where accommodating speakers transfer their innovation from the direct interactional episode with the innovating speakers to habitual individual innovation. The third stage is diffusion,

where innovating speakers spread the features they acquire into their community with whom they have multiplex and dense networks. It is the third stage that brings about language change. Viewing this process in relation to the Social Network structure of speakers, Auer and Hinskens (2005: 353) claim that weak and strong SNs for linguistic accommodation are best tested in terms of internal migration. This stems from the fact that, while accommodating, migrants break down old networks and create new networks.

3.2 Research in the dialect contact framework

In the course of his intense research activity on English dialect variation and change, Peter Trudgill contributed significantly to examining some major issues related to the contact-induced decrease of linguistic dissimilarities between mutually related dialects (Trudgill, 1986). His (1986) *Dialects in Contact* study is an investigation of dialect levelling (DL) within a contact framework and is basically concerned with contact between two or more mutually intelligible dialects. Chambers (1992: 674) argues that the value of Trudgill's book stems from the fact that it 'makes a convenient landmark for the growth of recognition of mobile populations, at the heart of dialect studies'. Trudgill (1986: 3) deals with the case in which 'regionally mobile individuals' accommodate to a 'non-mobile majority' and views the geographical spread of linguistic features from one place to another as a result of contact between individuals (Trudgill, 1986: 39).

Research within the contact framework in Arabic has revealed an interrelationship between linguistic change and people's mobility and contact. It is assumed that the common features of the process by which modern Arabic dialects originated and developed is one of convergence, rather than divergence (Versteegh, 1993: 68). Since the publication of Peter Trudgill's book *Dialects in Contact* (1986), a number of researchers investigated linguistic changes caused by mobility and internal migration (e.g. Kerswill and Williams, 1999; Britain,

2009). In the Arab world, a number of studies have examined situations of dialect contact in some Arab countries, namely Bahrain (Holes, 1987), Syria (Jassem, 1987), Jordan and Palestine (Al-Wer, 2002, 2007), Morocco (Hachimi, 2007), Saudi Arabia (Al-Essa, 2008), and Sudan (Manfredi, 2013). The majority of these studies follow Trudgill's framework in that they investigated language change resulting from contact between two or three mutually intelligible dialects. Most importantly, most of them focused on war-induced internal migration. Despite the mass waves of war-induced internal migration in Iraq since the early 1980s, which brought the two main dialect groups i.e. *qiltu* and *gilit* into contact, no study was conducted to investigate the outcomes of this contact. Noticeably, most of these studies examined the speech of immigrants and not the speech of the host communities. In other words, they focused on the speech of mobile populations in Trudgill's terms. This study will be different in that it will examine potential change in the speech of the non-mobile populations.

Jassem (1987) investigated phonological change and variation in the speech of the Golan immigrants in Damascus, Syria. Immigrants' realisation of eight linguistic variables were examined in relation to social variables, education, gender, age, and area. His study is one among very few studies that are concerned with immigrants' speech. The immigrants' speech situation is a tri-dialectal one, in that three language varieties are used in the speech community under investigation: the immigrants' dialect, which they brought with them from the Golan Heights, the Damascus dialect spoken by the host community, and Standard Arabic (SA), which is used mainly by educated people there. Gender differences are significant among younger informants, but are insignificant for the older informants. Younger women in all social groups were found to lead change away from the standard variety. They adopted local non-standard, but prestigious features. For example for the SA (q) variable, younger women used /ʔ/ more frequently than men did. One of the interesting findings of this study is related to level of education. Level of education comes to contravene the majority of studies,

which correlated it with the use of the standard forms. In this study, level of education correlated positively with the use of immigrants' dialect, but inversely with the adoption of the host dialect.

Al-Wer (2002) investigated contact-induced language variation and change in Amman, the capital city of Jordan. She examined the dialect situation between Jordanian Arabic represented by the Sult dialect and Palestinian Arabic represented by the Nablus dialect. She used as a sample for her study 30 informants covering three age groups and ranging in age from 12 to 70. The outcome of this form of contact is a koine represented by the emergence of new features which are part of neither of the two dialects. Koine is a new variety which occurs as an outcome of contact between two or more dialects.¹⁷ The new language varieties resulting from contact between languages are called creole and pidgin. Creole may be the first language of some groups of speakers and is used in all social functions. Pidgin is a contact language, which is the first language of neither group and is used in specific social contexts (Meyerhoff, 2006: 307,312). Siegel (1985: 361) claims that Blanc (1968) is the first author to use this process in his study of Hebrew. Siegel (1985: 363-4) distinguishes between 'regional koine' and 'immigrant koine'. Regional koine comes into existence through a contact between regional dialects and remains in the place where the dialects under contact are spoken, and it is sometimes spoken outside the region, as is the case with koineised colloquial Arabic and Greek koine. The immigrant koine differs in that the contact between the dialects does not take place in the place they originate, but in the region in which big numbers of immigrants come into contact. It then replaces the earlier features. An example of this type is the Fiji Hindustani (Siegel, 1975, 1983, reported in Siegel, 1985). Female informants were found to use features of the new dialect more frequently than male informants did (Al-Wer, 2002: 78). For example, they fronted /a:/ more often than the males did. On the consonantal level, the

¹⁷ One of the concepts that Trudgill discussed is the process of koineization which involves levelling and simplification (1986: 107) and occurs through a borrowing and levelling processes among dialects (Ferguson, 1959: 619).

realisation of /g/ played a significant role in defining gender differentiations and determining the sense of identity among them. For example, while their feeling of local identity necessitated males' adoption of the Jordanian /g/ variant, females replaced it with the Palestinian variant /ʔ/ (Al-Wer, 2002: 67). Except for /g/, male and female speakers favoured all the Palestinian consonantal features. While in most of the sociolinguistic studies examined contact situations take place between urban and rural dialects, this method does not apply to the situation in Jordan. Al-Wer (2002: 65-66) ascribes this to the fact that before the growth of Amman, the linguistic situation in Jordan was lacking urban centres and consequently lacking urban populations.

One of the cases that follows the urban-rural competition is Hachimi's (2007) that is between the Fes and Casablanca dialects in Morocco. One evidence of new dialect formation is the case where the youngest informants used a hybrid of Palestinian phonological patterns and Jordanian phonetic patterns. Al-Wer (2002: 77) employs Trudgill's concept of 'fudged form' and argues that it is possible to have a reverse rule where informants adopt phonological patterns characteristic of Palestinian Arabic and phonetic patterns characteristic of Jordanian Arabic. Hachimi (2007) investigated the linguistic and social outcomes of the migration-induced dialect contact between Fessi and Casablancon dialects in Morocco. She examined the role of Levelling and maintenance in constructing the social identities of fifteen Fessi women migrants in Casablanca (Hachimi, 2007: 98). Her study, therefore, aimed at revealing the interaction between migrants' sense of identity and DL and maintenance. Hachimi made use of the notions of in-group and out-group contacts and interspeaker accommodation. The concept of local identity stems from the fact that Fessis carry higher social and linguistic status. Socially, migrants had moved from a 'bourgeois' city i.e. Fes to a city with no history (Hachimi, 2007: 100). With regard to the linguistic status, the Fessi dialect is older and better established than the Casablancon dialect. In addition, the Casablancon dialect is considered by Fessis to be 'rural, non-prestigious and masculine' (Hachimi, 2007: 104). The decision to

examine women's' speech rather than men's speech that women have the motivation to accommodate towards a 'masculine' dialect. Results showed an interaction between age of exposure and Social Network Integration (SNI), and that most of the levellers of Fessi features have relatively weaker SNI with in-group rather than with out-group members (Hachimi, 2007: 107). The main finding was that all informants retain the Fessi variant /q/ in all lexical items, except for the verb [qa:l] 'to say' for which women fall into [qa:l] and [ga:l] producers. One interesting finding was that adopting [ga:l] allows them to sound 'normal' and casts them as Casablančan. Moreover, the study showed a significant correlation between maintenance of features of Fessi dialect, positive attitudes towards it, and strong in-group contacts. Interestingly, both levellers and maintainers showed positive attitudes towards their local dialect. This is despite the existence of a correlation between DL and negative attitudes.

Al-Essa (2008) examined the consequences of dialect contact between two varieties in Saudi Arabia: the Bedouin Najdi dialect and the sedentary Urban Hijazi dialect. In other words, the contact takes place between a conservative dialect i.e. the Najdi dialect and a dialect undergoing 'reduction' of some of its features, which is the Urban Hijazi dialect (Al-Essa, 2008: 1). However, unlike other Arabic sedentary dialects such as Cairene Arabic, Urban Hijazi dialect still retains some features. Al-Essa investigated the correlation between ten linguistic variables and three social variables (i. e. age, gender and level of contact).¹⁸ She investigated variability in the use of three interdental phonemes /θ, ð, ð^ɕ/ and the affricate /tʃ/. She found that level of contact proved to be more significant than age and gender (Al-Essa, 2008: 133). Degree of maintenance of the Najdi variants by the younger informants is determined by the low level of SNI and limited degree of contact with the Hijazi community.

¹⁸ Al-Essa (2008: 1) examined the following linguistic variables:

1. Five phonological variables: [θ, ð, ð^ɕ, k, g].
2. Five morpho-phonemic variables: The second person feminine suffix (-ik) the third person masculine suffix (-ih), the third person masculine plural suffix (-in), the third person masculine plural suffixes (-aw, -u:n).

Al-Essa interprets this in terms of the younger informants being more related to their parents than to peers from the host community. Consequently, they have higher levels of integration with their in-group members (families), than with out-group members (peers from the host community).

It is claimed that mobile populations with a high level of dialect contact promote the loosening of social ties, and thus giving rise to rapid DL (Williams and Kerswill, 1999: 10). During interpersonal interactions, people modify their communicative behaviour to achieve several goals. One of these goals is to signal in-group or out-group membership (Willemyns et al., 1997: 3). This takes place when individuals have their contacts within their speech communities i.e. in-group contacts, or outside them i.e. out-group contacts. As Coupland and Coupland (1988: 25) argue, deciding on a situation to be 'intergroup', we do two things: we homogenise the out-group members, and adopt the characteristics of the in-group members. Levels of accommodation are associated with the sense of identity. For this, Willemyns et al. argue that informants who are attached to in-group are more likely to adopt maintenance in order to signal differences in their identity (Coupland and Coupland, 1988: 5). Likewise, Giles and Billings (2005: 197) argue that 'when a non-standard speech style is, or becomes, a valued symbol of in-group pride,...individuals who are strongly committed to their social group membership display evaluative preferences for their own variety'. In addition to the sense of identity, motivation toward accommodation depends in one way or another on the amount of in-group as compared to out-group contacts. For example, when out-group contacts appear more frequently than in-group ones, the change is more likely to be away from the individuals' original variety (Britain, 2009). This leads to the process of innovation diffusion, characterised by the emergence of linguistic features with which the accommodating individuals are unfamiliar (Britain, 2009: 4). Although Britain does not clearly adopt it, the notion of 'out-group dense networks' tends to be the main driver of such a change. This takes place when individuals move to live in a new speech community; they begin to replace some

of their features with others from the host community (Trudgill, 1986: 40). In this scenario, as migrants will desire to use forms from the host dialect, they will disfavour native forms that are stigmatised in their native dialect. This might lead to what Trudgill calls 'interdialect' forms i.e. forms that are intermediate between the migrants' native dialect and the host dialect. It was found that dialect maintenance is identified in individuals with close-knit relations (Milroy, 1980), while Levelling was typical of those with loose-knit ties (Kerswill, 2003). For example, Belfast residents come into contact minimally with outside communities due to their in-group dense networks. Trudgill (1996: 12) directly associates close-knit networks with low contact cases, and loose-knit networks with high contact situations. His hypothesis was supported by Milroy's finding that it is the close-knit relations which enable members of Belfast's working class to preserve their allophonic system (Milroy, 2002: 10).

Kerswill (1993) examined the role of dialect contact in defining the notion of the speech community that Labov applied in his New York (1966) and Norwich (1972) studies. He applied four of Labov's community criteria: 1- Nativeness of speech community members, 2- The existence of systematic patterns of linguistic variation, 3-Uniform evaluation of linguistic features, and 4- How closely related the language varieties are; and he examined the effect of removing the nativeness criterion (Kerswill, 1993: 36). With the aim of testing the presence of linguistic boundaries between the native residents of the Norwegian city Bergen and the rural migrants, he applied a dialect perception test which revealed no significant distinction between the two communities, and that the rural migrants' language was well interpreted when related to the migrants' networks with the whole community. This is ascribed to the fact that the migrants in Bergen, who originally came from Stril, display the effects of long-term accommodation, which consequently reduces any signs of native-to-non-native distinction. In light of this finding, Kerswill (1993) presented a model where the whole community falls into two tiers. These are the 'lower tier', which covers natives and subgroups and partially corresponds to Labov's 'smaller-scale community', and the 'higher tier', which includes the

remaining population and fully represents Labov's 'larger- scale community'. As for who affects whom, Kerswill (1993: 51) employs the notions of 'focused' and 'diffuse' speech. The former is found in communities characterised by close-knit networks, whereas the latter occurs in communities undergoing high levels of social mobility. Furthermore, Kerswill suggests that the communities under study, may carry features generalisable elsewhere, but he did not clarify which communities he meant. In his study, he supports Torgersen and Kerswill's (2004) conclusion that internalised individual factors affect linguistic change more than external factors.

The concept of the linguistic market, adopted by the community of practice approach pioneered by Eckert (1988), may take place in situations of language, as well as dialect contact. An example of the language contact framework is the case of the Dutch Limburg, a small village located on the Dutch-German border, in which Levelling moves not in the direction of Dutch, but towards a new standard language, which is German. This form of change, is what Britain (2009: 4) terms 'innovation diffusion' which implies the emergence of new features, far away from the levelled and diffusing dialects, rather than 'Levelling', where the resulting variety still possesses pre-existing features. This tends to be due to the expectation that 'out-group contact' appears more than 'in-group contact' (Britain, 2009: 41).

The concept of the linguistic market is observable in most, if not all instances of dialect contact in the Arab world. In the western world, the standard-to-nonstandard conflict tends to be a predominant issue because English is a spoken variety where other varieties either converge to it, or diverge from it. The situation in Arabic is different due to the existence of Arabic diglossia, which means that Standard Arabic or, SA is not a spoken variety (Ferguson, 1959).

3.3 Research in the Accommodation framework

It is widely assumed that when distinct varieties of the same language come into contact, some kind of linguistic accommodation essentially occurs (Trudgill, 1986). In addition to this type of accommodation, which takes place over a long period of time (long-term accommodation), the CAT combined the psychological, social, and linguistic behaviours that people reveal when communicating with each other (Coupland et al, 1988) and generated research about contexts of social interactions within a short time (short-term accommodation), such as media (Bell, 1991), intergroup encounters (Chakrani, 2015), interethnic contexts (Holes, 1986), medical sessions (Hebl and McDonald, 2014; Watson *et. al*, 2015), work interviews (Willemys et al., 1997; Coupland, 1984), and education settings (Gasiorek and Giles, 2012). In the following paragraphs, I review some of these studies.

Hebl and McDonald (2014: 472) examined the use of CAT as a framework to explore communication strategies used by older adults and their care practitioners during medical ambulatory care sessions. They found that CAT proves to be a good framework for exploring communication strategies in this context of social interactions. One significant finding of this study is that it revealed the importance of age in the choice of pain topics. Older patients used certain communication strategies as a means of taking the more active role in their health care. This is regardless of the importance of pain topics.

Nilsson (2015) applies CAT to investigate the micro-level management of language variation in everyday conversation and to relate this to the dialect situation in Western Sweden. He asserts the importance of CAT and interactional analysis to modern sociolinguistic theory due to their ability in explaining processes behind language change and stability.

Accommodation competence tends to be another face of language input or the linguistic market as well as a factor able to underline speakers' attitudes. Ennaji (2002: 83) interprets Moroccan teachers' and students' disfavouring of Arabisation to be an outcome of 'lack of

competence' in SA, which plays a significant role in their negative evaluation of it and consequently affects their attitudes toward it. Gallois et al. (1995: 116) point out that speakers do not accommodate to the actual behaviour of others; they instead converge to or diverge from the communicative behaviours of their peers. In other words, the strategy of accommodation that speakers adopt depends on their perception and evaluation of their partners. When investigating the extent to which job applicants accommodate to the accent of the interviewers, Willemyns et al. (1997) adopt the notion of subjective and objective accommodation in relation to speakers' identity. In the first case i.e. Subjective, accommodation is perceived by the speaker or the listener. In the second case i.e. Objective, accommodation is judged positively by them. When discussing the concept of competence and performance in linguistic theory, as Hymes (1971: 7) argues, certain 'functional varieties' of a certain language are considered as carrying different values and uses within a speech community. These values, I argue, stem from two resources: the degree of input or exposure to a language variety, and the social evaluation of such an input. Worth mentioning here is that for Arabic speakers, the only sources of input of SA are religion (represented by prayer and Qur'an recitation), media, and education. However, none of these inputs construct a motivation for accommodation toward SA.

Research in a number of Arabic-speaking communities has shown the existence of the status-hierarchy differentiation between non-standard varieties. A number of Arab linguists agree that, although adopting 'prestigious' forms, speakers do not converge to the direction of SA. Ibrahim (1986), Bakir (1986), Abd-el-Jawad, (1987), Holes (1987), and Al-Wer (1997) showed that SA does not in all cases function as the spoken standard variety in Arabic. Instead, vernacular dialects showed stronger influence than that of SA, demonstrating that the varieties of certain dominant groups, which are always considering their in-group as carrying high vitality (Gallois et al., 1995), are acquiring a local prestige, which competes with the prestige of SA in informal settings. In contrast, a few studies showed that the prestige variety

that speakers adopt (women in particular), goes in the direction of the standard or literary Arabic (Abu-Haidar, 1989).

It is stated that the dialects which are undergoing Levelling under the pressure of convergence do not necessarily, lose their linguistic distinctiveness (Milroy, 2002: 9) or result in the elimination of the original dialects (Auer and Hinskens, 1996: 10). Holes (1986) analysed the dialectal variation in the use of Classic Arabic (CA) (ك) and (ت) by three communal groups in Bahrain. He found that these groups are socially motivated to converge their speech to SA and local variants, which they consider more prestigious than their own. In addition, they diverge away from their local dialects.

Miller (2005) investigated the process of dialectal accommodation among Upper Egyptian migrants in Cairo, Egypt. She analysed the realisation of 21 linguistic features as produced by seven adult speakers. She focused on the concept of prestige carried by Cairene dialect and found that among the factors behind the slow accommodation process is the interference between Cairene dialect and SA. Furthermore, the degree of accommodation is affected by the type of linguistic features as well as type of interaction.

Speakers may accommodate to non-standard and non-prestigious varieties. For instance, Gibson (2002: 29-30) in his study on accommodation in Tunis Arabic observed a shift toward the Tunis dialect, although it does not function as a prestige variety. In his interpretation of this direction of accommodation. Gibson makes use of Trudgill's (1972) notion of 'covert-prestige', where prestige is not accepted by the whole society. He comments on Trudgill's finding, where accommodation took place toward the working-class variety despite the fact that this variety does not function as a prestigious one. This is in line with Trudgill's (1974) finding that some features are acquired despite the fact that they are not evaluated socially as prestigious.

One aim of the present study is, therefore, to interpret the role of the prestigious variety in DL in Iraqi Arabic (IA). As to whether 'prestigious' means standard features, Al-Wer (1997:

261) points out that ‘there is no reason to suppose that men are more favourably disposed to standard features; they are merely retaining local features which happen to be identical to those of the standard ones’. This supports Swaie (1984, cited in Abd-el-Jawad, 1986), who claims that some linguistic features are perceived as ‘masculine’ or ‘feminine’.

3.4 Summary of Chapter Three

The chapter fell into three sections and a summary as follows: In § 3.1 I introduced the chapter and reviewed the CAT theory with a reference to the pioneer scholars, who adopted this theory. It also referred to the main strategies associated by speakers to accommodate, such as convergence, divergence and maintenance, and types of accommodation as used by speakers, such as short-term and long-term accommodation. In § 3.2, I briefly presented the main sociolinguistic studies conducted under the of the dialect contact framework with a focus on the studies conducted in the context of Arabic dialects in different Arab countries. In § 3.3, I reviewed the studies motivated by the CAT in the Arabic region and worldwide.

To sum up, earlier research has examined the strategies and motivations that interlocutors adopt when accommodating to each other. However, it has shown very few accounts recognizing that the degree of accommodation may depend on the interlocutors’ strength of SNI. Combining SNI that links these interlocutors with the accommodation strategies they adopt offers a strong predictive and explanatory power, since it represents the plan to initiate behaviour.

Chapter Four: Research Methodology and Data Collection

4.1 Introduction

In this chapter, I present a full description of the fieldwork procedures I followed in this study and the methodological issues encountered while conducting my research. I also describe data analysis and indicators of Social Networks (SNs). In § 4.1, I introduce the whole chapter. In § 4.2, I discuss ethical issues and procedures required for the present study. In § 4.3, I clarify the sampling methods followed in the present study with reference to the ones adopted by previous sociolinguistic studies. In § 4.4, I discuss the researcher's status in the community under investigation. In § 4.5, I tackle the problem of the observer's paradox and its effect on data collection. In § 4.6, I explain data collection methods employed in the present study. In § 4.7, I review the social variables of age, gender, attitudes and Social Network Integration (SNI) and present how I formulated these variables in the present study. The methods of calculating and scaling my informants' SNI scores are discussed in § 4.8. In § 4.9, I give an overview of the data analysis techniques. Finally, I give a summary of the whole chapter in § 4.10.

4.2 Ethical issues¹⁹

Anonymity was assured in that I confirmed to my informants that their names would not be revealed and they would be referred to either by numbers or Pseudonyms. Informants were given codes according to when they were interviewed; therefore, H001 is the code assigned to the first informant interviewed and H036 to the last informant interviewed. I informed them that the objectives of my research is to investigate the history of Hīt, and that they could

¹⁹ Prior to conducting the research fieldwork, I needed to complete the ethical approval form to inform the University Ethics Board that my research accorded with the code of ethics employed at the University of Leeds (see Appendix A for the ethical documents).

withdraw from participating whenever they wanted. All participants were given information sheets, which informed them of the research aims and objectives and for what purposes the recordings would be used. Those who agreed to participate in the project were given a consent form to sign as proof of their acceptance to take part in the project.²⁰

4.3 The Sample

The most crucial challenge for sociolinguists is how to obtain linguistic data that truly represent the targeted population and how to obtain high-quality data. In other words, how can the results from a study of the linguistic behaviour of a relatively small sample of informants be generalised to the entire population of a speech community? Sampling indicates the selection of speakers from the entire population to depend on for the purpose of the study. Any social research that draws conclusions about a large speech community when only selected members of that community are observed needs to address the issue of representativeness.

4.3.1 Sampling Methods

The significance of the conclusions arrived at depends on how the sample represents the whole population. As Labov (2001: 38) puts it, ‘A truly representative sample of the speech community, must be based on a random sample, in which, each one of several million informants has an equal chance of being selected. Such a sample requires an enumeration of those individuals, the selection of random numbers, and a vigorous pursuit of the individuals selected’. Similarly, Grafström and Schelling (2014: 279) argue that ‘A representative sample from a population will be a scaled-down version of the entire population, where all different

²⁰ See Appendix G for the Arabic and English information and consent forms.

characteristics of the population are present'. Consequently, a researcher who investigates the speech of a group of people in a given site, might be able to generalise about members of such a group, but could not claim the conclusions represent the whole site, or even its community. Indeed, achieving representativeness is most challenging when surveying a diverse population, as is the case with big urban scopes. There are three methods that sociolinguistic studies adopt for the sampling of informants: random sampling, stratified random sampling, and judgment sampling. Practical issues related to the community under research and the objectives of the study would justify the researcher's choice of any one.

Random sampling, which is pioneered by Labov (1966), is characterised by employing large numbers of participants to achieve a representative sample. Each participant should have an equal chance of being chosen. Knowing the size of the whole population, which is normally achieved by depending on some resources such as pre-existing lists of census records or telephone directories, is important before selecting the sample. This method is criticised in that selecting a representative sample is normally done by means of computational techniques, such as electoral registers, and in that Labov had to remove from his randomly selected sample those informants who did not fit certain criteria that were designed specifically for the selection. For example, Labov's (1966) sample was composed of 340 participants, but was reduced to 88 participants. Therefore, it is not guaranteed that a random sample represents all the segments, which are of interest to researchers (Schilling, 2013: 33). Another criticism put forward against this method is that it focuses on large samples. On-going sociolinguistic research has shown that it is not essential for language variation to be accounted for by using large samples, but rather that it can be achieved by small ones (Sankoff, 1980: 900). Furthermore, random sampling tends to increase the effect of the observer's paradox because the chosen informants are recorded individually out of the social networks within which they used to interact (Milroy, 1980: 41).

Stratified random sampling aims to provide relatively equal numbers of different people or elements, to obtain balanced population proportions (Luborsky and Rubinstein, 1995:98). This method is useful where one component of the population has a lower percentage than other(s) (Baily *et. al.*, 1991 reported in Schilling, 2013). This method was subject to criticism because it does not insure that all the components of the population would be represented in their actual proportions. Instead, it stratified a random sample on the basis of a certain variable, but not on the basis of the suitability of its components. Owing to the criticism put against each of them, both random sampling methods were abandoned in favour of the more realistic and well-suited method of judgment sampling for the reasons associated with each of the methods.

The majority of sociolinguistic studies rely on this method. The types of informants and the sample size are predetermined by deciding the set of criteria, such as informants' ages, genders, social ethnicity, etc.

In the present study, I used judgment sampling to select my informants from the Hīt community. The use of this method is considered valid for two practical reasons. First, as a native speaker of the Iraqi *qiltu* dialect spoken by the Muslim community in Hīt (HIA), who was born and has lived in Hīt all his life, I relied on my inclusive knowledge of the population to build my sample. Second, the well-established community of Hīt justified the adoption of judgment sampling. As Milroy (1987: 27) argues, in places with a well-defined population, whose characteristics are already defined by researchers, judgment sampling is more valid for linguistic research. I selected informants who were born and raised in Hīt and might come into contact with *gilit* speakers in different degrees and situations. The sample is drawn from HIA speakers, who belong to the original sedentary population of Hīt rather than from the *gilit* community.

4.3.2 The sample design and size

Sociolinguistic research is concerned with the size of the sample to be used for the study. With regard to size, linguistic studies tend to use smaller samples than other types of survey studies (Milroy and Gordon 2003:28). This is because linguistic phenomena are more homogeneous, and less subject to conscious manipulation than others investigated by sociological surveys, such as voting intentions (Labov, 1966: 180-181).

Thus, studies on language variation and change do not necessarily require large numbers of informants. Before deciding on the number of informants to be used in the present study, I consider sample sizes of some relevant variationist studies. Pioneering studies on language change used small samples as far as these samples represent the whole population. Sankoff (1980: 51-52) argues that, even for large communities a sample of 150 individuals is ‘redundant’. In his (1966) New York study, Labov used a sample of 88 informants, which was reduced from a preliminary sample of 340 individuals. Trudgill’s Norwich study (1974) consisted of 60 informants, while Milroy and Milroy (1997) based their data on 46 individuals. Milroy (1980) worked with the same number. In more recent studies focusing on dialect change, researchers used smaller samples. Lippi-Green (1989) used a sample of 42 informants. Edwards (1992) used 66 informants, 33 of each gender. Haeri (1997) interviewed 49 informants: 25 women and 24 men. Hilton (2010) recorded the speech of 44 informants, stratified into four age groups. Wilson (2010) had a sample of 39 informants.

Table 4.1 shows the number of informants used in this study stratified by age group and gender.

Table 4.1 The distribution of informants by gender and age

Age group	Males	Females	Total
20-39	6	6	12
40-59	6	6	12
Over 60	6	6	12
Total	18	18	36

The sample of the present study is composed of 36 speakers (18 male and 18 female), who are HIA native speakers, having been born and grown up, or been resident in Hīt for all or the greater part of their lives. Although this number tends to be an adequate number in sociolinguistic research, a small sample of 36 informants corresponds to samples used by other sociolinguistics (see studies above) and is considered capable of producing representative results (see Schilling, 2013). As I am interested in examining age and gender differences among individuals, I stratified the sample into three age groups (20-39, 40-59, and over 60) and I made sure that I had an equal number of male and female informants evenly split in the three age groups. In addition, I included SNI as a third independent variable to examine its effect on the linguistic behaviour of informants.

A sample of this kind requires prior information on SNs, such as friendships, study, work, and lifestyle activities. I obtained these information from two sources: the information sheets that the informants filled in, and their answers and discussion during the interview sessions. Table 4.2 provides information about the participants with identification through code names for confidentiality.

Table 4.2 Research participants

Code Name	Gender	Age ²¹	Place of birth	Education	Occupation
H001	Male	28	Hīt	B.A	PG student
H002	Female	77	Hīt	Primary school	Housewife
H003	Male	36	Hīt	B.A	lawyer
H004	Female	34	Hīt	Diploma	Teacher
H005	Female	34	Hīt	Diploma	Teacher
H006	Male	32	Hīt	Diploma	Teacher
H007	Male	56	Hīt	Secondary school	Employee
H008	Female	49	Hīt	Secondary school	Housewife
H009	Male	69	Hīt	B.Sc.	Doctor
H010	Male	51	Hīt	Primary school	Builder
H011	Female	80	Hīt	Illiterate	Housewife
H012	Male	65	Hīt	Secondary school	Shopkeeper
H013	Female	84	Hīt	Primary school	Housewife
H014	Male	64	Hīt	Diploma	Medical assistant
H015	Male	66	Hīt	Primary school	Driver
H016	Female	55	Hīt	Illiterate	Housewife
H017	Male	61	Hīt	Secondary school	Employee
H018	Female	26	Hīt	Secondary school	Housewife
H019	Male	59	Hīt	Secondary school	Contractor

²¹ The mean age of the informants is:

1. Younger age group: males: 33,5, females: 31,5
2. Middle-aged group: males: 49,8, females: 49,3
3. Older age group: males: 67,8, females: 72

H020	Male	49	Hīt	Diploma	Shopkeeper
H021	Female	54	Hīt	Diploma	Teacher
H022	Female	26	Hīt	B.Sc.	Housewife
H023	Female	65	Hīt	Primary school	Housewife
H024	Female	43	Hīt	Diploma	Accountant
H025	Female	41	Hīt	Diploma	Teacher
H026	Male	35	Hīt	BSc	Teacher
H027	Male	41	Hīt	PhD	Academic
H028	Female	64	Hīt	Illiterate	Housewife
H029	Female	62	Hīt	Illiterate	Housewife
H030	Female	54	Hīt	Primary school	Employee
H031	Female	37	Hīt	B.A	Teacher
H032	Male	43	Hīt	B.Sc.	Engineer
H033	Male	82	Hīt	Diploma	Retired teacher
H034	Female	32	Hīt	Diploma	Teacher
H035	Male	36	Hīt	M.Sc.	PGR
H036	Male	34	Hīt	M.Sc.	PGR

4.4 The researcher

The researcher's status in the community under research tends to exhibit significant impact on his or her ability to access the community and the data to be collected from the chosen sample (Milroy, 1987). Being a member of the community under research, a researcher usually facilitates access to the community and the elicitation of spontaneous speech. Furthermore, the linguistic match between the researcher and his or her informants assures the latter a feeling of comfort and reduces potential difficulties while conducting the

fieldwork. However, being from the same speech community as the informants does not automatically guarantee eliminating the odds of the observer's paradox due to certain social constraints (see § 4.5 for more details on the observer's paradox). Informants might be more suspicious of someone who speaks the same dialect, but whom they do not know, than of a complete stranger, and this might affect their linguistic behaviour. Nonetheless, they will probably be less formal and may produce the required data if they know the fieldworker who collects the data. Speaking the same dialect as her informants and being interested in the linguistic changes in the Najdi dialect helped Al-Essa (2008) in her research. The researcher in this study and his three consultants belong to the Hīti community. I am an HIA native speaker, who is born and has lived most of my life in Hīt. I can claim excellent knowledge of the HIA dialect. My parents were also born and raised in Hīt.

The researcher may be familiar with the targeted community, but not part of it. As Milroy (1987: 80) puts it, 'the closer the fieldworker is matched to subjects in terms of various social attributes, the more successful he or she is likely to be.' Therefore, the researcher is 'more likely to receive help from other members of the local community, and consequently data collection can be more effective' and reduce the potential of 'linguistic accommodation towards a regional, or more standardised variety by the informants' (Hilton, 2010: 125).

The critical security situation in Iraq in general, and in Al-Anbar province, in which Hīt is situated in particular influenced my methodological choices at the time I was doing the fieldwork. One important choice was specifying the research site. The original research site was Hīt. Since October 2014, and due to the military operations taking place in the town, it was impossible to carry out the fieldwork in situ. I was looking for an alternative site, where I could interview native speakers of the HIA dialect. As a result of the situation mentioned above, hundreds of families moved from Hīt to Baghdad and settled there. Therefore, I conducted my fieldwork in Baghdad, where I was able to select my informants from these families. I managed with the help of consultants to locate the potential areas in Baghdad to

recruit my informants. In the variationist literature, several researchers were unable to conduct their fieldworks in the original sites and hence they collected their data in alternative places. Crucially there is sometimes no choice, either due to security issues or because the entire community has moved. As for studies on IA dialects, especially the *qiltu* dialects, two examples come from the *qiltu* dialects of Hīt and Rabia. In his study on KH, Khan (1997) collected his data from native speakers of this dialect, who migrated from Hīt and settled in Beersheba, Palestine. Until the early 1950s, they were living in Hīt. While Abu-Haidar's 2004 target research site was to investigate the *qiltu* dialect spoken in Rabia, she interviewed her participants, who are native speakers of this dialect in Germany, Turkey, and Switzerland.

It is argued that when adults move to a new location, they preserve fixed social norms. Therefore, they are less prone to change their speech behaviour than their children (Kerswill and Williams, 2000a: 68). That is not to say that they do not change, adults still change, but not to the same degree as children. Furthermore, they are thought to have passed the 'critical period' for language acquisition, and hence are less likely to 'make major grammatical and phonological changes' to their language after migration (Kerswill and Williams, 2000a: 67). The critical period refers to a time after which a speaker is no longer preserving his/her native competence in another variety. Research on dialect contact (see, for example, Trudgill 1986) suggests that when speakers at the age of 16 move from one dialect area to another, they lose some of their dialect features and adopt features of the new dialect. I was keen in selecting my informants from the families, who left Hīt to Baghdad between October 2015 and May 2016. The range of the time they lived in Baghdad was between one and seven months and the average period was four months. Due to this relatively short period my informants had lived in Baghdad at the time the fieldwork was carried out, and given that all my informants were adult, I assume that informants did not pick up native variety forms and acquire the *gilit* features, and that any changes (if any) that informants might have done on their native dialect, would be minor. Moreover, some linguists suggested that the most important factor in second

dialect acquisition is the level of SNI in the host community. For example, Lippi-Green (1989: 231) concluded that individuals, men in particular with high degree of integration to the local community are conservatives to their language norms. In the present study, all my informants were living in a tight-knit migrant community with speakers of the same variety (HIA). This is similar to the situation with Khan (1997), whose informants were clustering in neighbouring areas at the time he interviewed them. Such a situation encourages the retention of regional forms. Further, of course some factors favour retention. The informants whom I recorded have been living in a tightly-knit community, which made them have little contact outside the HIA community in Baghdad. Further, they tended to cluster in neighbouring districts in Baghdad. It is argued that the elimination of stigmatised features from the source dialect precedes acquisition of target dialect features. For example Chambers, (1992: 695) reported that the process of second dialect acquisition does not only involve converging to the new variety but also diverging from the old variety. Although he stated that simple phonological rules change faster than complex rules, he did not specify period. However, he argued that most of the lexical changes are made in two years (Chambers, 1992: 682).

I made my first community contacts with my consultants, who helped me to interview my informants. My consultants were born and had lived all their life in Hīt. They were academic colleagues who are holders of Master degrees in English and Arabic and were living in Baghdad at the time I conducted my fieldwork. Two of them were holders of Master's degrees in English Linguistics. The third one is a female, who holds Master's degree in Arabic Literature. I maintained contact with them via face-to-face meetings prior to interviewing my informants. The choice of the consultants is based on two purposes. Firstly, they had good knowledge of fieldwork procedures due to the experience they obtained when they conducted their own research. Secondly, they were HIA native speakers. The two male consultants helped in recruiting participants and arranging the interviews by making essential contacts with the participants already recruited. The female consultant, who arranged with female

participants prior to interviewing them, and introducing me to them, performed the most effective task. Table 4.3 provides information about the three consultants who participated in my fieldwork.

Table 4.3 Information about the three consultants

Code	Age	Gender	Level of education	Role
MKH	38	Male	MA in English Linguistics	Recruiting participants
SN	42	Male	MA in English Linguistics	Preparing for the interviews
QJ	40	Female	MA in Arabic literature	Helping interview female participants

I provided my informants with the consent forms and information sheets, which they filled in and returned to me during the interview sessions, or sent them back to me by post.

4.5 Observer's paradox

Critical to empirical fieldwork is the problem of the observer's paradox. It is defined as the 'double-bind' that researchers face when they are interested in discovering how people behave without being observed, but the only way of doing that is to observe them (Meyerhoff, 2006: 293). Speakers tend to shift away from their casual variety when they are observed by a stranger and/or tape-recorded. Some researchers have already drawn attention to this problem as a serious effect on obtaining a vernacular that a selected sample use when they are not observed. The first attempt to overcome this problem was Labov's rapid surveys and his technique of discussing topics personal to his informants during interviews. According to Milroy (1980: 40), the issue of the observer's paradox forced some researchers who are not from the same speech community under investigation to change the character of the features

they aim to analyse. Sociologists are concerned with the development of several methods to reduce the effect of the observer's paradox in order to elicit speech that is meant to reduce the odds of persons changing their speech habits in a sociolinguistic interview. For example, Milroy (1980: 43-44) used an approach which is a hybrid of insider and outsider investigators. She did not work as a researcher, but as a friend of a friend. At the same time, she was not acting as a stranger, but as a second-order member of the community. By applying the social network technique, she was able to establish the nature of the relationship with her potential informants, with whom she had interacted over a period of time. The disturbed situation in Belfast resulted in three procedural constraints. All three constraints served the purpose of fieldwork procedures, such as resolving the observer's paradox and most importantly entering the speech community (Milroy, 1980, 44-45). Firstly, being a woman reduced the potential of being in danger while staying in the research site because no attention is paid to women. Secondly, entering the community alone enabled her to record much data because women were not viewed as a threat. Thirdly, in order to be able to tape-record her informants, she required to assure them a good faith. To resolve this constraint, she was introduced to her informants as a friend of a student, who had lived there and known to them. This approach enabled her to record as many interactions as possible within a short period of time. In his study on language variation and change in Bahrain, Holes (1987) relied on assistants who were familiar with the informants' culture and circumstances. He relied on teachers from the Bahraini illiteracy-eradication programme to interview twelve of their illiterate pupils. Holes (1987: 25) trained those teachers to interview the village female informants, with whom he could not have separate meetings.

In my fieldwork, two social constraints have been expected to exacerbate the effect of the observer's paradox. The first constraint was the close-knit social ties and the homogeneous structure of the Hīt community. Such ties are not common in the speech communities where most variationist work was carried out. For example, it was more likely that any two persons

meeting for the first time were related to each other by means of tribal ties, kinship, or neighborhood relations. This was evidenced by the fact that one of my consultants, who interviewed four informants, in the early stages before I started my fieldwork discovered, that three of them belonged to the same tribe as his. He noticed that their variety did not change much, especially when they were asked to talk about their local dialect and social habits. When I listened to their recorded speech, I also noticed that compared to other informants, they used more *qiltu* variants. I employed a ‘friend of a friend’ method pioneered mainly by Milroy (1980) in language change in Belfast. In accordance with this method, I interviewed those informants with whom I was put in touch by mutual friends, neighbours or relatives. According to Milroy (1980: 53), when a fieldworker who is a ‘stranger’ is introduced to the informants as a friend of a friend, his chances of observing spontaneous interaction increase. In addition, the fact that I belong to a well-known family in the community and that I was known to most of my informants as an academic at the University of Al-Anbar enabled me to gain the trust of my informants. They allowed me into their homes to meet them and talk to other members in their family, and most importantly, they allowed me to tape-record them.

The second constraint was interviewing younger and middle-aged female informants. For religious and social reasons, I could not have individual meetings with them, being an unrelated male individual. In his study on Regional Dialect Levelling (RDL) in the dialect of Al Qassim in Saudi Arabia, Al-Rojaie (2013) interviewed his female informants with female assistants. In his study on vowel intrusion, elision and *'imāla* in HIA, Ahmed (2012: 4-5) could not record any female informants as they do not interact with ‘outsiders’ and because they are ruled by religious and social factors. Therefore, he could only interview families and relatives of his friends. Likewise, I required their (my female informants’) husbands or other relatives to attend the interviews. This enabled me to reduce the effect of the observer’s paradox and served to obtain as spontaneous vernacular speech as possible. However, one should be cautious here, having a third person present at the interview did have an impact on

the informants' linguistic behaviour by reducing informants' freedom to speak. Nevertheless, this impact has not been effective due to the family atmosphere during the interviews.

4.6 Data collection Procedure

I spent one and a half months (11th May-30th June 2016) conducting fieldwork in Baghdad during which I recorded the linguistic features of HIA by interviewing my informants. The interview is a method of data collection, which involves the researcher interviewing an informant, asking them questions to obtain information on language use and language attitudes (Swann et. al., 2004: 154). In addition to an interview with informants, sociolinguists preferred other formats of data elicitation, such as picture naming, and map tasks followed in mainstream variationist linguistics and demonstrated to be successful. In her study of RDL in the Hønefoss Dialect in Norway, Hilton (2010: 134-135) used a map task technique which, compared to reading and word lists, does not rely on writing to elicit variables, and is suitable for eliciting data from illiterate informants. In her study on dialect contact in Jeddah, Saudi Arabia, Al-Essa (2008: 38) used a picture-naming task. I adopted a hybrid of tried-and-trusted methods in data collection such as informal individual interviews, picture naming, and map tasks.

The sociolinguistic interview tends to be the most commonly used method of data collection within variationist sociolinguistic research (Milroy and Gordon, 2003: 61), and is considered a vital tool in the variationist sociolinguistic fieldwork (Schilling, 2013: 7). It is typically a one-on-one exchange between the researcher and the informant. I adopted individual interviews for one important reason. The conservative character of the Hīt community makes it difficult for informants, especially females, to speak normally in front of a group of people. As was mentioned earlier (§ 4.5), it was difficult to interview female informants individually. Therefore, I conducted group interviews, where a third party was required to be present in the

interviews. This was usually a husband or another relative. In some cases, I relied on my female consultant to interview female informants, who had none of their relatives available at the time of the interview. Having the opportunity of interviewing more than one informant in the same family made it easier. For example, I interviewed five younger female informants in the presence of their grandmothers, who were also interviewed in separate sessions.

My female consultant interviewed six female informants. Prior to letting her conduct the interviews, I gave her instructions on how to operate the recorder and gave her a list of the topics and questions, a collection of pictures, and a consent form to be signed by informants. Owing to her knowledge in conducting fieldwork and tape recording participants, which she had done in her own fieldwork, she was successful in the task that she was given. To make sure that our informants did not accommodate to my consultant when she interviewed them, I have made a sample comparison between two informants, whom I interviewed and other two informants, whom my female consultant interviewed. Their language behaviour was relatively similar irrespective of the interviewer as shown in Table 4.4.

Table 4.4 Language scores of two female informants interviewed by the female consultant compared to two informants interviewed by the researcher.

Interviewer	Informant	Age group	Percentage of use			
			[g]	[tʃ]	Vowel epenthesis	Vowel lowering
The researcher	H001	20-39	3	0	19	25
	H028	+ 60	0	0	13	0
The consultant	H006	20-39	5	0	15	25
	H029	+ 60	5	0	13	0

With regard to the duration of the interview, Labov (1984: 32) claims that the interview should last from 1-2 hours of speech from each speaker. In contrast, Schilling (2013:33) argues that a one-and-a-half hour sociolinguistic interview is time consuming, both in terms of sociolinguistic and linguistic data analyses. Milroy and Gordon (2003: 58) suggest that a

20-30 minute interview can help to obtain sufficient data. However, they agree with Labov's suggestion that the informants' speech is liable to change as the interview lasts longer. Due to time constraints on data analysis, I used a 20-30 minute individual interview, which I conducted at the informants' homes. The data for scoring informants' quantitative language scores for the four linguistic variables and their SNI, which were planned to be elicited in two recorded interviews, i.e. interview (I) and interview (II), were all collected in two sessions.

After initial greetings, the interviewees would ask me about my study in the UK and my family there. In return, I would ask them about their life in Baghdad. This served my purpose of creating an atmosphere of informal discussion. Prior to starting the interviews, I would kindly ask the interviewee to switch off his or her mobile phone or leave it outside the room. In interview One (I), a participant was given a pen or key ring that has the University of Leeds logo worth £10.

The interviews were conducted at informants' homes during the day times. I used a battery-operated and AC adapter-powered TASCAM DR-40 audio recorder to record the interviews. Its small size helped to reduce the effect of the presence of recorders. It was beneficial to use digital recorders like the one I used to make it easy to copy the files onto a computer for analysis. In order to guarantee as good quality of recordings as possible, I asked the interviewees to switch off sources of background noise, such as fans and air conditioners. Owing to the high temperatures, I was also happy to stop recording and let them enjoy the benefit of the fans before switching them off again to resume the interview. Recordings were backed up on: 1- an HP pavilion g laptop, 2- a Dropbox folder shared with the supervisor(s), 3- a 500GB Toshiba external hard drive, and 4- DVDs if necessary.

4.6.1 Interview One (I)

Interview (I) consisted of two parts. In the first part, which lasted for 20 minutes, the interviewees were encouraged to talk about various topics. The ‘conversational network’ method followed by Labov in his Philadelphia study (1984: 35) was employed. This method includes topics, which informants eagerly discussed at length. The choice of the topic was done so that it corresponded to the informant’s age, gender, interests, previous experience, lifestyle habits, and social information. This method put the informants in a more relaxed state of mind. Further, I noticed a state of correlation between the informants’ age and the topics that they talked much more than others. For example, when I asked older informants about stories related to wars and traditions from the old days, they were able to talk at length. A similar thing happened with younger informants when they were asked to talk to me about peers, school days, etc.

The topics, which were discussed in the interview, included the following:

1. Childhood and early school days
2. Games
3. Marriage customs
4. Jobs and work
5. The Hit castle and memories of old town
6. Times of war and conflict
7. Fasting of Ramadan
8. Cooking
9. Neighborhood

The second part of Interview (I) lasted 10 minutes and included a picture naming task. I used this task to guarantee elicitation of some of the linguistic variables of which were expected to occur in low frequencies in the first part. In this part, I gave the interviewees

pictures that included traditional tools and social activities, such as marriage parties, food, and farming.²² For example, to elicit the variants of the variable /a/, I showed them a picture of a torch, and informants would produce the word either with a short vowel [fanu:s^ʕ], or a long vowel [fa:nu:s^ʕ]. Before completing the recorded interview, I would give the interviewees consent forms to sign. In her study of dialect contact in Jeddah, Al-Essa (2008: 40) used picture description to elicit the variants of the variable (ǰ). I prioritised Interview (I) for certain practical reasons. Firstly, for four interviews, background noise affected the quality of recordings, and therefore these recordings were excluded from the analysis. Secondly, for analysis procedures, larger amounts of data require a great deal of time to transcribe. Therefore, Interview (II) was shorter than Interview (I).

4.6.2 Interview Two (II)

The main purpose of conducting Interview Two (II) was to obtain demographic information about my informants such as their age and profession. Although most of my questions have an open-ended format, it was more likely that the Interview (II) session, designed to elicit answers about life-style and attitudes, would be shorter than Interview (I). The longest interview lasted 30 minutes and the shortest lasted 10 minutes. The answers to these questions assessed the informants' variations in network structure, and were used as indicators to quantify their integration with the *gilit* -speaking community. Where appropriate and as part of the interview, informants were shown pictures related to the culture of Hīt which they were motivated to comment on and describe. This helped me to obtain vernacular speech and elicit good repetitions of the required phonological variables. In addition to eliciting vernacular speech, their comments were able to reflect their sense of social and local identity, also giving

²² See appendix I for the pictures.

an idea about the nature of their social networks with the local community and the *gilit* community.

4.6.2.1 Life-style questions

In order to calculate informants' SNI scores, researchers used indexes composed life-style information. For example, Wilson (2010: 78) composed his life-style question index from 13 questions. I asked my informants 10 questions related to their social activities and exposure to the *gilit* dialect i.e. the *gilit* dialect. The first group includes 10 indicators, representing the informants' answers to the lifestyle questions:²³ Indicators of SNI included the following:

1. Exposure to the *gilit* dialect from parents
2. Place of origin of informant's relatives
3. Exposure to the *gilit* dialect at the workplace network
4. Region of origin of informants' friends
5. Leisure time
6. Frequency of contacts
7. Spatial mobility
8. Motivation for going to the *gilit* area
9. Pre- migration contacts
10. Exposure to the *gilit* dialect by media

These questions examined: 1- frequency and intensity of informants' exposure to the *gilit* speakers in various situations; that is, how often and in what ways they come into contact with native speakers of the *gilit* dialect, 2- informants' level of contact with their native community; that is the Hīt community, 3- what factors motivated informants to make contact with the *gilit* speakers, and 4- their future plans regarding working and living all of their

²³ See Appendix E for the life-style questions and their scoring criteria.

lives; that is, whether they would prefer to spend their remaining life in Hīt or any *gilit*-speaking area. Table 4.5 shows speakers' scores on the SNII with their ages, genders, and code names. Informants' SNI score was calculated along a twenty-one-point continuum (the SNI index), informants being assigned a score from 0 (unintegrated) to 21 (highly integrated). A highly integrated individual is the one who is exposed on a regular basis to the *gilit* community in various ways, has most of his or her friends from that community, travels almost regularly to the *gilit*-speaking areas for work, study and leisure purposes, and plans to spend most of their future life in these areas. An unintegrated individual is the one who preserves strong social relations with his or her native community, travels very rarely to the *gilit*-speaking areas, and has the majority of friends and workmates from the Hīt community.

Table 4.5 Informants scores on the SNII

Age group	Younger age group (20-39)		Middle age group (40-59)		Older age group (over 60)	
	Coded Name ²⁴	SNII score ²⁵	Coded Name	SNII score	Coded Name	SNII score
Males	H001	10	H027	7	H009	13
	H003	8	H010	5	H014	5
	H006	5	H020	4	H015	11
	H026	6	H007	6	H017	3
	H035	10	H032	8	H012	9
	H036	10	H019	5	H033	7
	H018	4	H024	6	H013	6

²⁴ Informants were assigned the codes according to first-interviewed first coded. For example, H001 is the first informant interviewed, while H036 is the last interviewed informant.

²⁵ Out of 21 points

Females	H022	8	H021	6	H002	3
	H031	5	H008	7	H011	2
	H034	9	H025	2	H023	7
	H004	6	H016	2	H029	0
	H005	5	H030	4	H028	0

4.6.2.2 ‘Attitude’ questions

The second group includes informants’ answers to attitudes questions. Some researchers employed sets of questions to elicit informants’ attitudes towards the language varieties under investigation. Wilson (2010: 82) used 15 questions to obtain language-related attitudes. In the present study, the attitude part consisted of 9 questions, 7 of which were dialect-related.²⁶

1. Do you think that the *gilit* variety is more prestigious than HIA?
2. Which variety do you consider more standard?
3. When do you use HIA dialect?
4. Where would you like to live all of your life?
5. Has it happened that someone from Hīt thought that you were a *gilit* speaker?
6. What do you think of the *gilit* dialect?
7. Do you speak differently in Hīt than in a *gilit* city?
8. When you return from a *gilit* area, have people ever commented that you pretend to speak the *gilit* dialect?
9. Do you consider that your accent has changed since you made contacts with the *gilit* speakers?

²⁶ See Appendix F for the attitudes questions and their scoring criteria.

These questions sought to examine: 1. informants' attitudes towards the *gilit* dialect, 2. their evaluation of cultural differences between Hīt and the *gilit*-speaking communities, 3. their views on linguistic differences between their native dialect and the *gilit* dialect, 4. their views on the influence of the *gilit* dialect on their linguistic behaviour, and primarily 5. informants' attitudes towards which *qiltu* forms they find salient, which forms they change the most, the least, and so on. All the questions were open-ended in order to allow informants more freedom to discuss the individual issues in detail.

4.7 The independent variables

The linguistic variables elicited from the data were correlated with the four social variables: age, gender and SNI, and speakers' attitudes. In the following sections, I discuss these variables and justify the need to include them in the analysis.

4.7.1 Age

Milroy and Gordon (2003) emphasise the necessity of using age as a social variable to show the different life experiences of the speaker:

Age by itself has no explanatory value; it is only when examined in the context of its social significance as something reflecting differences in real life experiences that it becomes a useful analytical construct. Milroy and Gordon (2003: 39)

In the present study, the informants were classified into three age groups which represent different generations of Hīt. Nevertheless, there is no one-to-one correspondence between the chronological grouping and the generational sequence. In the analysis, reference was made to the age cohort of the speaker. For the purpose of comparison within the same family, reference was made to the generational position of the speaker in the family. My choices of the age

groups were based on my knowledge and experience with the HIA speech community, but perhaps I should have used more objective criteria in distributing my informants into age groups to avoid potential problems associated with successive ages. Nevertheless, I looked at individual variation too and found SNI to override age

While drawing my sample, I was keen in finding informants who represent different generations within the same family. Out of the 36 informants used in the study, three families met this criterion (three informants each). I managed to interview two generations from each family. For example, I obtained data from a father (over 60) and his son and daughter (20-39). This served my purpose to trace differences in the linguistic behaviour across different generations in the same family and to reveal the complications of the sociolinguistic situation in the community. For example, two members of the same family who were of the same age and gender (sisters) revealed different language behaviour. Due to the critical age of adolescence, which is considered as the age between childhood and adulthood, I was keen not to include any informant and managed to recruit my youngest informants whose minimum age was 24 years old. I stratified my sample into three age groups as shown in Table 4.6.

Table 4.6 The distribution of informants by age group

Age group	Number of informants
20-39 (min. 24; max. 39)	12
30-49 (min. 41; max. 59)	12
Over 60 (min. 61; max. 84)	12
Total	36

Sociolinguistic studies have examined language change across time by investigating the variation in language usage of a sample of informants across different age groups. Age has shown patterns of language variation within speech communities reflecting changes in the language usage over time. In order to examine age-related language variations, a sample can

be stratified in different methods. A sample of informants is classified by means of different methods in order to examine age-related variations among informants. One method is to divide informants into groups by chronological age and compare their use of the variables under investigation. For example, a sample may be classified into age groups depending on age limits (e.g. younger, middle-aged, and older). Another method is to group informants into predetermined age stages: children, adolescents, and adults, or classifying them into age groups: young, middle-aged and older informants (Eckert, 1988).

In almost the majority of sociolinguistic studies, age proved to be one of the most important social variables in investigating dialect change over ‘apparent time’ (Labov, 1972: 163). Apparent-time is a method of ‘simulating and modelling real-time change using synchronic data’ (Meyerhoff, 2011: 140).

The main assumption of this method is that language change is hard to observe in a short time. It also relies on the assumption that individuals stabilise their speech patterns after adolescence. Wagner (2012) adopts the term ‘generational change’, which involves a stability of the individual’s use of a certain linguistic form and instability over time in the community represented by the occurrence of new forms. According to the apparent-time hypothesis, the age-related differences represent different periods of time. For example, if the sample of informants is divided into younger, middle-aged and older age groups, the speech of the older age group at the time of research represents their speech when they were young. In the light of this hypothesis, if younger informants use a linguistic feature more than older informants do, it represents a change in progress. In contrast, if older informants use it more frequently, it serves as evidence that this feature is being retained. Age is one of the social variables that are commonly used to categorise the sample of informants in sociolinguistic research.

However, one should be cautious because not all age-related differences in language usage indicate a change in progress. There may be age-graded differences. In accordance with this process, there is the instability of an individual’s linguistic form over the lifespan against a

stability of the community use of the same form (Wagner, 2012: 373). Labov (1994: 84) defines age grading in the following way: 'If individuals change their linguistic behaviour throughout their lifetimes, but the community as a whole does not change, the pattern can be characterised as one of age grading'. According to this process, the use of a language form is associated with a particular age group, but disfavoured by other groups. Therefore, the pattern is repeated in every generation and does not evidence a change across time.

A number of sociolinguists developed methods to maintain a valid diagnosis for a change in progress. One of these is the real-time method pioneered by Labov (1994: 73). This method involves observing a speech community at two separated points of time. Chambers (1995: 206) argues that real-time studies are more practical where the time limit is short. However, I can claim that a longer time frame gives more reliable results as it covers as many informants and data as possible. Meyerhoff (2006: 159) argues that using apparent-time data provides sociolinguists with a 'quick-around' of results they need and reduces the challenge of potential changes to the community. Nevertheless, in communities that witness social and demographic changes, the apparent-time method may not be a better means to predict the rate of change, but it helps to define the start and direction of change (Meyerhoff, 2006: 160).

There are two approaches that sociolinguistic studies used to collect real-time data. The first approach is to look in the literature for any studies that dealt with the speech community under investigation. In his study in Martha's Vineyard, Labov compared the data he collected with observations done by the dialect atlas surveys. This comparison enabled him to define the relative frequency of individuals' speech and to infer what is being changed and who was leading such a change. Pope et al. (2007) replicated Labov's study of Martha's Vineyard forty years after Labov's study. To achieve the aim of close replication of Labov's original work, they used a data collection method similar to the one that Labov followed (Pope et al., 2007: 616-617). For example, they used word lists and reading passages and grouped informants according to year of birth. However, their results were different from Labov's. For example,

although the centralization index correlated with the raising of the onset of the diphthongs [ay] and [aw], the rate of centralization was higher than that found by Labov (Pope et al., 2007: 623). Significantly, they supported Labov's apparent-time hypothesis as a tool with which to use present data to interpret the past. This approach is difficult to apply, especially in the speech communities that have not been studied before.

The second approach is to revisit the speech community after a period of time and conduct the same study. In the research sites which are difficult to visit, such as Trudgill's (1983) study of Norwich, this approach may not be applicable. Longitudinal studies can take two types: panel studies in which the same informants are recorded at different times, and trend studies which use different but comparable informants at each point in time (Wagner, 2012: 376).

Sociolinguistic studies showed that younger informants use new language features more frequently than middle-aged and older informants (e.g., Labov, 1966; Eckert, 1988; Kerswill, 1993; Cheshire et al., 1999; Kerswill and Williams, 2000a; Evans, 2004) and that the use of these features is associated with early life stages, such as adolescence rather than other life stages (Eckert, 1988: 206). Eckert (2000: 7) states that the innovativeness of younger informants in providing more realistic data stems from the fact that when they are recorded, they are in their 'productive years'. Coupland and Coupland (1988: 9) agree that younger informants regularly over accommodate their speech to the elderly by producing 'inappropriate', but 'stereotyped' social persona of the elderly interlocutors. One of the best case studies that focused on adolescents is Eckert's (1988) study in Detroit, USA. Although this study looks to be a class-based one, Eckert examined the role of age in language change by reinforcing the social practices of adolescents, which played a considerable role in formulating their social networks and understanding the motivations of change. In Detroit area schools, the opposition involved two class-based social groups: Jocks and Burnouts. The former group came from the upper half of the local socioeconomic class and formed their

close-knit networks within the school sphere, while the latter group came from the lower half of the same school class and formed their networks in the neighbourhood and more widely outside the school. For instance, one feature in common among Jocks, Burnouts is that, due to the on-going expanding social activities, adolescents in all these groups adopted urban variants different from those used by their parents (Eckert, 1988: 206). The innovativeness of adolescents in providing more realistic data stems from the fact that when depended upon as a source of data, adolescents are in their 'productive years' (Eckert, 2000: 7). They represent a reliable source of change due to their readiness to modify speech when such modification is in its most visible cases (Kerswill, 1993:34), which is also assumed by Eckert (1988:185) in her finding that unlike children, adolescents' social identities are independent of their parents and this enables them to lead a potential language change. Adolescents lead both children and adults in phonetic change (Eckert, 1997 cited in Eckert, 2012). Regardless of the process of change, adolescents still preserve their inevitable role in formulating and directing such a change. At the time they were responsible for language change, adolescents also have the opposite role in resisting diffusion, as in the case of Hull (Neil, 2011: 5), which supports Eckert's (1988) argument that, unlike their social structure, adolescents' linguistic patterns may be independent of family and residences (Neil, 2011:185). However, this tends to contrast the case of Arab adolescents who do not resist, but innovate language change (Abdel-Jawad, 1986, 1987). One of the significant interpretations why adolescents use more innovative linguistic forms than older informants is by reinforcing their social networks.

Chambers (1995) argues that younger people's being exposed to a widespread use of new linguistic forms stems from the nature of their social networks. He states that, while the forms of social relations during childhood are restricted to neighborhood and local primary schools, such forms expand in adolescence to secondary schools and colleges. Due to increasing mobility, these social relations extend to using cars (Chambers, 1995: 184). Cheshire et al. (1999: 1) focused on the role of adolescents in Dialect Levelling in Britain. The research sites

included three towns, which are Hull, Reading and Milton Keynes; three vocalic and four consonantal variables were examined, and two social groups i.e. working and middle class were used. Male as well as female informants were depended upon, and two age groups i.e. adolescents and elderly subjects represent the informants providing the data.

Dyer (2002) investigated phonological change over three generations in Corby, the town located in Northamptonshire, England, in which a contact between displaced Scottish people and native English inhabitants is taking place. Findings showed that Corby has had a new dialect which is a mixture of some distinct local Scottish features and other supra-local ones. The new mixed dialect is referred to as a Corby 'Koine' (Dyer, 2002: 109).

In this study, the informants were classified into three age groups which represent different generations of HIA speakers (see Table 4.6). Nevertheless, there is no one-to-one correspondence between the chronological grouping and the generational sequence. In the analysis, reference was made to the age cohort of the speaker. For the purpose of comparison within the same family, reference was made to the generational position of the speaker in the family. While drawing my sample, I was keen in finding informants who represent different generations within the same family. Out of the 36 informants used in the study, three families met this criterion (three informants each). I managed to interview two generations from each family. For example, I obtained data from a father (over 60) and his son and daughter (20-39). This served my purpose to trace differences in the linguistic behaviour across different generations in the same family and to reveal the complications of the sociolinguistic situation in the community. For example, two members of the same family who were of the same age and sex (sisters) revealed different language behaviour.

4.7.2 Gender

The correlation between language usage and informants gender have been examined in sociolinguistic studies in different parts of the world. These studies showed that to a certain extent some aspects of women's linguistic behaviour differ from those of men. However, researchers interpreted the role of gender in language variation and change in different ways. Gender is not a simple social factor, but a significant factor in structuring people's lives in the society (Labov, 1966). Likewise, Milroy (1980: 113) argues that interpreting the change in terms of the speaker's gender without considering its social values is 'unwise'. Cameron (1998: 271) also states that 'gender is socially constructed rather than natural'. For example, the younger women in Martha's Vineyard might have the opportunity to lead the change if their social values are similar to those of men. In light of this, Ehrlich (2004: 304) states that in order to support the assumption that certain linguistic features or varieties become socially categorised as feminine or masculine, it is needful to refer to the social contexts, activities or communities of practice that men and women are involved in. The following quotation given by Holmes explains this need:

Women are often the family brokers in interaction with outsiders: it is more often women than men who interact with others in shops and neighborhood interactions, as well as in communications with schools, and between institutional bureaucracies and the family. Women's social activities and jobs often involve them in interaction with a wider range of social contacts than men's.

Holmes (1997: 199)

Variationist research on IA does not in many ways support Holmes' view of women being family brokers. Depending on gender in isolation from other factors would be fruitless. The reason is that women's style of social interaction is different from that of men (Labov, 2001: 344). The same may in part be true for the situation in Iraq, as gender is difficult to evaluate unless its role is interpreted by means of other factors. Among such factors is the level of

Social Network Integration (SNI) that male and female informants have. Labov (2001: 345) argues that social networks add crucial information to the leaders of change, and suggests that the leading position of people reflects a style of their social interaction. The gender factor is demonstrated to have a significant correlation with social class; upper middle class women's speech is more standard than men's speech in the same class. This is because women's style of social interaction is different from that of men (Labov, 2001: 344).

One of the most significant findings in the sociolinguistic research into the languages of the world is that women are found to use standard and prestigious features more than men do (Labov, 1966; Trudgill, 1968; Milroy, 1980). Trudgill (1974: 22) found that male and female speakers in Norwich use '-ing' differently; male speakers use more non-standard [n] forms, while female speakers use the standard form '-ng'. Russell (1982: 140) obtained a different finding in her study of Swahili in Mombasa, Kenya; she found that women use vernacular forms more than men do. Russell (1982) investigated the realisation of the dental stops i.e. *t*, *č* in the speech of members of the Swahili-speaking Afro-Arab Muslim community in Mombasa, Kenya. This goes against the situation in Iraq (Abu-Haidar, 1989) in that women in Mombasa, although they had a considerable exposure to Standard Swahili, preferred to use non-standard forms more frequently than men did. Fasold comments on this finding and interprets it in terms of speakers' preferences as they evaluate some linguistic features as 'favoured' or 'disfavoured' (Fasold, 1990: 93). He argues that in formal styles, women do not use socially disfavoured forms, but in less formal styles it is hard to find gender differences in the use of such forms. It seems that Fasold, although he did not clarify it, implied context and not the speaker's gender, which defines what language forms are to be used and under what social evaluations. Central to these evaluations lies the fact that women's preferences to use vernacular forms stems from their negative attitudes to outsiders i.e. those from out of their social groups. In contrast, educated men who have positive attitudes towards outsiders were leading a change away from the local dialect by adopting forms that are more standard.

According to Holmes (1992), there are various reasons why women use features that are more standard. First, by using standard features women are claiming social status in the community. This is because standard speech forms are generally associated with high social status (Holmes, 1992: 157). Holmes ascribes this to the fact that women lack status in the society and that by adopting standard forms they tend to enhance their social status. Women's use of favoured linguistic forms is a rebellion against lower social status (Key, 1975: 103) and their 'unfavoured status' in their own communities (Peng, 1982: 132-133). Ibrahim (1986: 123) describes this as 'women's inferior social position' and interprets it in terms of women being 'less secure socially and psychologically than men'. Similarly, Fasold (1990: 95) views women's social position as traditionally less secure. This lack of status is in part true for Arabic-speaking communities. However, due to social limitations women may not be able to adopt standard forms. One such limitation is women's exposure to sources of Standard Arabic (SA), such as education. A second reason for women's use of standard forms is the role of women as 'modelling correct behaviour' in the society (Holmes, 1992: 158). This also depends on the availability of forms of the standard language for women to adopt. A third reason that Holmes (1992: 159) gives is that, being subordinate, women must be polite. Holmes disagrees that politeness should be equated with standard speech and argues that it is possible, for example, to speak politely, while using a Liverpool or a Glasgow accent.

The situation in Arabic-speaking communities tends to be no exception. A number of sociolinguistic studies showed that in Iraq, women were found more innovative than men (Abdul-Hassan, 1988; Abu-Haidar, 1989), other studies conducted on other Arabic dialects showed that women are linguistically more conservative than men (Abd-el-Jawad, 1986; Haeri, 1997; Al-Essa, 2008, 2009; Al-Harashseh, 2014). In other cases, however, women were seen to approximate to standard features more than men (Bakir, 1986). In terms of the Social Network Theory (SNT) though, one could predict that men innovate language change due to certain cultural and/or community-specific factors. One of these factors is that, in the

Arab communities, especially in the groups governed by tribal traditions and restrictions as in the case of Iraq, women have significantly lower degrees of out-group contacts and as a result fewer social networks and exposure to other dialects. Therefore, women may not be expected to have a significant role in the potential change.

Al-Harahsheh (2014) investigated conversational styles and phonological variations between men's and women's speech in Jordanian spoken Arabic. He followed a sociolinguistic and pragmatic theory and found that women are more 'linguistically' conservative than men (Al-Harahsheh, 2014: 872). According to Al-Harahsheh, four language varieties are recognised in Jordan: 1. Standard Arabic which is the official language of Jordan, 2. an urbanised dialect, which is considered as prestigious in Jordanian society, 3. the rural dialect spoken in rural areas, and 4. the Bedouin dialect spoken by tribal populations in eastern and southern regions of Jordan. Within these four categories women have an upward switch when they codeswitch between standard and urbanised forms, while men switch between vernacular and urbanised forms. For example, for the demonstrative pronoun [ha:ða] 'this', a woman used the urbanised form [ha:ð] compared to [ha:d^s] used by men. The Bedouin dialects in the Arab world in general (Rosenhouse, 2006: 259) are considered more conservative than the sedentary ones since they still retain specific features, which are being lost from other dialect groups, especially the sedentary dialects. However, women's linguistic conservativeness that Al-Harahsheh (2014) found does not come from women adopting the Bedouin dialects, but rather it stems from their use of more prestigious and standard forms.

With regard to Arabic, the role of women in language change went through two waves. In the early wave represented by the studies conducted in the early 1980s, and due to social factors, Arab women are characterised by playing a less prominent role in public life and therefore having less access to sources of the standard language. This is represented by women given less opportunity to, for example, be involved in formal education where the standard forms are available. In light of this, the early findings from Arabic sociolinguistic studies

appeared to contrast with the general trend of gender differentiation arrived at in the world languages by proposing that Arab men use standard forms more frequently than Arab women. Abd-el-Jawad's (1987) study of Nablus and Sallam's (1980) study of Cairo showed that men use the standard variant /q/ more than women. One of the confusing results was related to the vernacular form/g/. The highest frequency that educated male informants showed in the use of this variant indicates a confusion as to whether it is a stigmatised variant compared to /q/, which is more likely to be used by educated people due to its association with education domains. However, Sallam (1980: 83) criticised viewing this variation in terms of the stigmatised-prestigious dichotomy, and continues to maintain that it is linguistic loyalty which defines this type of usage. One can predict that one of these loyalties is the sense of regional origin.

Sallam (1980) investigated the distribution of the Standard Arabic (SA) (q) in five Arab countries i.e. Egypt, Palestine, Jordan, Lebanon and Syria. This variable has a regional distribution over these countries: /q/ and /ʔ/ are used in all countries, /g/ is used in all countries except Syria and /k/ is used only in Palestine (Sallam, 1980: 90). The same variable is categorised differently depending on the region where it is used. For example, while /q/ is a variant of educated people in all five countries, it is a variant of Bedouin populations in Jordan and of rural areas in Syria and southern Egypt. The variant/g/ is the one that speakers use in informal situations to establish friendly relations (Sallam, 1980: 83). With regard to gender differences, female speakers used the vernacular form /ʔ/ more frequently than male speakers, but used the standard form /q/ less than male speakers (Sallam, 1980: 94).

The studies representing the second wave of gender differentiation studies that have been conducted since the early 1990s, findings from Arabic appeared to support the general pattern of gender differentiation found in studies in the world languages by suggesting that Arab women use standard features more frequently than Arab men. This is due to the social awareness in the Arab world including Iraq, which began to offer women more opportunities

and better status in life. One of the important studies that investigated gender differentiation in Iraqi Arabic (IA) is that of Abu-Haidar (1989), who found that in Baghdad the prestigious variety of spoken Arabic was in the direction of the SA and that women approximated to adopt it more than men (Abu-Haidar, 1989: 471). She ascribed this to the increase in women's exposure to the sources of SA, such as the media.

Haeri (1994) examined the role of age, gender and social class in the distribution of palatalization among men and women in Cairo, Egypt. Palatalization is a phonological process whereby certain consonants are produced with the blade or front of the tongue touching or coming close to the hard palate. This usually happens under the influence of an adjacent front vowel and or a palatal glide. An example of palatalization in English is the colloquial pronunciation of *did you?* as [dɪdʒu:] rather than [dɪdju:] (Bhat, 1978). Palatalisation in the Cairo dialect may be strong or weak. In strong palatalisation the effect is type of affrication, where there is a shift of the primary articulation to a point further back toward the hard palate. In terms of weak palatalisation, the effect is one of frication in which a secondary articulation is added to a dental; stop, such as /t/ (Haeri, 1994: 88, 95). For example, the word /manti/ 'my mum', is weakly palatalised as /mamtʲi/ or strongly palatalised as /mamtʃi/. Haeri used a sample of 25 female and 24 male speakers of Cairene Arabic. She found that high- school educated women, located in the middle and lower middle classes, are innovators of change, where they use palatalization more frequently than men (Haeri, 1994: 108). One of the key factors in the women's adoption of non-standard features, and in relation to type of education, is that women who attended private schools have higher frequencies of palatalization. This supports the notion of the language market and access and exposure to sources of SA forms. In accordance with the findings that signalled a change in the role of Arab women in language change, it seems that in the first generation of gender differentiation studies, women had maintenance, and with the increase of women's access to the language sources as well as social facilities such as education, this role changed into an innovative one.

Unlike Abu-Haidar (1989), she did not ascribe this tendency to lack of exposure to SA through access to the media, but rather to the social practices of women, which are reflected in their linguistic behaviour.

In Iraq, gender-related sociolinguistic studies are not given considerable attention. However, some researchers focused on the role of gender in language usage among speakers of IA. Bakir (1986) investigated gender variation in the realisation of interdental fricatives among speakers of IA in Basra. He found that women are more likely to adopt the prestigious Basra Arabic i.e. BA than men. Abu-Haidar (1989) has conducted a quantitative analysis on the speech of 50 educated Baghdadi men and women speakers, 25 of each, aged 26-41 years. She examined the use of six variables.²⁷ The role that women in Iraq took differed from their roles in other Arab cities, such as Nablus in Jordan (Abd-el-Jawad, 1987), Basra in Iraq (Bakir, 1986), and Cairo in Egypt (Schmidt, 1974), and the prestige variety that women in Baghdad favoured was in the direction of Literary Arabic (Abu-Haidar, 1989: 474), where women use fewer standard features than men. Abu-Haidar ascribes this to the fact that women had less access to sources of SA, such as the media and education.

Nevertheless, a gender-related pattern is not always reliable and not easy to be generalised because the differences do not involve all the informants in the sample. As Labov (2001: 269) claims, not all sociolinguistic variables are determined by gender differences. In the present study, gender is correlated with the social variables of age and SNI. Unlike many previous sociolinguistic studies conducted on IA dialects, in which gender was not correlated with the

²⁷ Abu-Haidar (1989: 475-476) examined six linguistic variables: 1- MSA passive forms, as opposed to the vernacular 3rd person plural: *yūqa:l* 'it is said', instead of *yū:lu:n* 'they say', 2- months of the year as replaced by ordinal numbers (eg. The first for January), 3- the MSA adverb *lamman* 'when' introducing a verb, in lieu of its vernacular form *min*, 4- MSA adjectives *ṣaġi:r* (ms) and *ṣaġi:ra* 'small', 5- MSA forms instead of corresponding loanwords (eg. *talīfo:n* instead of the MSA *ha:tif* 'telephone'), and 6- MSA forms instead of their well-established vernacular equivalents (eg. *dazz* instead of *risal* 'to send').

SNI of informants (Blanc, 1964; Bakir, 1986; Abu-Haidar 1991), the present study provides a fair representation of the SNI of both male and female informants.

Although gender correlates with the use of standard and non-standard language features in many of the studies previously conducted on Arabic dialects and other languages, standardization is not considered as a correlate variable in this study. SA is not used in everyday life by Arabic speakers. Instead, speakers' adoption of more or less prestigious forms is tackled in this study.

4.7.3 SNI

The correlation between age and language use can be explained in terms of the social networks. Holmes (1992: 184) states that adolescents' adoption of non-standard forms results from the pressure imposed by peers and when they are 'observed' (Labov, 1994: 73). This pressure leads them to resist the society's and parents' forms. In the Arabic-speaking communities, a similar pattern exists.

Numerous Arab sociolinguists found that adolescents resist their parents' linguistic forms. Abd-el-Jawad (1986) found that younger family members abandon the local variant /q/, which is used by their parents and used /g/. Abd-el-Jawad (1986: 58) ascribes this tendency to the social pressure imposed on adolescents by neighborhood, study and work. However, some other sociolinguists found a different pattern. For instance, Al-Wer (2002: 72) found that the youngest boys adopt their parents' linguistic forms more frequently than their peers' forms. She ascribes this to the fact that, owing to social restrictions, adolescents are closely connected to their parents. In contrast, in middle age, when the social pressure increases, informants tend to be conservative by using native norms (Holmes, 1992: 186). Tagliamonte (2006: 47) supports this by stating that informants in the 30-55 age range score the highest level of using standard and prestigious forms. Interestingly, as informants get older, the social pressure

imposed on them decreases. As a result, their use of standard forms increases. Chambers (1995: 158) summarises these age-related variations in three formative periods, which he relates to sociolects. The first period is childhood, in which informants acquire the vernacular forms from family and peers. Adolescence is the second period, which involves the use of vernacular forms beyond the limits of family under the pressure of peers. The third period is younger adulthood, in which the use of the standard forms increases under the influence of society interactions. One of these interactions is exposure to standard forms, such as in education.

4.7.3.1 Measuring speakers' SNI scores

The present study draws from the social network theory, which was introduced to the sociolinguistic research by Milroy (1980) in her Belfast study. It has been widely applied by sociolinguists in studies on mobile speakers as well as on non-mobile speakers, on communities with close-knit social networks and those who have loose-knit relations. The degree of integration that HIA speakers share with their peers in the *gilit* community was explained by means of two groups of indicators, both of which help to interpret the motivations for DL. The first group includes indicators of SNs, such as friendship, work, study, and leisure activities. Other indicators include exposure to the *gilit* dialect through the media and pre-migration period. In order to detect whether change is a result of contact after the migration process has taken place, I examined the extent to which informants were exposed to the *gilit* community through pre-migration contacts. To obtain this information, I tried to ascertain whether they had lived in any of the *gilit* areas before October 2015, and if so, the length of time and reasons for living in these areas.

The second group of indicators examines the informants' attitudes towards the *gilit* dialect. These indicators were derived from informants' answers to attitude questions, which aimed to elicit whether informants consider the *gilit* dialect as more standard or prestigious than their

native dialect, where they prefer to use their native dialect, as well as their attitudes towards the *gilit* community.

The life-style questions which I used in Interview (II) and discussed earlier (§ 4.6.2.1) were divided into secondary sections (sub-variables) and the scoring criteria for the individual sub-variables are presented in Appendix E. Before discussing the method that I used to measure my SNI index, let us look at the strategies that sociolinguists followed to measure their informants' social network structure and the techniques they used to develop their social networks integration.

Sociolinguists used different strategies to measure variations in the social network structure. Milroy (1980) relied on what she called Network Strength Scale, or NSS, by which she related her informants' network to indicators of integration to the local networks such as kinship, work, and friendship ties. These indicators range from 0-5. The degree of integration an individual carries towards his community was expressed by assigning him or her one point for each of the following conditions: (Milroy, 1980: 142)

1. Membership of a high density cluster.
2. Ties of kinship in the neighborhood.
3. The same place of work as at least two from the same area.
4. The same place of work as at least two of the area and gender.
5. Friendship with workmates in leisure time.

Condition 1 is an indicator of density, while conditions 2, 3, 4, and 5 are indicators of multiplicity. Scores range from zero for the informant who fulfils none of the conditions and is said to have no integration with his local community, to five for informants who perform them all, and who are closely integrated into the community in that their kinship, work and friendship ties are all contracted within it.

Milroy's results showed that speakers who scored higher on the NSS led in the use of local language forms, while speakers who scored lower on the NSS used the new language forms more.

Boronti-Ricardo (1989) studied the sociolinguistic changes in the Brazilian city Brazlândia. She follows a different orientation; instead of testing how speakers approximate towards the standard norms, she focused on the extent to which they lose their local stigmatised dialect. To my knowledge, her study is the only one examining loose-knit networks. Her Urbanisation Index Scale, or UIS, included indicators such as schooling level, work, the degree of spatial mobility, social participation, exposure to the media, and political awareness.

In her (1989) study of language change in progress in the Austrian village of Grossdorf, Lippi-Green used a 16-point scale to measure her respondents' social integration. Lippi-Green employed a scale similar to that of Milroy in that she looked at her speakers' integration with the outside community through the domains of kinship. Due to the fact that her community differs from the Milroy's Belfast community, she included her speakers' exposure to the other community through work place and background. She adopted indicators of passive or active integration to core families, involvement in employment, their involvement in multiplex relations, and their voluntary activities. Her main finding was that integration into networks of workplace and adoption of non-local language forms scored the best correlation of conservative linguistic behaviour. She ascribes that to the fact that integration into workplace networks is 'a better and more refined indicator of voluntary community integration' (Lippi-Green, 1989: 225).

Edwards (1992) also used indicators of kinship, friendship, and workplace, but adopted a scale of integration called Vernacular Culture Index, or VCI, constructed from responses to ten statements, ranging from 1 to 4 and corresponding to Strongly Disagree and to Strongly Agree, respectively. The first five statements of his VCI tested respondents' physical integration, while the second five statements tested their psychological integration. It seems

that the former corresponds to the lifestyle information used in the present study, while the latter refers to attitudes information. In his study on the linguistic accommodation of Moravian migrants in Bohemia, within the Czech Republic, Wilson (2010) used 13 questions to measure his informants' lifestyle information and 15 questions to measure their attitudes towards Common Czech.

The results of the above sample of studies undoubtedly indicate that the speakers' social network integration acts as a vital tool in uncovering their tendencies towards linguistic innovation as well as maintenance. Moreover, they show that individuals with close-knit social relations adopt the minority local language forms, while those with loose-knit social networks prefer language forms that carry a more cultural dominating prestige.

In the present study, the situation is different from the above mentioned studies for a number of reasons. First, my target population is not a mobile one, but a non-mobile local community, who are recipient of migrants. Second, the primary objective in investigating this close-knit community is a description of the acquisition of the new dialect, not maintenance of the local dialect. I aim to find out whether the SN theory can be used as an effective method to predict HIA speakers' accommodation of the *gilit* features. In other words, whether my social network integration index can function as a reliable technique of innovative language use in the same way that previous indices of network integration studies have been reliable in predicting the maintenance of local forms. To perform this objective, I used the Social Network Integration Index (SNII) to calculate informants' SNI scores. Table 4.7 shows informants' scores on my social network index.

Table 4.7 Informants' scores on the SNII.

SNII score	Number²⁸
0	2
1	0
2	3
3	2
4	3
5	6
6	6
7	7
8	3
9	2
10	1
11	0
12	0
13	1
14	0
15	0
16	0
17	0
18	0
19	0
20	0
21	0

²⁸ Number indicates number of informants.

4.7.4 Speakers' Attitudes

Attitude has been one of the concepts that is studied worldwide. This is because people's responses to language varieties reflect their perception and evaluation of speakers of such varieties. Consequently, they might attempt to be either more similar to, or different from these speakers. Attitude is defined as 'a disposition to react favourably or unfavourably to a class of objects' (Sarnoff, 1970: 279). Allport (1979: 23) defines attitude as a 'state of mind of the individual toward a value', where values are 'social in nature'. It is argued that language varieties which change away from the standard language, are viewed less favourably even by their native speakers (Edwards, 1982: 30). As Edwards states, this is true when speakers' evaluations are made in relation to their competence. Language attitude is applied in connection with accommodation under different perspectives: second language learning (Edwards, 1982), the majority and minority populations (Carranza, 1982), and interpersonal language accommodation (Chakrani, 2015). Although widely studied, the concept of attitude is one about which there was no agreement. Ryan and Giles' (1982) book is one seminal work that reviews a series of language attitude studies. The first chapter of their book is an introduction to the main concepts and methods used in the sociolinguistic studies to examine language attitudes. It also discusses the motivations for change and maintenance. One of the works reviewed in this book is Ryan et al.'s (1982) perspective on examining the role of attitudes in language change. Central to this perspective is the distinction between in-group and out-group contacts and their importance in determining a potential change; that is, whether individuals prefer to interact with others from inside or outside their native community.

Some studies employ a direct method for observing language attitudes (Carranza, 1982, Ryan et al., 1982). This method infers language attitudes by means of evaluating speakers of two or more language varieties. Carranza (1982: 63) presents an overview of the researches

that adopted the direct method in observing language attitudes in the Hispanic language varieties.²⁹ Carranza (1982: 82) criticises some of the methodological issues used in language attitude studies. One of these issues is that in communities where more than two varieties are used, the majority of attitude studies examined no more than two varieties and ignored the rest of them. Another issue is that a number of studies neglected the context and domain of speech which have significant effects in discovering the attitudes. The third issue is related to the mechanism of selecting the scales. In the light of this, Edwards (1982) claims that while some studies follow an overall scale of adjectives (acceptable- unacceptable), others deal with each adjective separately. Carranza argues that it is necessary to adopt a scale of questions that reflect different values and situations.

Other studies depend on an indirect method to infer such attitudes (Edwards, 1982). This method includes the collection of written direct questions put to individuals or groups of interviewees. These questions involve certain categories, such as language evaluation, language preference, desirability or reasons for learning, evaluation of the speakers of a certain variety, and views related to shifting or maintaining language policies. According to the indirect method, language attitudes are obtained via the evaluation of a speaker's or listener's accommodation in favour of another speaker out of the speech context. As Edwards (1982: 31) argues, it is necessary that language attitude studies show greater distinction between listeners' attitudes and their beliefs. He adds that belief is one component of attitude. Although Edwards claims that this distinction is a minor issue, he gives two reasons why it is valuable: the first is that this distinction might establish a workable ground between sociolinguists and social psychologists, where the latter pay more attention to it; the second

²⁹ Carranza (1982) used the term 'Hispanic' to refer to the language varieties for which Spanish is an alternative in some communities. These varieties those spoken in Spain, Latin-America in addition to three Spanish-speaking communities (Puerto Ricans, Cubans and Mexican Americans).

is that such attention might help in discovering the reasons which underline the evaluations of those who make the judgments.

Speakers' attitudes toward a language or any of its varieties may be a good factor not only in determining the variety to which speakers converge, but in directing language planning as well. The attitudes that speakers carry toward a specific language variety are expressed in terms of accommodation competence, which is defined as the 'accumulation of accommodation resources and repertoires over the lifespan' (Pitts and Harwood, 2015: 89). Chakrani (2015) examined patterns of interpersonal language accommodation among Arabic speakers in the USA and the role of attitudes in motivating patterns of language accommodation. He analysed the speech of five participants as speaking five Arabic dialects.³⁰ He showed that speakers' trigger accommodation positive or negative attitudes toward the dialect they accommodate to. Despite this finding, though, eliciting a direct association between language and attitudes is not a reliable means because in accommodation studies the dropping of old forms and acquisition of new ones was shown to be subconscious. So, attitudes alone are certainly not enough to shape an individual's speech. However, they help to some extent in revealing the role of attitudes in accommodation. Chakrani (2015) has also shown a significant role of prestige on accommodation in that the less prestigious the variety, the greater it is disfavoured by speakers (Chakrani, 2015: 26).

As Hymes (1971: 7) argues, certain 'functional varieties' of a certain language are considered as carrying different values and uses within a speech community. These values, I argue, stem from two sources: the degree of input or exposure to a language variety, and the social evaluation of such an input. Worth mentioning here is that for Arabic speakers, the main sources of input of SA are religion (represented by prayer and Qur'an recitation), the

³⁰ The five participants come from five Arabic countries: Saudi Arabia, Jordan, Egypt, Sudan and Morocco. They speak Saudi Arabic, Jordanian Arabic, Egyptian Arabic, Sudanese Arabic and Moroccan Arabic.

media, and education. However, none of these inputs construct a motivation for speakers to accommodate toward SA.

4.7.4.1 Measuring the attitudes scores

With regard to the attitudes questions, it was difficult to score informants' attitudes towards the *gilit* dialect since open-ended questions are not easily quantifiable. Compared to other forms of questions, such as lifestyle and language usage scores, informants' attitudes are in most cases psychological components related to values, beliefs, and competences. Nevertheless, I tried to set a method by which I quantify informants' attitudes scores. To calculate their attitudes scores, I graded my informants based on my own judgements – along a five-point continuum with regard to their attitudes towards the *gilit* dialect (1 = very negative; 2 = negative; 3 = neither negative nor positive (neutral); 4 = positive; 5 = very positive). The overall scores of the nine attitudes questions were 9. The highest score was 6, while the lowest score was 1. For example, the above five-point continuum was obtained as follows: informants who scored 0-2 points in the overall scores were given point 1 on the continuum (this included 8 informants).

Table 4.8 Informants' attitudes scores.

Overall score	0-2	3	4	5	6
1-5 point continuum	1	2	3	4	5
Number of informants	8	8	3	9	8

The mean score for the whole sample was (1.9), which means that informants' attitudes towards the *gilit* dialect are very negative.

4.8 The linguistic variables³¹

Basic to variationist studies is the linguistic variable, a concept that was introduced and developed by Labov (1966) in his New York study. According to Labov (1966: 49), there are several characteristics of the linguistic variable. It must be frequent enough, be an integral part of larger units, and be easy to quantify. A linguistic variable is a unit that sociolinguists want to examine, a feature that has a number of alternative forms known as variants, which differ from each other in form but not meaning. The linguistic variable can be a language, dialect, style, register, syntactic pattern, word or phrase, or a specific sound (see Stockwell, 2007: § A). Linguistic variables are used by sociolinguists to study the relationship between language use and various social factors, such as age, gender, social class, attitudes and social networks. They have also been used by linguists to examine variation at various levels of language: phonology, morpho-syntax, and lexicon as well as suprasegmental processes, such as stress and intonation. Individual phonological variables are studied the most because they are easy to elicit, being more frequent than other linguistic variables. According to Tagliamonte (2006: 82-84), there are several criteria that help sociolinguists select ‘good’ linguistic variables. In addition to the variable being frequently used, there should be accurate variation between the variants of the same variable, so that variants should be distributed variably over a scope of a ‘comprehensive descriptive profile’. When they want to select their linguistic variables, researchers look for previous studies that used or mentioned these variables. When researchers are investigating variation in communities that received little research, they rely on close observation to identify potentially interesting variables. In this section I present an overview of the four linguistic variables (q) and (k) and their reflexes in

³¹ The terms ‘linguistic’ and ‘dependent’ will be used interchangeably along the thesis. Therefore, the use of one indicates the other. More specifically, the term ‘dependent’ (or variant) will be used in the discussion chapters i.e. chapters 5 and 6.

the Arabic dialects, including IA. I also discuss the vocalic features vowel lowering and vowel epenthesis.

The phonological variables that I claim to have changes in progress are the following:

1. The velarization of the uvular stop (q) to /g/.
2. The affrication of the velar stop (k) to /tʃ/.
3. The insertion of the short vowel /i/ into onset consonant clusters in word initial position.
4. The lowering³² of the high vowel /i/ into /a/ in open weak syllables.

The choice of these variables is determined by the fact that they are, namely the consonants, are stereotypical of the *qiltu* dialects. I predict that variation will be observable across the three age groups. The previous works on IA that investigated these consonants (§ 1.3) described their geographical and communal distribution, and I shall use this data in order to make predictions about my informants' accommodation towards the *gilit* dialect.

Table 4.9 shows the linguistic variables, their *gilit* variants, and the phonological processes involved.

Table 4.9 The linguistic variables investigated in the study

Variable (<i>qiltu</i>)	Process	<i>gilit</i> variant
(q)	Velarization	/g/
(k)	Affrication	/tʃ/
[i] as in [sɪmi:n]	Vowel epenthesis	Epenthetic [i] ³³
[i]	Vowel lowering	[a] ³⁴

³² It needs to be explained here that in Arabic, the phenomena of vowel backing and lowering are used variably as they are directly attached to back consonants coarticulation. However, in Arabic the high-low dichotomy is used more frequently than the front-back one (Arabic has /i/ and /u/ as high vowels, and /a/ as a low vowel). For this objective reason, I will use lowering instead of backing.

³³ In the analysis, I will use epenthetic [i] to refer to vowel epenthesis.

³⁴ In the analysis, I will use vowel lowering.

4.8.1 (q) velarisation

One of the sounds that received a considerable attention by Arab researchers is the uvular stop (q) that corresponds to the 21st letter of the Arabic alphabet (qaf). The use of the uvular stop (q) is one of the criteria used to classify Arabic dialects in Iraq (Blanc, 1964), Jordan (Abd-el-Jawad, 1987), Syria (Jassem, 1987), Bahrain (Holes, 1983), and Egypt (Schmidt, 1974). In Iraq, this variable plays an important role in the distinction between the *qiltu* and *gilit* dialect groups. While it is a stereotypical feature of the *qiltu* dialects, the *gilit* dialects are referred to as ‘g-dialects’ because in these dialects, this variable is reflexed as /g/. Due to the migration-induced contact between the two dialects, I predict that (q) would be reflexed as /g/ by HIA speakers. Table 4.10 shows words which illustrate the contrast between /q/ and /g/ reflexes of (q) in Iraq Arabic.

Table 4.10 Reflexes of (q) in the *qiltu* and *gilit* dialects

<i>qiltu</i> (HIA)	<i>gilit</i>	English gloss
/aqu:l/	/agu:l/ ³⁵	I say
/qa:m/	/ga:m/	He stood up
/su:q/	/su:g/	Market
/jfiqq/	/jfugg/	To tear
/qara:ba/	/gara:ba/	Relatives
/miqt ^s u:ʕ/	/magt ^s u:ʕ/	Sectioned

The reflexes of SA (q) and (k) plays a significant role in the distinction of Iraqi dialects as *qiltu* and *gilit*. The *qiltu* dialects are found to show the SA reflexes of (q) and (k), while for

³⁵ In the analysis, I will use /g/ when I describe reflex of (q).

speakers of the *gilit* dialects these consonants have the reflexes /g/ and /tʃ/, respectively (Blanc, 1964). To my knowledge, no empirical studies to examine the synchronic variation of these variables in Iraq have been conducted. Therefore, no intercorrelation between these variables and social variables, such as age, gender and SNI is available for this dialect. The SA (q) was analysed in a number of studies conducted in several Arab countries. In these countries, the reflexes of this consonant reflect regional, social, and communal variations. Whereas it is preserved as a voiceless velar plosive in urban dialects, it has the reflex /g/ in most Bedouin Arabic dialects, such as Jordanian dialects (Abd-el-Jawad, 1986, 1987). Variation in the use of this variable in Bahrain was investigated in many studies, including Hansen (1967) and Holes (1983, 1986, and 1987). In this country, this variable has four variants depending on communal stratification; the voiceless uvular stop (q) is used by Sunnis, whereas /g/ is used by the Shi'i population (Holes, 1983: 447). In Iraq, the variant /g/ of the SA (q) is associated with the *gilit* dialect group (Blanc, 1964), and in other regions of the Arab world, such as Jordan, it is associated with the Bedouin dialects (Abd-el-Jawad, 1986: 54).

According to Sallam (1980), in Syria, the SA (q) has four variants; the voiceless uvular stop /q/ used in the rural areas, the voiceless glottal stop /ʔ/ spoken in the urban centres, such as the capital Damascus, the voiced velar stop /g/, and its voiceless version /k/ are spoken by the immigrants in the Golan Heights. In his study on phonological variation and change in the speech of the 1967 Arab-Israeli war immigrants in Syria, Jassem (1987: 193) found that older informants used the variant /q/ more than younger informants did.

In Jordan, SA (q) has three variants; the voiceless velar stop /k/ used in rural Palestinian dialects, the voiced velar stop /g/ used in Bedouin dialects and rural areas, and the voiceless glottal stop /ʔ/ used in urban centres (Abd-el-Jawad, 1986: 54). Abd-el-Jawad (1987) conducted a sociolinguistic study in Jordan to examine the influence of regional dialects competing with SA. He criticised the claim of a number of Arab sociolinguists that the only prestigious variety in Arabic is SA. He adds that those researchers are being influenced by

Western languages, such as English, where the concepts prestigious and standard are used interchangeably (Abd-el-Jawad, 1987: 359).

4.8.2 (k) affrication

Affrication is a phonological process whereby stop consonants such as (k) and /t/ are realised as /tʃ/ and /ts/ or /tʃ/, respectively. This phenomenon exists in a number of languages, including Arabic (see Zeroual, 2006: 26 for these languages). In Arabic, this is a well-known phonological phenomenon, whereby the stop consonants (t) and (k) are realised as /tʃ/. The Arab linguist Sībawayh, in his earliest and most comprehensive book al-kitāb ‘The Book’, first described (k) affrication. In this book, Sībawayh reported that when the vowel of the second person singular masculine [ka] and feminine [ki] object/possessive pronouns is deleted in final position, speakers use /tʃ/ instead of /k/ due to the deleted high front vowel. Affrication was later called *kaskasa* and *kshkasha* (Sībawayh). In the former, researchers relied on Sībawayh’s indication that /s/ is added to the second person singular feminine pronoun /ki/. In the latter, /ʃ/ is added. (see Al-Azraqi, 2007: 555 for details).

(k)affrication was investigated in a number of modern urban and Bedouin Arabic dialects in the Peninsula (Johnstone, 1963; Ingham, 1997; Al-Essa, 2008), the Arab Gulf countries, such as Iraq, Oman and Northern Yemen (Watson, 1992), and the Levant (Jassem, 1987). This phonological process plays a noticeable role in the regional distribution of the Arabic dialects in these regions.

Johnstone (1963) investigated (k) and (q) affrication in the Arabic dialects of the Arabian Peninsula. He based his description on the occurrence of /ts/ and /dʒ/ as variants of (k) and (q) respectively in the Central Najdi dialects in Saudi Arabia. Johnstone reported that in these dialects and the dialects which lie to the north and east of Central Najd, these two stops are

affricated in contiguity with the front vowels (1963: 210-211), whereas they are blocked in contiguity with back vowels.

Jassem (1987) included (k) affrication in his study of the variation in the speech of people who immigrated into Syria due to the 1967 Arab-Israeli War. He has found that the variation between /-k/ and /-tʃ/ feminine suffix is not governed by phonetic or grammatical constraints, but represents alterations on the lexical level (1987: 141). What is interesting is his finding that the immigrants prefer to use /-tʃ/ when they talk to each other, but shift into /-k/ when they talk to local residents.

Al-Essa (2008) conducted a dialect contact study in Saudi Arabia to analyse the variation in the speech of Najdi speakers who migrated to Jeddah. Her data came from the recorded speech of 61 Najdi male and female speakers stratified into four age groups ranging between 10 and 55 years old. Al-Essa (2008: 138) found that the older male and female speakers used /ts/ and /dz/ more frequently than their peers in the younger age groups. However, this difference statistically insignificant (P= 0.127).

Al-Rojaie (2013) has examined whether (k) affrication in the stem and in the second person singular feminine object/possessive pronoun /-ik/ has any phonological constraints. He has also examined the effect of age, gender, and level of education on this process. He has found that affrication in the stem was higher than that in the suffix; out of the 2396 tokens, 27 %³⁶ /tʃ/ reflex were affrication in the stem, while only 9 % /tʃ/ variant were suffix affrications (2013: 51). Unlike Jassem's finding mentioned above, affrication was found to be governed by phonological contexts. For example, as regards affrication in the stem, (k) affrication was found to be most highly favoured when it occurs adjacent to high front vowels with a relative weight of .92, followed by low front vowels (Al-Rojaie, 2013: 51-52). In contrast, suffix-based affrication was not affected by the phonological context (Al-Rojaie, 2013: 54). With

³⁶ It needs to be mentioned here that Al-Rojaie mentioned these statistics using numbers, and that the percentages given are made by the present researcher for reasons of legibility.

regard to the social variables, age and level of education were more important than the speaker's gender.

In Iraq, as far as I am aware, there is no empirical study of this phenomenon either with regard to linguistic constraints or in relation to social variables, such as age, gender, and SNI. That is not to say that /k/ – /tʃ/ variation has not been mentioned in previous studies on IA, but the majority of these studies have mentioned this variation in relation to regional and communal factors. One of the most important findings is that speakers of the *gilit* dialects realise (k) as /tʃ/ (Khan, 1997: 55), while speakers of a number of *qiltu* dialects retain the (k) realisation (Abu-Haidar, 2004). Minimal pairs in Table 4.11 illustrate the phonemic contrast between /k/ and /tʃ/ in Iraq.

Table 4.11 Reflexes of (k) in the *qiltu* and *gilit* dialects

<i>qiltu</i>	<i>gilit</i>	English
(HIA)		gloss
/simak/	/simatʃ/ ³⁷	Fish, pl.
/kalbi/	/tʃalib/	Dog
/ki:s/	/tʃi:s/	Carry bag
/ʃabaka/	/ʃibtʃa/	Net
/aħki:/	/aħtʃi:/	I speak
/hi:k/	/hi:tʃ/	Thus
/kinit/	/tʃinit/	I was

³⁷ In the analysis chapters, I will use /tʃ/ as a variant of (k).

4.8.3 Vowel epenthesis

A vowel can be inserted in a word via vowel epenthesis or vowel intrusion. Epenthesis signifies a vowel segment that is added, along with a vocalic gesture, and forms the nucleus of a new syllable, e.g. [stʌdi] → [ʔistʌdi]. This process involves a change to the segmental string (Hall, 2006: 37).

According to Crystal (2008:171), vowel epenthesis is a ‘term used in phonetics and phonology to refer to a type of intrusion, where an extra sound is inserted in a word’. It denotes any process of adding a sound to a word or an utterance, mostly to ease and facilitate pronunciation. Hall (2006: 20) supposes that ‘Epenthesis is a way of repairing syllables’

Vowel epenthesis can be classified into two types: anaptyxis and prothesis. The first type refers to the process of inserting a vowel between two consonants. Anaptyctic vowels are also known as parasitic vowels, such as in the pronunciation of the word ‘film’ as [filəm] in some dialects of English (Lass, 1984: 184)). The second type of epenthesis is prothesis. In this type, an extra sound is inserted initially in a word especially in connected speech. Specific motivations stand behind epenthesis. McMahon (1995: 15) supposes that ‘Epenthetic vowels often break up ‘difficult’ consonant clusters’. Hall (2011: 1577) states that one function ‘of epenthesis is to repair an input that does not meet a language’s structural. She reports other linguists’ ideas about insertion:

Itô (1989: 217) treats epenthesis as a prosodic phenomenon and argues that it ‘results from the interrelated requirements of prosody and not from obligatory skeletal insertion rules’. In contrast, Broselow (1982) explores the idea that some epenthesis is simply triggered by particular sequences of consonants, irrespective of syllable structure requirements. Côté (2000) argues that epenthesis is motivated primarily by the need to make consonants perceptible, based on the Licensing by Cue approach of Steriade (1994).

All in all, these views support the same notion that vowel epenthesis is used to repair illicit structures. Constraints provide the basis for an account of some puzzling generalisations about where vowel epenthesis does and does not apply. Insertion of vowels is not a matter of randomness. As the epenthetic vowel is used to break up the consonant cluster, a vowel can be inserted in more than one position to produce a phonotactically acceptable output; this position is definitely language specific (Hall, 2011: 1580). A vowel can be inserted between the clusters in word initial position in singleton cases. Ali et al. (2008: 2) suppose that ‘The length of the epenthetic vowel and silent pause of the stop consonant is greater than of a noise material’.

With regard to the Arabic dialects, they systematically differ in this point. Hall (2011: 1580) reports that Broselow (1982), Kiparsky (2003), and Watson (2007) identified that ‘onset dialects like Egyptian syllabify the second consonant as an onset, meaning that the epenthetic vowel follows the second consonant /ʔul-t-l-u/ [ʔul.ti.lu] ‘I said to him’, while coda dialects like Iraqi syllabify the second consonant as a coda /gil-t-l-a/ [gi.lit.la] ‘I said to her’/, meaning that the epenthetic vowel follows the first consonant.’

A vowel is inserted in the ‘onset consonant clusters in word initial positions in most of the singleton pairs’ (Ali et al., 2008: 3). Fleischhacker (2001) illustrates that the placement of the vowel is determined by the type of consonants in the clusters of some languages, as in the case of Egyptian Arabic; in word-initial clusters that involve a voiceless sibilant plus a stop, a vowel is inserted before the first consonant, as in (study → istadi, special → isbasjal, ski → iski), while in word-initial clusters of an obstruent and sonorant, the vowel is usually inserted between the consonants, as in (sweater → siwetar, slide → silaid) (Hall, 2011: 1592).

Mostly, there is a structural motivation for vowel epenthesis when this is optional, use of vowel epenthesis being the only evidence that such clusters are marked in some languages; whereas in other languages, vowel epenthesis is one of a ‘plot’ of processes used to eliminate

a cluster type. Interestingly, speakers are not always conscious of epenthetic vowels. Actually, consciousness ‘may differ from language to language’ (Hall, 2011: 1576).

The location of the epenthetic vowel differs from one dialect to another. For example, the vowel may occur before C2 or C3 in a medial three consonant cluster. If we consider the Arabic dialects, they systematically differ in this point. Hall (2011: 1580) reports that Broselow (1992), Kiparsky (2003), and Watson (2007) identified that CV or onset dialects, such as Egyptian Arabic, syllabify the second consonant as an onset, meaning that the epenthetic vowel is inserted after C2 as in /ʔul-t-l-u/ [ʔul.ti.lu] ‘I said to him’, while VC or coda dialects like Iraqi Arabic syllabify the second consonant as a coda by inserting a vowel before C2 as in /gil-t-l-a/ [gi.lit.la] ‘I said to him’, meaning that the epenthetic vowel follows C1. In light of this approach, IA is a VC-dialect as it splits three consonant clusters by inserting a vowel before C2. For example, /qil-t-l-u/ [qi.lit.lu]. Hall (2011: 1576) reports that Haddad (1984) explicates vowel epenthesis as ‘more or less obligatory in coda clusters of an obstruent followed by a sonorant, or optional in most other clusters’. She shows such examples of vowel epenthesis in Lebanese Arabic:

Obligatory: /ʔism/ [ʔisim] ‘name’, /ʔibn/ [ʔibin] ‘son’,

Optional: /sabt/ [sabt ~ sabit] ‘Saturday’, /nafs/ [nafs ~ nafis] ‘self’.

Al-Ani (1970: 87) lists five syllable types of Contemporary Standard Arabic as used in Iraq: CV, CVC, CVV, CVVC, and CVCC, where C stands for consonant, V for short vowels, and VV for long vowels. According to Watson (2002: 66), Cairene Arabic and Sana’ani Arabic allow six syllable types: CV, CVC, CVV, CVVC, CVCC, and CVVCC. In his study of Stress Patterns in HIA, Al-Abdely (2011: 392) reports that what distinguishes HIA from other Iraqi dialects is that it does not allow final consonant clusters but favours initial ones. HIA allows onset two consonant clusters in word initial positions in five syllable types. They occur in various grammatical categories, such as nouns (as in 2 below), verbs (as in 1 and 3), quantifiers (as in 4), and adjectives (as in 5). Initial onset consonant clusters in word initial

positions are reported to exist in other Arabic dialects, such as Moroccan Arabic (Ali et al, 2008). Examples of this type of clusters in HIA are the following (Based on Al-Abdely, 2011: 387):

1. CCV, as in /ʃla-ʕa/ [ʃlaʕa]³⁸ ‘he pulled it out’.
2. CCVV, as in /blaa-yis/ [bla:jis] ‘pliers’.
3. CCVC, as in /trag-gaʕ/ [traggaʕ] ‘it was patched’.
4. CCVVC, as in /kθiir/ [kθ:ir] ‘much’.
5. CCVVCC, as in /zʕa:r/ ‘little ones’.³⁹

The more frequent (but not attested) type of vowel epenthesis in HIA is the insertion of the high front vowel /i/ to break up initial two consonant cluster in nominal and adjectival stems. In this type, CC- consonant clusters are broken up by inserting an epenthetic vowel after C1 resulting in CiC-. Table 4.12 includes a sample of words produced by the informants and shows both the *gilit* and HIA reflexes (*i* in the *gilit* examples and syllable structure indicates the epenthetic vowel).

³⁸ The IPA transcriptions are ours.

³⁹ Al- Abdely (2011) did not provide an example for type 5 and this example is taken from my dataset.

Table 4.12 Sample of the words with vowel epenthesis extracted from the data

<i>qiltu</i> (HIA)		<i>gilit</i>		English
No epenthesis		Epenthesis		gloss
Example	Syllable structure	Example	Syllable structure	
[smi:n]	CCVC	[simi:n]	CiCVC	Fat. masc.
[dʒri:j]	CCVC	[dʒiri:j]	CiCVC	groats
[tʰhi:n]	CCVC	[tʰihi:n]	CiCVC	Flour
[zya:da]	CCVCV	[ziʒa:da]	CiCVCV	Addition
[fti:la]	CCVCV	[fiti:la]	CiCVCV	Wick
[ʃfa:jif]	CCVCVC	[ʃifa:jif]	CiCVCVC	Lips

4.8.4 Vowel lowering

During speech, vowels occur in coarticulation with consonants within a successive phonetic context. Coarticulation is a process whereby different speech sounds overlap in time and interact with each other. Consequently, the air constriction in the oral cavity is influenced by more than one sound. Vowel lowering is most frequently caused by the presence of an adjacent pharyngeal, uvular or emphatic consonant. However, it is observed in the present study that HIA exhibits vowel lowering, but it is not restricted to emphatic or pharyngeal environments (see Table 4.13 below). In Arabic, emphasis is one of the phonetic phenomena that was given intensive attention. It refers to a group of consonants that are produced with a secondary articulation in the back area of the oral tract. This group includes four consonants: /ðˤ/, /tˤ/, /sˤ/, and /dˤ/. These consonants are said to be the emphatic counterparts of the plain

sounds /ð/, /t/, /s/, and /d/ (Al-Solami, 2013: 314).⁴⁰ Al-Solami claims that the phonetic description of emphatics is problematic. They are considered in three different ways. One group of phoneticians describe them as velarised, the second view them as uvularised, while the third team of phoneticians group them as pharyngealised. Al-Solami adds that phonetically, emphatics are grouped together with gutturals, laryngeal, and pharyngeal. Some Arab phoneticians (e.g. Al-Ani, 1970) refer to these consonants as velarised as they are produced below the velum. Velarization is a secondary articulation, which involves the retracting the tongue toward the back part of the soft palate. Other Arab phoneticians categorise emphatics as uvularised (Zawaydeh, 1998). I will use the term emphatics as it is a neutral term for this type of consonants. Al-Ani (1970: 44) used the term ‘pharyngealised’. Although Al-Ani has conducted an acoustic and physiological description of the phonology of Contemporary SA, he investigated it as used by Iraqi informants as most of his informants were from Iraq (of his nine informants, seven were from Iraq and two were from Jordan). In their study of ‘unique’ consonants in Arabic,⁴¹ Alotaibi and Muhammad (2010: 222) presented a table showing the disagreement among Arab phoneticians about the place of articulation of these five consonants. In terms of place of articulation, the four emphatics and five consonants are adjacent. Most of the Arabic studies⁴² that attempted to investigate this phenomenon based on phonological description categorised it as a consonantal rather than a vocalic feature being attached to the emphatics environment.

Vowel lowering is a coarticulation process, according to which, when a front vowel, such as /i/ occurs adjacent to an emphatic, uvular and pharyngeal consonant is rendered into a lower quality vowel lowering as in [qis^sʕa:b] vs [qas^sʕa:b] ‘butcher’. Phonetically speaking, the anterior primary articulation is coupled with a secondary articulation caused by moving

⁴⁰ ‘Emphatics’ tends to be the agreed upon term for this group of consonants by Arab phoneticians.

⁴¹ Alotaibi and Muhammad (2010) dealt with the two ‘pharyngeal’ i.e. /ʕ/ and /ħ/, and three uvular i.e. /χ/, (q),/ʁ/ consonants.

⁴² See Barkat (2009: 669) for the list of studies.

the back part of the tongue toward the pharyngeal area. Al-Ani (1970: 44-49) has found that the front vowels /i/ and /i:/ are backed, when they appear adjacent to one of the emphatic, uvular or pharyngeal consonants. Although he did not use the term ‘lowering’, his results showed that in this phonological context, F1 and F2 values of /i/ became more like those of [a]. For example, in /t^s+i/ context, F1 raises from 290Hz⁴³ to 1000Hz, while F2 is lowered from 2200Hz to 1100-1300Hz. Table 4.13 shows a collection of words produced by the informants explaining how they are realised in HIA as against how they were realised in the *gilit* dialect.

Table 4.13 Sample of the words extracted from the data showing vowel lowering

<i>qiltu</i> (HIA)	<i>gilit</i>	English gloss
[t ⁱ nnu:r]	[t ^a nnu:r]	Oven
[m ⁱ s ^ʕ nu:ʕ]	[m ^a s ^ʕ nu:ʕ]	Produced
[m ⁱ ʃhu:r]	[m ^a ʃhu:r]	Famous
[n ⁱ d ³ d ³ a:r]	[n ^a d ³ d ³ a:r]	Carpenter
[ħ ⁱ dda:di:n]	[ħ ^a dda:di:n]	Ironmongers
[f ⁱ lla:ħ]	[f ^a lla:ħ]	Farmer

As I am specifically interested in this study in whether vowel lowering exists in HIA rather than the extent to which the vowel /i/ is lowered, no acoustic analysis has been carried out to examine this process. Therefore, vowel lowering will be tested depending on auditory judgments, which were carried out and offered an impressionistic profile of the high vowel /i/ and the lowered one [a].

⁴³ The basic F1 and F2 values are the measurements of vowels in isolation presented by Al-Ani (1970: 23)

4.9 Statistical Analysis

Basic to inferential statistics is the concept of the null hypothesis, which means that there is no difference between the means of two samples of population and that correlation is the result of chance and therefore has no meaning. (Rose and Sullivan, 1996: 168). One of the main aims of conducting statistical tests is to see whether the mean differences are statistically significant in order to accept or reject the null hypothesis. The criterion that is used to test this significance (Sig.) is whether differences are the product of chance; the level used for this is 0.05. The levels of probability or significance test values used by researchers are $p < 0.01$ (chance of 1 out of 100, or when there is less than a one-in-twenty chance of them being random), or $p < 0.05$ (chance of 5 out of 100, or when there is less than a one-in-hundred chance of them being random). The level chosen by the researchers is called the p value, which is considered statistically significant if it is equal or less than 0.05, and highly statistically significant when it is equal or less than 0.01. In the majority of social research, the 'rule of thumb' is to consider the 0.05 significance level (Miller et al., 2002: 118).

After the measurements (listening to the audio file of each speaker separately) were obtained through auditory judgments, I analysed them by using bivariate tests, such as correlation coefficient and multivariate tests, such as T-test and ANOVA test. The bivariate tests are used to test the relationship between one dependent variable and one independent variable. For example, to test the relationship between speakers; age and their use of / /g/, a correlation test is performed. The multivariate tests are adopted to find out which independent variables (predictors) play a greater role in the use of which dependent variables (responses). The results assisted in determining the role of the social factors already decided upon in the use of the linguistic variables. The study focused on phonological variables, examining the phonetic quality of variants used for each variable. The variant reflexes of such variables were correlated with gender, age, SNI, and attitudes to determine which of these factors influenced HIA speakers and underline the variations. In addition, significance values are gathered by

means of IBM SPSS statistics 22 application. This includes conducting statistical tests, such as Pearson correlation coefficient, which is used to examine the relationships between two or more scalar variables (e.g. the relationship among informants in three age groups in the use of (q)). The statistical application to be used for further analysis will be SPSS statistical software. Statistical tests, such as Cross tabulation, Chi-square, ANOVA are used in the analyses in accordance with the research questions. Another test is the independent-sample t-test, which is used to examine the relationship between two variables (e.g. the variations between men and women in the use of (q)).

At the first stage of analysis in chapter 5, I will focus on examining the correlation between each of the independent variables and the dependent variables separately. From the correlations between each independent variable and dependent variables I can conclude which independent variable has the strongest impact on informants' language behavior. As in this study I am mainly interested in examining the role of SNI in speakers' language behaviour, I will carry out a multiple regression to test which sub-variable has the strongest impact on informants' linguistic behaviour (§ 5.2.3.3). A number of previous network integration-based variationist studies did not use multiple regression to test the main independent variables, but they employed it to analyse the network integration sub-variables (e.g. Wilson, 2010)

4.10 Summary of Chapter Four

Empirical fieldwork is one of the most important components of research in variationist sociolinguistics. It includes certain components, such as entering the research community, making initial contacts, finding participants and recording the interviews. Therefore, this chapter is one of the basic chapters contributing to the present study. It opens with an overview of the fieldwork that I conducted in Iraq, which comprises three stages: entering the community, data collection, and data analysis. I led a one and a half months fieldwork in the

Iraqi capital, Baghdad, aiming to record the sociolinguistic behaviour of a sample of HIA speakers to test the extent to which their language behaviour is affected by the *gilit* dialect. The data of this study come from 36 HIA native speakers, who are born and spent all their life in the town and who represent three age groups. Furthermore, I recruited three fieldwork consultants to introduce the participants to me and help in recruiting informants and recording the interviews. The main sources of data were individual sociolinguistic interviews, which were held at the informants' homes, picture description and map task. I used the SNII to score my informants' integration to the *gilit* community as well as to know the attitudes they carry towards the *gilit* dialect. A detailed account of the linguistic variables is also given in this chapter. The four linguistic variables are discussed along with the variation in their use across the Iraqi contexts and beyond. This chapter presents an overview of the statistical tests used to examine the results. The data are mainly examined by using applications, such as Excel and SPSS statistical software and by running processes, such as Cross tabulation, Chi-square, one-way ANOVA test (Analysis of variance), and the independent-sample t-test.

Chapter Five: Results and Discussion

5.1 Introduction

A basic assumption that motivates variationist sociolinguistic research is that any language pattern is inevitably variable and that variation is to a certain extent regular. Most of the linguistic variation patterns observed in any speech community are found to be linguistically structured and socially driven. In this chapter, I discuss the social distribution of the dependent variables under investigation, their correlation with the independent variables,⁴⁴ and correlation between the independent variables to examine which independent variable has the greatest impact on the linguistic behaviour of HIA speakers. In this chapter, I examine the relationship between the dependent and independent variables. I start by looking at informants' linguistic variation according to their age, and then discuss their behaviour in relation to their gender. In the third sub-section, I discuss the correlation of the dependent variables with SNI. I devote a section to examine informants' linguistic variation in relation to their attitudes towards the *gilit* community.

5.2 The relationship between the dependent⁴⁵ and independent variables

A primary objective of the present study is to examine informants' linguistic behaviour in relation to a set of independent variables. In this section, I seek to analyse the correlation of informants' use of the four dependent variables with the four independent variables of age, gender, SNI, and speakers' attitudes. The first step is to implement a bivariate analysis, that is, to look at the correlations between the dependent and independent variables individually.

⁴⁴ In Chapters 5 and 6, I will use 'independent' instead of 'social'.

⁴⁵ For the dependent variables, I will use 'variants' unless I talk about the process. For example, I will use the variant /g/, and the variable (q). Likewise, I will use the variant /t/, but the variable /k/, [a] for vowel lowering, and epenthetic (vowel) [i] for vowel epenthesis.

The next step is to perform multivariate tests to examine how the independent variables interact with one another. In the majority of cases, researchers need to interpret how the independent variables affect the dependent variables, and by so doing, they are interested in making judgments on this interaction. For example, if we are interested in explaining how middle class informants use variable X more than working class informants, we test the correlation between social class as an independent variable and X as a dependent variable. Likewise, to examine how respondents aged between 20 and 30 use variable Y more than respondents over the age of 60, we examine the correlation between age and Y. A more advanced examination is to test how two or more independent variables interact and which is more important than others in the use of dependent variables. For example, to test whether age is more important than gender in the use of X, we perform a cross tabulation of both variables.

5.2.1 Distribution across age groups

In this section, I examine the results of the phonological variants in relation to age. As will be seen, the informants produced the *gilit* variants in different rates. Figure 5.1 below presents an overall distribution of the four dependent variants according to informants' age groups.

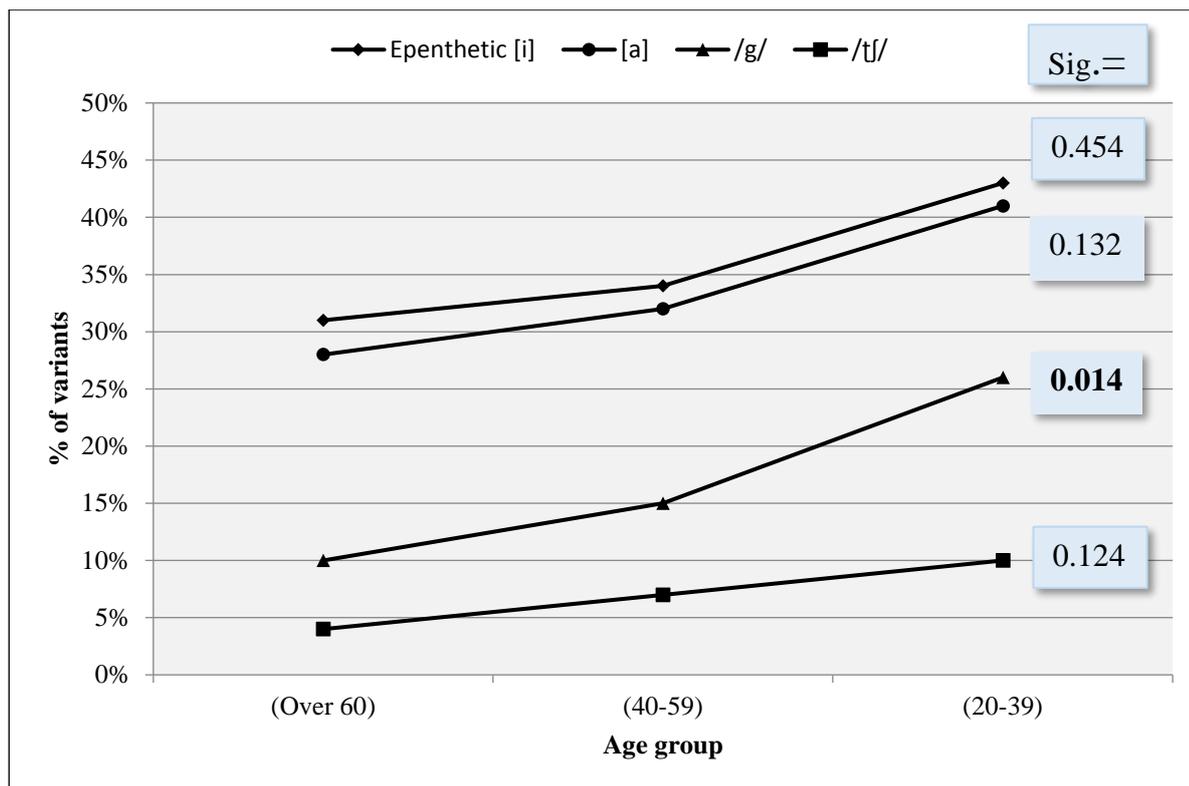


Figure 5.1 Overall distribution of variants by age, with correlation coefficients

Figure 5.1 clearly shows an age-related pattern of variation for all four variables. The informants in all age groups showed different rates of use of the *gilit* variants. Moreover, the new variants of the vocalic variables are spreading among HIA speakers more frequently than the consonantal ones. I start, however, by discussing how HIA speakers acquired the consonantal features for one objective reason. In addition to the kinds of evidence produced by Al-Ani (1978) and Khan (1997), it seems that the two consonant variables are more salient for HIA speakers. During my data collection, I asked my informants what sounds distinguish their dialect from the dialect of Baghdad (*gilit*). The majority of them mentioned that HIA speakers (and more generally speakers of other *qiltu* dialects) are recognised by their realisations of (q) and (k), but very few mentioned the differences in the reflexes of vowels as they might have considered them less salient and therefore not brought them up in the interview. The data clearly show the same pattern of variation for all four variables. From the

correlation coefficients ($P= 0.014$), it seems that the differences were statistically significant only for (q). Therefore, I start discussing the use of (q).

5.2.1.1 (q) velarization

As we can see in Figure 5.1, older informants used the variant /g/ of the variable (q) less than younger informants, with a 10 % rate. This frequency goes up to 15 % in the middle-aged group, but in the younger age group, it jumped to 26 %. Differences among the three age groups were statistically significant at the 0.05 level. Results of a Pearson Correlation test indicate that there was a significant negative relationship between informants' age and their use of /g/, ($P= 0.014$). This means that as informants get older, their use of this variant decreases. However, this relationship was moderate ($r= -0.485$).

The linguistic behaviour of informants in all age groups indicates a case of dialect convergence towards the *gilit* dialect as the use of /g/ was progressing among HIA speakers. It seems that the adoption of this variant was most progressive among younger speakers. As I predicted, as HIA speakers came into contact with the *gilit* speakers, they would acquire their dialect features. This will be discussed in more detail in § 5.2.3. For example, they began to pronounce (q) as /g/, affricate (k) to /tʃ/, lower the high vowel /i/ to [a], and insert the vowel /i/ into onset consonant clusters in word initial positions. The data in Figure 5.1 suggest that change is in progress, with the younger informants using all the variables the most. The important observation is that there is a consistent rise in the use of *gilit* forms among younger informants. Although the middle-aged informants fall in between in the use of the three variables, there was only negligible differentiation between them and the older informants. In the four variables, there was 3.75 % differentiation between older and middle-aged informants compared to 8 % differentiation between middle-aged and younger informants. This small increase in the younger age group in the use of the *gilit* variants can be interpreted in terms of

the informants' ages in relation to the three waves of migration (§ 1.6). Table 5.1 displays the average ages and years of birth of informants in the three age groups.

Table 05.1 Mean age and year of birth of informants in the three age groups

Age group	Mean age	Year of birth
Over 60	65 (min. 61; max. 84)	The late 1940s- the early 1950s
40-59	45 (min. 41; max. 59)	The mid 1960s- the early 1970s
20-39	34 (min. 26; max. 39)	The early 1980s

I mentioned that the first wave of migration from the *gilit* area to Hīt took place in the early 1980s during the Iraq - Iran war. At that time, the older informants were in their thirties and forties, and the middle-aged informants were aged between 15-20 years old. In contrast, the younger informants were still 5-10 years old. In addition, while the older and middle-aged informants reached their forties and fifties during the second migration wave in 1991, the younger informants were still under 10 years old. The fact that the older informants actually used these *gilit* variants indicates that these variants are not recent. It also indicates that there is a sound change in progress in that it has neither gone to completion nor stopped completely. Although we have no real time data available for HIA to the period earlier than 1940s or 1950s,⁴⁶ a prediction can be made. These variants were present during the childhood and adolescence of the older informants in our data set. For example, evidence comes from two Iraqi researchers, who referred to a case of change in progress in the *qiltu* dialects. The first piece of evidence comes from Al-Ani (1978: 105), who noted that a number of his informants

⁴⁶ This is the period in which the older informants in the present study were born according to their ages reported in Table 5.2.

from Anah and Hīt (The Euphrates *qiltu*-speaking towns) pronounced (q) as /g/. Some of those informants would be among the older (over 60) age group in the present study, who were in their twenties or thirties at the time Al-Ani's research was conducted. More evidence comes from Khan (1997: 54), who stated that the *qiltu* dialect in Hīt is under the influence of the *gilit* dialects, and he described this as 'beduinization'. Although he studied the dialect of the Jews in Hīt, this variation indicates a state of dialect levelling since that time.

In addition to the age pattern observed in Figure 5.1, it seems that the diffusion of the *gilit* variant /g/ is characterised by a low rate of frequency. It is important to know the statistical significance of such a pattern.

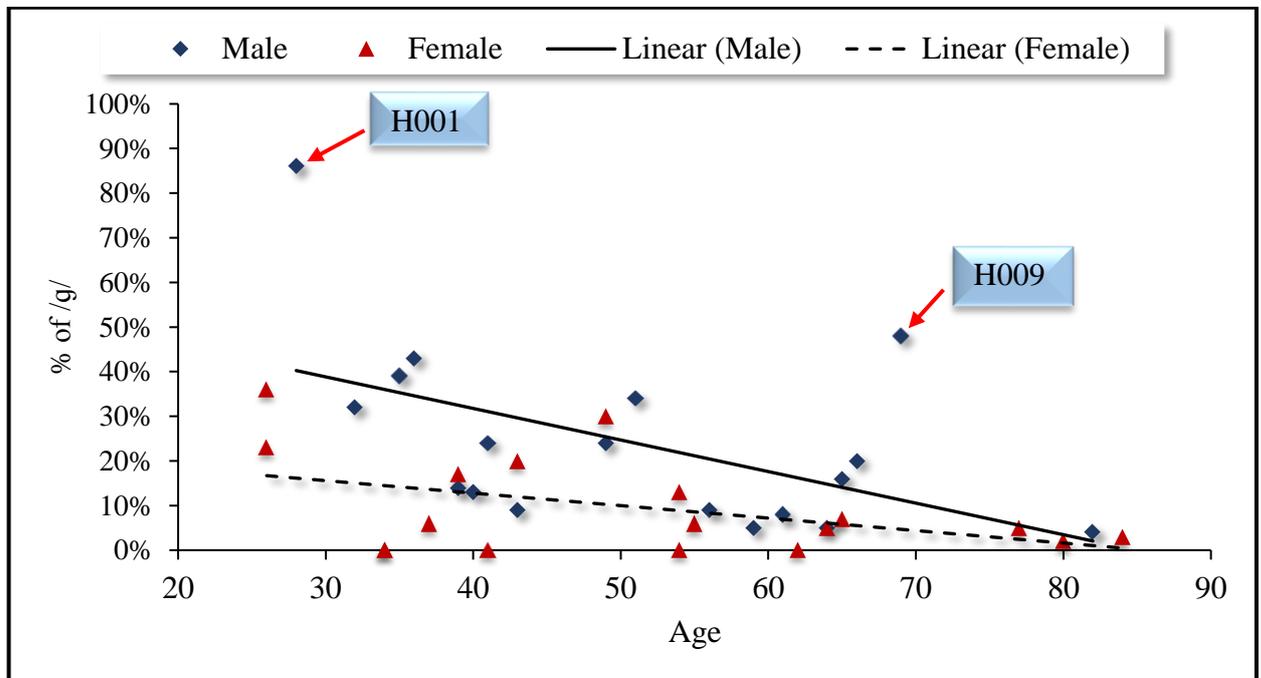


Figure 5.2 Distribution of /g/ among male and female informants by age

The distribution of individual use of /g/ around the trend lines in Figure 5.2 displays that the positive relationship between age and use of this variant for men and women was a weak one. With the exception of one male informant, none of the informants used /g/ more than 50%. The first highest user of /g/ was a younger male informant (H001), while the second highest user of this variant was the older male informant (H009). As will be seen (§ 5.2.3.1),

these two informants were the most highly integrated with regard to SNI. A further analysis of the correlation between age and use of /g/ is presented in Table 5.2 below. The data are supplemented by ANOVA test to examine whether there are any statistically significant differences among means of the three age groups. Analysis of variance test ANOVA at 0.05 significance level indicates that these differences are statistically significant ($P= 0.033$).

Table 5.2 Reflexes of (q) according to age group.

Age Group	Percentage of /g/	Percentage of /q/	Subtotal
Over 60	10 % (28 tokens)	90 % (212 tokens)	240
40-59	15 % (36 tokens)	85 % (196 tokens)	232
20-39	26 % (46 tokens)	74 % (167 tokens)	213
ANOVA: F= 2.795; P= 0.033*			Total: 685

* Sig. = $p < 0.05$

This pattern goes in the direction that we expected with regard to use of (q) in relation to the age groups. However, there was only a negligible difference between the older and middle-aged informants as shown in Figure 5.3.

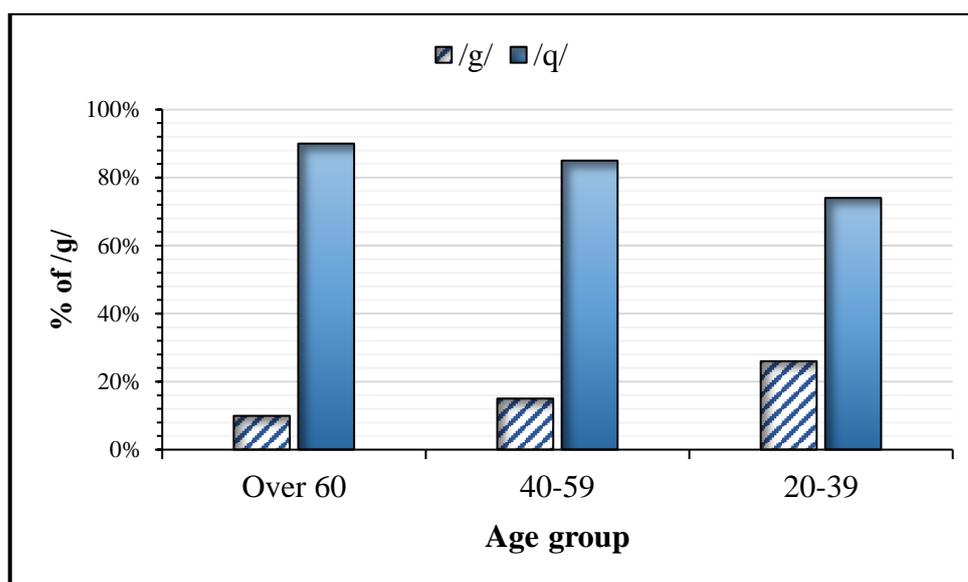


Figure 5.3 Overall distribution of /g/ by age.

As Figure 5.3 shows, there is a general gradation in the percentage of /g/ at the expense of (q) according to age. There was only a 5 % differentiation between the older and middle-aged informants, which increases to 11 % in the youngest age group. The data indicate that the difference between the older informants and the younger informants can be statistically significant. However, it does not show whether the differences between any successive generations are statistically significant. In order to test this, the independent-sample t-test was performed, which reveals the values shown in Table 5.3 below.

Table 05.3 T-test among age groups in the use of/g/

Age groups compared	T-test
(20-39 vs 40-59)	0.158
(40-59 vs over 60)	0.411
(20-39 vs over 60)	0.063
Older generation vs. Younger generation	0.045*

* Sig. = $p < 0.05$

In order to test the variation patterns in relation to the waves of migration shown in Table 5.2, I divided the three age groups into two generations. I amalgamated the middle-aged and older speakers into one group to create a new group called ‘older generation’, the data from which was compared against data from the ‘younger generation’ group. Interestingly, the differences between the two generations for/g/show significant values ($p < 0.05$). This indicates a relationship between migration-related contact and informants’ acquisition of/g/. Furthermore, the two groups are thought to have different social attributes. Previous sociolinguistic studies showed that one reliable method to test language change in progress is to compare observations of two sequential generations of speakers, who have different social

standards that represent time phases in the same speech community (Labov, 1972: 163).⁴⁷ It may be possible because younger informants were born and grew up around the migration wave, they are more likely to acquire the *gilit* variants. The majority of my informants, especially the older ones, reported that they observe more words pronounced with /g/ instead of (q) and they described these words as *mu-hitawi* ‘not from Hīt’. They added that younger people use these words more than older people do. They ascribed this to the tendency of younger Hītis to sound like ‘Baghdadis’. It appears, then, that HIA speakers are aware of how their local dialect is changing.

The data revealed that, to a certain extent, variation in the acquisition of all variants tends to follow complex phonological rules,⁴⁸ as we will see. The use of /g/ across age was found to be governed by linguistic constraints, such as word category and syllable position. It was claimed that (q) in the Euphrates sedentary *qiltu* dialects of Hīt and Anah is reflexed as the Bedouin version /g/ in restricted lexical cases (Jastrow, 1978: 42). According to word category, my data revealed similar cases in that the alternation between /q/ and /g/ is restricted to four grammatical categories: verbs, nouns, adverbs, and adjectives. It can be seen from Figure 5.4 below that the production of this variable is produced almost variably as /g/ across the categories coded.

⁴⁷ The reader is referred to Labov (1972: 163) for examples of language variations between successive generations.

⁴⁸ According to Chambers (1992: 682), there are two types of phonological rules. The first type includes ‘simple rules’, which are spontaneous processes that are not governed by rules and have no exceptions. The second type covers ‘complex’ rules, which are governed by phonological, grammatical, or lexical restrictions.

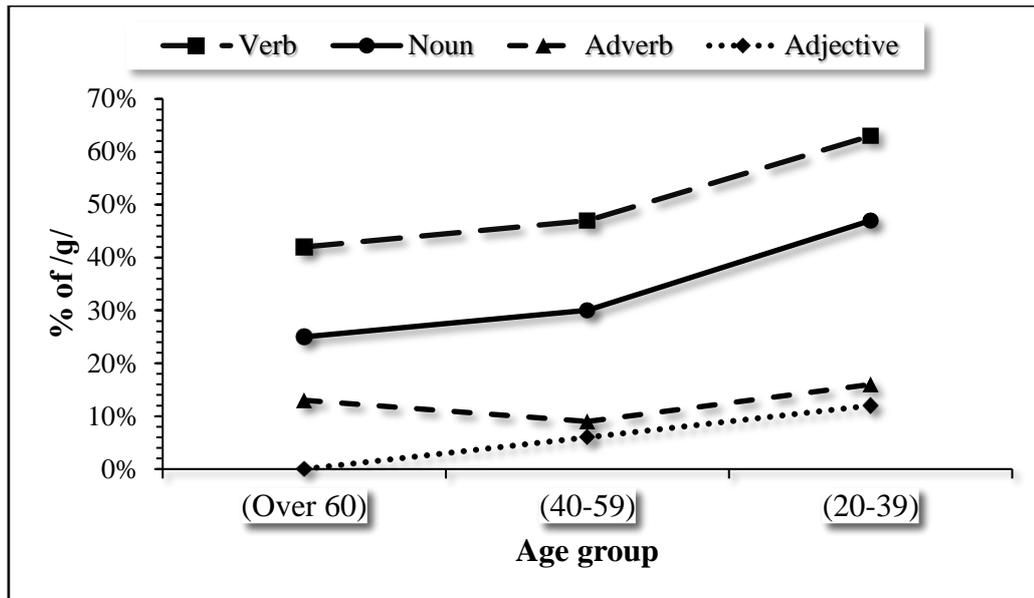


Figure 5.4 Distribution of /g/ by grammatical category and age

In the older age group, the values ranged from 0 % in adjectives to 42 % in verbs. In the middle-aged group, the values were slightly higher and ranged from 6 % in adjectives to 47 % in verbs. In the younger age group, there was a notable raise of /g/ to 12 % in adjectives and 63 % in verbs. As can be seen in Figure 5.4, /g/ was most common in verbs. In all age groups, the highest proportion of /g/ was recorded in verbs at a mean value of 42 % for the older informants, 47 % for the middle-aged informants and 63 % for the younger informants. There is a possible explanation for this observation in that these adjectives possibly have no alternatives in the *gilit* dialect, although there is no previous research that can be used to confirm or disprove such an explanation. Take for example the adjectives [s^ha:qit^h] ‘raffish’, [s^haqi:ʕ], ‘stupid’, and [mqabbat^h] ‘detached [house]’. These adjectives were realised with (q) in both the *qiltu* and *gilit* varieties. Furthermore, all speakers in my data realized these two adjective with /q/ rather than /g/. In contrast, verbs such as [jgu:l] ‘he says’ and [ʔagt^haʕ] ‘I cut’ were realised as [jqu:l] and [ʔaqt^haʕ] in HIA. I argue, if these adjectives have possible alternatives in the *gilit* dialect, this might increase the percentages of /g/ being used in this grammatical category. The second highest proportion of /g/ was realised in nouns. For this

category, informants in the older age group produced /g/ in 46 noun tokens out of 184 (25 %) of the time. The middle-aged group used the /g/ variant of the variable (q) in 83 out of 269 noun tokens (30 %). There was a gradual increase in the /g/ realization by the younger informants has risen gradually to 47 %. Informants in the three age groups did not exceed 16 % /g/ variant of (q) when it occurs in adverbs. Unlike the case with verbs and nouns, there is no linear trend in the use of /g/ in adverbs. The middle-aged informants used it the least with 9 %, the older informants used it slightly higher at 13 %, while the younger informants used this variant in adverbs 16 % of the time. The observation that the older informants did not change (q) to /g/ when it occurs in adjectives indicates that it is more recent compared to the other three grammatical categories. Moreover, the middle-aged informants used it only 6 %, which was doubled in the younger age group to 12 %.

In terms of syllable position, the *gilit* variant /g/ is variably present in all syllable positions. Example for the three positions are: [gumar] ‘moon’ for onset position, [jdiggu:n] ‘they hit’ for geminated position, and [su:g] ‘market’ for coda position. Figure 5.5 illustrates the distribution of /g/ according to position in the syllable.

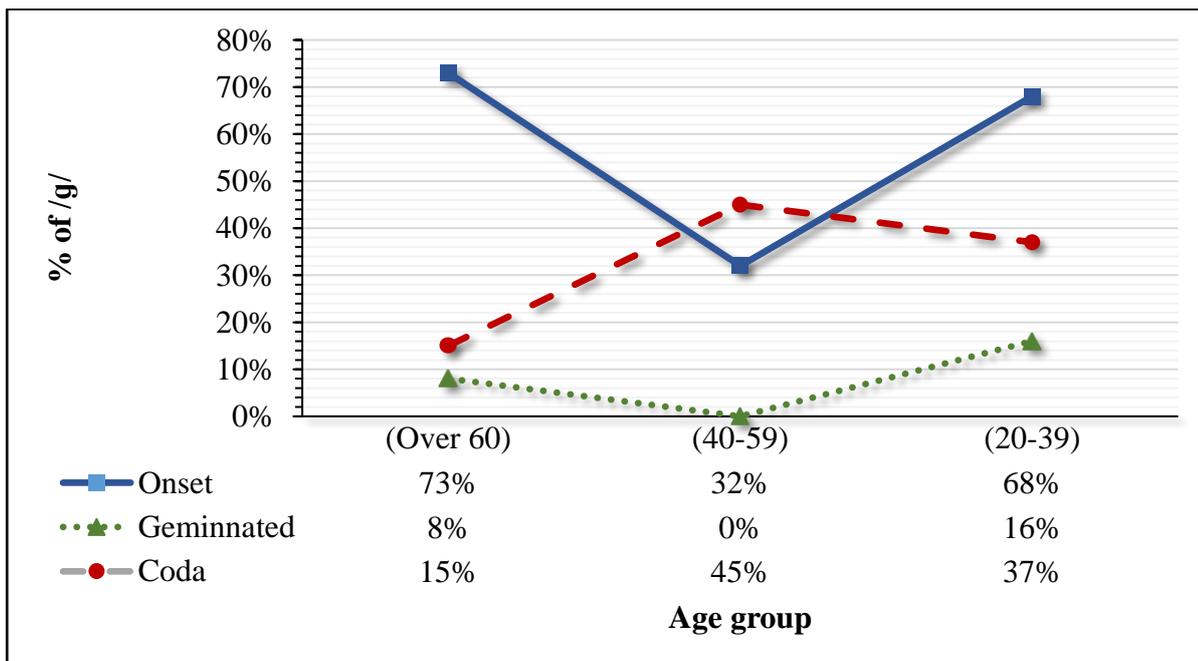


Figure 5.5 Distribution of /g/ by syllable position

In the older and younger age groups, the supra-local variant /g/ was used in onset positions the most and in geminated positions the least. While the younger HIA speakers adopted the /g/ realisation of the traditional variable (q) in onsets at 73 %, the middle-aged speakers used it in this syllable position almost less than half of this percentage at 32 %. The adoption of /g/ in onsets increased gradually to 68 % by the younger informants. The traditional variable (q) was realised as /g/ by all age groups in geminated position the least. The best correlation between age group and the use of /g/ according to syllable position appeared when (q) occurs in coda position. The older informants adopted the /g/ variant of the traditional variable (q) 15 % of the time. This percentage increased gradually by 30 % in the following age group, but fell slightly to 37 % in the younger age group. Despite this slight decrease in the younger age group, it seems that the best age pattern for (q) occurs in coda position. An explanation for this might be related to phonetic as well as psychological factors; phonetically speaking, when consonants occur in word final position, they are more likely to be devoiced, a phonetic process where voice is slow to build up at the onset of speaking and fades at the end. It looks like HIA speakers, namely older and younger speakers are more aware when they have /g/ in onset than in coda position. The reason is that in coda position it is not straightforward to determine whether (q) is realised as [q] or [g].

5.2.1.2 (k) affrication

The analysis of (k) affrication across the three age groups is presented in Table 5.4. It is supplemented with the results of analysis of variance ANOVA test.

Table 05.4 Variants of (k) according to age

Age Group	Percentage of /tʃ/	Percentage of /k/	Subtotal
Over 60	4 % (6 tokens)	96 % (142 tokens)	148
40-59	7 % (8 tokens)	93 % (165 tokens)	173
20-39	10 % (18 tokens)	90 % (169 tokens)	187
ANOVA: F= 1.268; P= 0.295			Total: 508

Overall, there was a low rate of variation among the three age groups. Further, all age groups adopted /tʃ/ of the variable (k) in higher frequencies than they did for /g/. It seems that both consonant variants are salient and that informants are aware of this variant more than other variants. During data collection, I asked my informants if they knew what variables that distinguish HIA from the dialect spoken in Baghdad. A large number of them mentioned that they are more sensitive to using /tʃ/ than using /g/. Some of them reported that HIA speakers could be recognised more easily when they pronounce /tʃ/ when they pronounce /g/. Moreover, a number of my older informants mentioned that when HIA speakers use the *gilit* dialect, they would be described as using the [tʃa:] dialect. The data show only 3 % difference between each of the two age groups; the older informants used it 4 % of the time, and this frequency increased slightly to 7 % in the middle-age group, and further increased to 10 % by the younger informants. In order to examine whether this rate of variation is statistically significant, an independent-sample t-test was conducted to examine the significance of variation.

Table 5.5 T-test among age groups in the use of /tʃ/

Age groups compared	T-test
(20-39 vs 40-59)	0.599
(40-59 vs over 60)	0.477
(20-39 vs over 60)	0.217
Older generation vs Younger generation	0.163

The results in Table 5.5 do not appear to reveal an obvious correlation between age and use of /tʃ/. As can be seen, none of the differences was statistically significant. The dots in the scatter chart represent informants' individual use of /tʃ/ in relation to age. Unlike the migration-related language behaviour of informants in the use of /g/ that we saw earlier (Table 5.3), the informants' behaviour with regard /tʃ/ does not seem to be influenced by migration.

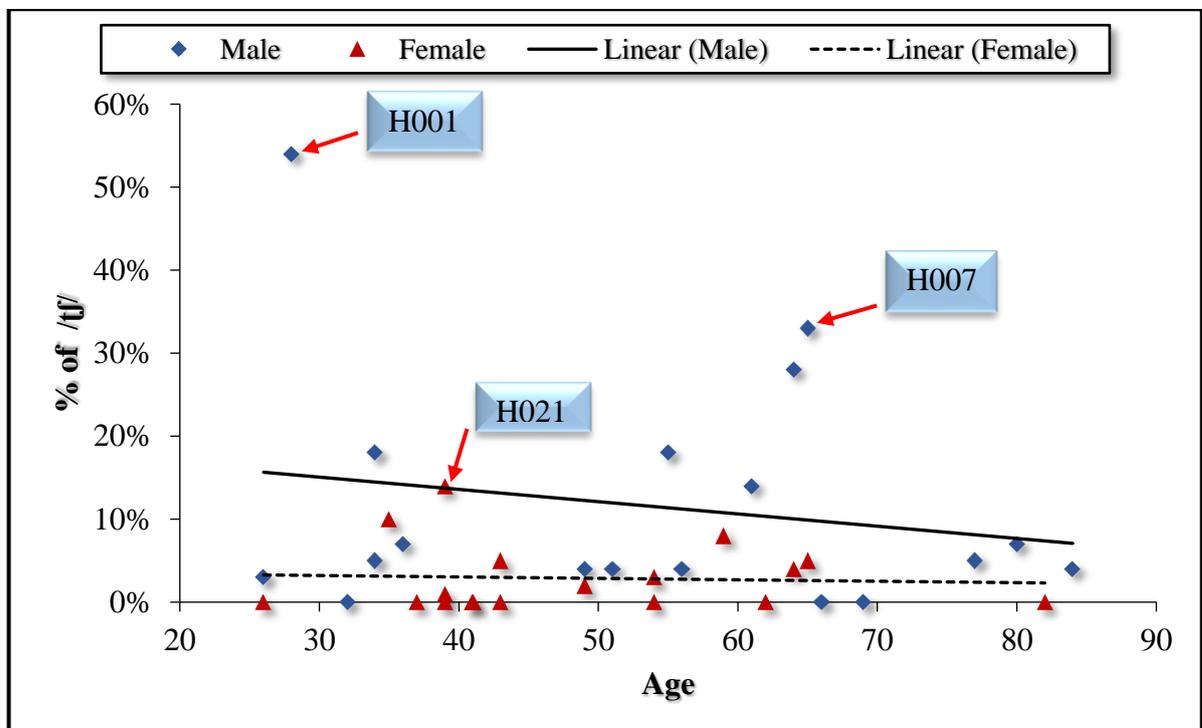


Figure 5.6 Distribution of /tʃ/ by gender and age

As the dots fit very loosely around the trend lines, especially for men, the data here indicate that the relationship between age and use of this variant was very weak. The scatter graph also reveals that the vast majority of informants used /tʃ/ below 10 % of the time. As the data show, only seven informants used this variant above this rate: six men and one woman. It will be shown (§ 5.2.2) that gender has a stronger impact than age for all dependent variables except for vowel epenthesis. Almost a third of the male informants had a ratio of /tʃ/ above than 10 %, compared to just 6 % of the female informants. The first highest male user of this variant was from the younger age group H001, the second highest user was the middle-aged informant H007, while the first highest female user was the middle-aged informant H021. Results of analysis of variance ANOVA test indicate that the relationship between informants' age and their use of /tʃ/ was statistically insignificant ($P= 0.479$). This indicates that age does not have a significant impact on the determination of informants' use of this variable.

The results seem to reveal that affrication is a phonological feature in that (k) is affricated only when it occurs adjacent to the high front vowel /i/ or its long version /i:/, in open and closed syllables, and in word-initial and word-final position. This finding goes in line with previous studies that investigated (k) affrication in other Arabic dialects (§ 4.8.2). However, it differs from the most recent relevant study that was conducted by Al-Essa (2008), who found that older male and female speakers affricated (k) to /ts/ and /dz/ more frequently than their younger peers. Furthermore, our results showed more variations in this process as far as the position of (k) in a word is concerned. Nevertheless, the variation in the adoption of /tʃ/ has fewer grammatical constraints than that of /g/. Across the three age groups, /tʃ/ was used only in verbs and nouns. This restriction is shown in the examples given in Table 5.6.

Table 05.6 Use of /tʃ/ according to adjacent vowel

	Structure	HIA	<i>gilit</i>	Meaning	Description
Word-	<u>C</u> V	/kinit/	/tʃinit/	‘I was’	Short, open
initial	<u>C</u> V <u>C</u>	/ki:s/	/tʃi:s/	‘bag’	Long, closed
	<u>C</u> V	/haki/	/hatʃi/	‘speech’	Short, open
Word-final	C <u>V</u> <u>C</u>	/hi:k/	/hi:tʃ/	‘thus’	Long, closed

5.2.1.3 Vowel epenthesis

Table 5.7 displays the results of variation among the three age groups in epenthetic [i] in onset consonant clusters in word-initial position. The results are supplemented with ANOVA test result.

Table 5.7 Epenthetic [i] according to age

Age Group	Epenthetic [i] CiC	No epenthesis	Subtotal
Over 60	31 % (83 tokens)	69 % (158 tokens)	241
40-59	34 % (92 tokens)	66 % (168 tokens)	260
20-39	43 % (131 tokens)	57 % (175 tokens)	306
ANOVA: F= 0.280; P= 0.757			Total: 807

As the data show, the scores for epenthetic [i] in word initial CC clusters are lower than the non-vowel epenthesis. This is similar to the pattern that we saw for (q) and (k) affrication. The (over-60) age group produced the epenthetic vowel [i] at 31 %, while in the middle-aged group this variant increased by 3 %. The rate of usage increased in the younger age group to 43 %. There was lower rate of variation between the 40-59 and the over-60 age groups than that between the 20-39 and 40-59 age groups. Results of analysis of variance ANOVA show

that the differences in the use of epenthetic [i] by age were statistically insignificant ($P=0.757$). Furthermore, no statistically significant differences is found between the ‘pre-migration’ and the ‘post-migration’ informants.

Table 5.8 T-test among age groups in the use of epenthetic [i]

Age groups compared	T-test
(20-39 vs 40-59)	0.074
(40-59 vs over 60)	0.149
(20-39 vs over 60)	0.972
Older generation vs. Younger generation	0.100

Of the onset (two) consonant clusters in word initial positions reported in HIA (§ 4.8.3), we found that the vowel /i/ was inserted into these clusters and that this insertion was restricted to three types of syllables: Type 2 (CCVV), Type 3 (CCVC), and Type 4 (CCVVC). Figure 5.7 shows the distribution of epenthetic [i] in relation to syllable type.

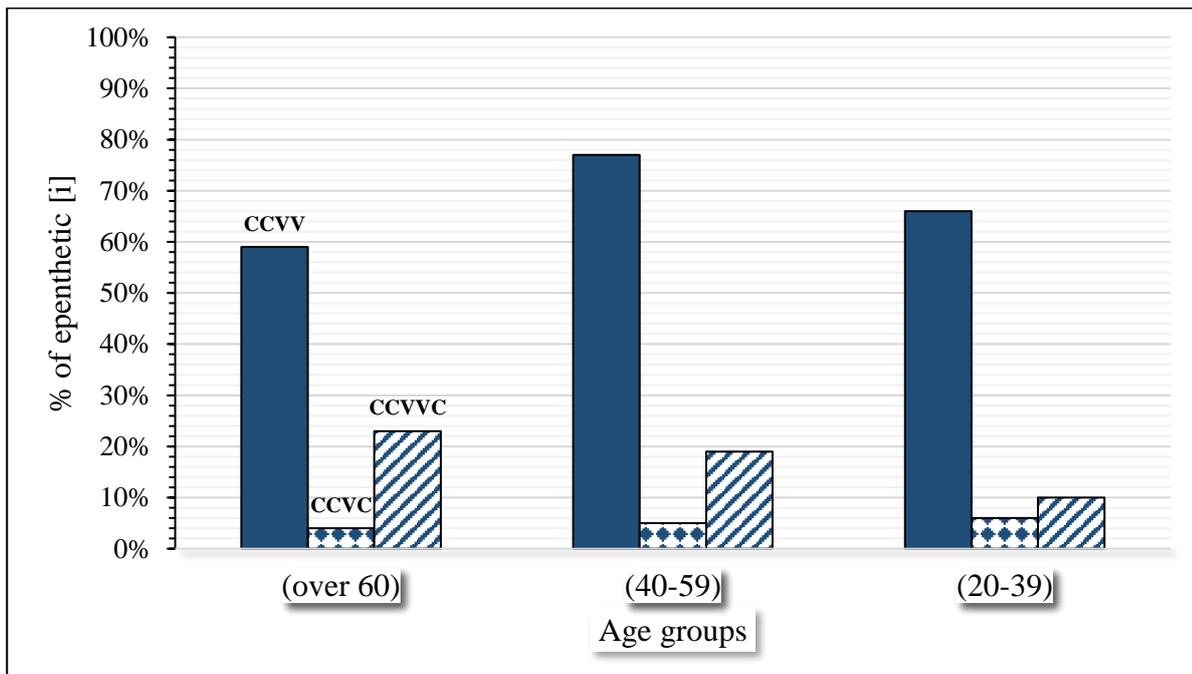


Figure 5.7 Age-related distribution of epenthetic [i] according to syllable type

In all types, epenthetic [i] was restricted to monosyllabic words. It seems that informants in the three age groups prefer to insert a vowel into open syllables the most, but are sensitive to using epenthetic [i] in closed syllables. The older informants used it 59 % of the time. This frequency increased gradually to 77 % in the middle-aged group, but fell slightly to 66 % in the younger age group. An independent-sample t-test shows that the difference between younger and middle-aged informants was statistically significant ($P= 0.045$), while the variation between the middle-aged and older informants was insignificant ($P= 0.165$). Although the younger informants used the epenthetic vowel [i] in syllable Type 3 the most, there was only negligible variation between them and informants in the older and middle-aged groups. While vowel epenthesis into syllable Type 3 started with 4 % in the older age group, it increased marginally to 5 % in the middle-aged group and then to 6% and the younger age group. Analysis of variance ANOVA test shows that the relationship between age and the use of Type 4 was statistically insignificant ($F= 1.022$; $P= 0.371$). Interestingly, epenthetic [i] in Type 4 was used by the older informants the most with 23 %. Over time, this use decreased gradually to 19 % in the next age group, and to 10 % in the younger age group.

5.2.1.4 Vowel lowering

The analysis of lowering of /i/ to [a] in unstressed closed syllables across the three age groups has shown that this process takes place irrespective of surrounding consonants (§ 4.8.4). Table 5.9 presents percentages of vowel lowering across the three age groups. The data was supplemented with the results of analysis of variance ANOVA test.

Table 5.9 Vowel lowering according to age

Age Group	[a]	[i]	Subtotal
Over 60	28 % (101 tokens)	72 % (242 tokens)	343
40-59	39 % (180 tokens)	61 % (198 tokens)	378
20-39	41 % (150 tokens)	59 % (240 tokens)	390
ANOVA: F= 1.536; P= 0.230			Total: 1,111

Informants in the three age groups realised the front short vowel /i/ as [a] in 431 tokens out of the 1,111 total tokens. The rates of variation (11 %) between the older and middle-aged informants in the use of vowel lowering were less than that between the younger and middle-aged informants (2 %). Despite this noticeable variation, it was not statistically significant as the significance value was much higher than the 0.05 level (P= 0.971). Moreover, the standard deviation values of both age groups were very close to each other (22.952 for the older age group and 21.160 for the middle-aged group). Although vowel lowering has progressed in the younger age group, this progress was nevertheless low with a variation of only 2 % difference. Referring to the point of migration-related year of birth shown in Table 5.2, I conducted an independent-sample t-test, which revealed that the differences between the older generation and younger generation was statistically significant (P= 0.04). Figure 5.8 shows how the informants in the age group 20-39 in one hand and in the older age groups (over 60+ 40-59) combined produced vowel lowering.

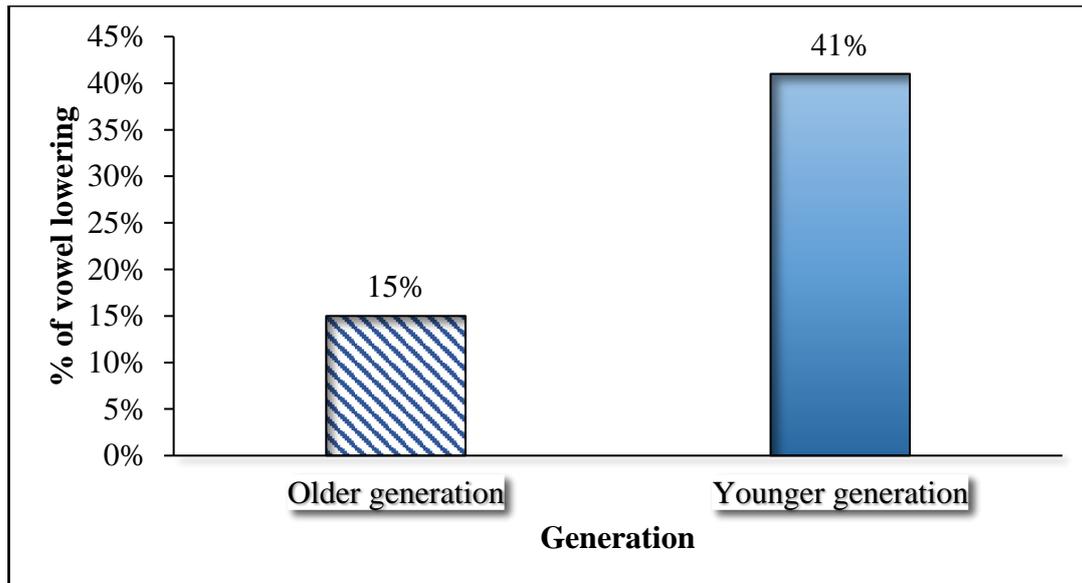


Figure 5.8 Distribution of vowel lowering by older vs younger generations

Phonologically, the process of vowel lowering is linked to the context of back consonant coarticulation, such as velars and emphatics. Surprisingly, our data showed that this process is not limited to this context. Next to this, the front vowel /i/ is lowered when it occurs adjacent to consonants other than emphatics. Figure 5.9 presents vowel lowering in the context of pharyngeal and non-pharyngeal consonants. The ‘other consonants’ group included two pharyngeal fricatives (/ʕ/, /ħ/), two uvular fricatives (/χ/, /ʁ/), and one uvular stop (q).

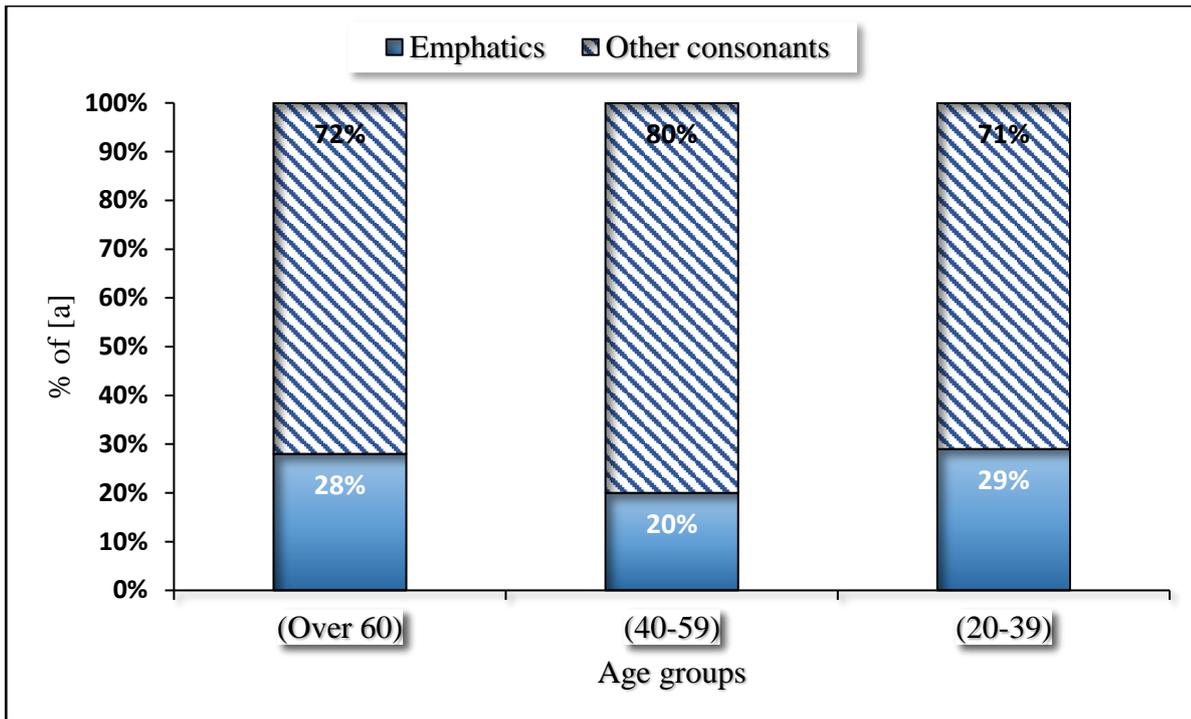


Figure 5.9 Distribution of vowel lowering by adjacent consonant consonants: emphatics (bottom), other consonants (top)

Two observations can be made about the data in Figure 5.9. The first observation is that the rate of variation among informants in all age groups was small. While there was 11 % rate of variation between the older and middle-aged groups, there was lower rate of variation (9 %) between the middle-aged and younger informants. The rate of use in the older age group was 28 %, which decreased marginally to 20 % in the middle age group. This percentage increased by 9 % to arrive 29 % in the younger age group.

The second observation is that informants in all age groups lowered the high vowel /i/ when it occurs adjacent to pharyngeal consonants much less than to other consonants. Out of the five consonants, the pharyngeal fricative /ʕ/ scored the highest; the younger informants used it 35 % of the time, the middle-aged informants used it 43 %, and the older informants adopted it 25 %. It looks that in terms of the phonetic context of vowel lowering, the age groups are

not relevant in that the rate of change is no longer following an age-related pattern as was the case in how the two generations of speakers used it.

Unlike previous findings on vowel lowering, the results of the present study showed that the presence of emphatics in a high vowel context does not necessarily increase the lowering of this vowel, but in contrast it decreases it.

5.2.2 Distribution according to gender

In this section, I examine the correlation between the four *gilit* variants and gender. I start by discussing the use of (q), followed by a discussion of (k) affrication, then epenthetic [i], and finally vowel lowering in relation to gender. Figure 5.10 shows the use of the four *gilit* variants according to gender.

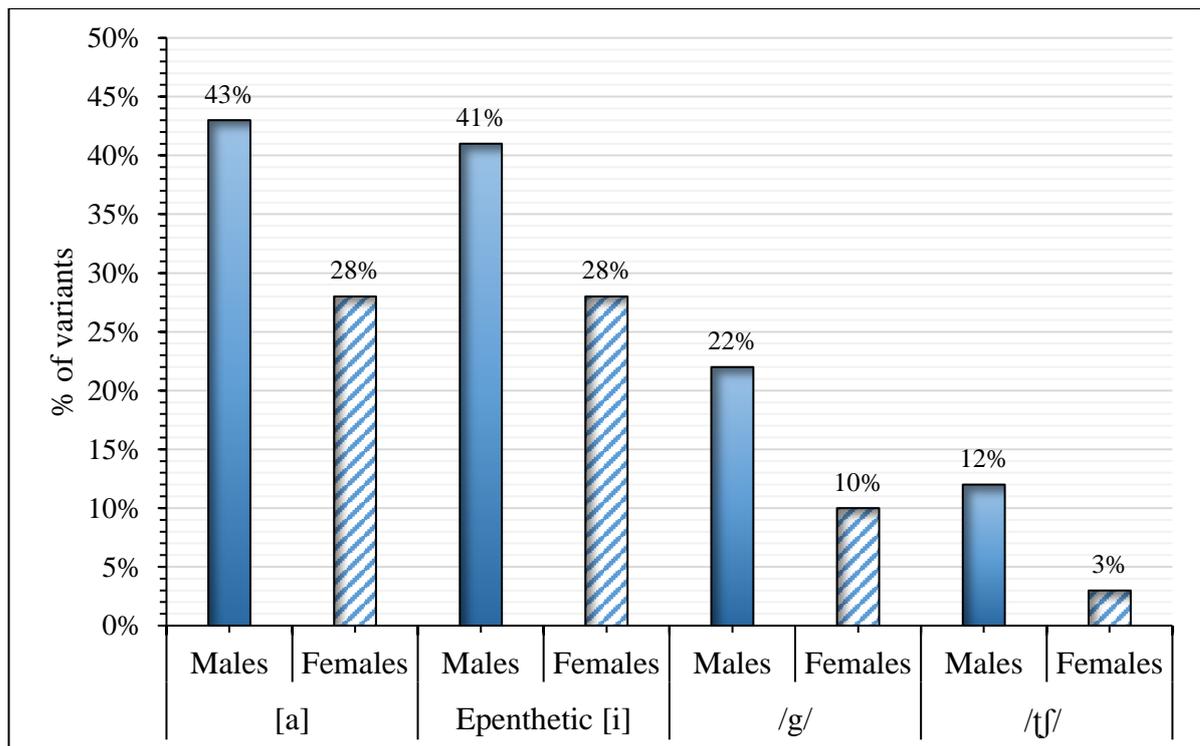


Figure 5.10 Percentages of the *gilit* variants by gender

The data presented here show that for all the studied variables male informants used more of the *gilit* variants than women did. Moreover, both male and female informants used the vocalic variants more than the consonantal ones. This observation is interesting in that it goes against the hypothesis that women are more innovative in acquiring new prestigious dialect features (Jassem, 1987). HIA speakers used [a] instead of /i/; men used it 43 % of the time and women 28 % of the time. The second most frequently used variant by male and female informants was the epenthetic [i], where the vowel /i/ is inserted into word initial two consonant clusters. Men used the epenthetic vowel [i] 41 % of the time while women used it 28 % of the time. The third most frequently used variant was /g/, which is used by male informants 22 % and females 10 % of the time. This pattern supports the usually reported pattern in previous gender-related studies, which investigated the use of (q) in other Arabic-speaking communities. In Jordan, Abd-el-Jawad (1986: 55) found that male informants used the rural variant /g/ more than female informants, who retain the urban variant /ʔ/. However, this finding supports other studies on Arabic dialects. In Palestine, Sallam (1980) showed that men in Nablus use the standard variant (q) more than women do.

The variable that is changed by both male and female informants the least was (k), which was affricated to /tʃ/ by men 12 % of the time, and female informants only about quarter of this percentage with 3 %. Men and women were extremely differentiated in the use of epenthetic [i], with 4 % by men and 28 % by women.

5.2.2.1 (q) velarization

The data were analysed to examine gender-related variation among informants with regard to the use of (q). Table 5.10 shows the results of the quantitative and statistical analyses of this variation.

Table 5.10 Reflexes of (q) according to gender

	/g/	/q/	Subtotal
Males	22 % (77 tokens)	78 % (271 tokens)	348
Females	10 % (33 tokens)	90 % (294 tokens)	327
T-test: F= 3.026; P= 0.012*			Total: 675

* Sig. = $p < 0.05$

The observation that can be made about the data in Table 5.10 is that men appear to favour the *gilit* dialect by adopting the *gilit* variant /g/ more frequently than women do. The differences between male and female informants in the use of /g/ were statistically significant ($F= 3.026$; $P= 0.012$). Male informants used /g/ 22 %, while this variant accounted for only 10 % of the total tokens with (q) in the speech of female informants.

This reveals that gender has a greater influence than age with regard to the use of /g/ (see Table 5.4).

Many studies in different parts of the world examined the correlation between language usage and speakers' gender. Women were found to be more conservative than men in some situations, while they were more progressive in others. It is argued that the linguistic behaviour of women varies depending on whether there is a change in progress or not, and in relation to the age of the speaker. In stable sociolinguistic situations, women use more conservative features and adopt the conservative role. In cases of language change, men tend to favour standard features, while women tend to use innovative features (Labov, 1966). In many cases, the symbolic significances that underlie patterns of variation claim that when women use those features, they consider them as more prestigious because they are standard-

like ones.⁴⁹ For example, in his study on language change in New York City, Labov (1966) found that women adopt the post-vocalic [r] variant more than men do, and consider this variant as more prestigious. He (2001: 367) states later in another study that women ‘deviate less than men from linguistic norms when the deviations are overtly banned, but more than men when the deviations are not proscribed’.

Many studies conducted on Arabic dialects, including IA identified two important trends of change. With regard to the impact of gender on linguistic behaviour, the earlier studies contrasted with the general gender-related patterns of language use mentioned above; they revealed that Arab men use new linguistic forms more frequently than Arab women do.

A recent review of the research on gender-related variation in Arabic showed that women lead in using new forms. Bakir (1986) investigated gender-related variation in the use of interdental consonants among informants of the Basra *gilit* dialect. He found that women used the prestigious variants more than men did. Another study on IA was conducted by Abdul-Hassan (1988: 184), whose results showed that female speakers from the central part of Iraq used the non-standard variant /g/ of the variable (q) more than male speakers with a statistical significant value at $p < 0.05$. He ascribed this finding to the prediction that people in this part of Iraq were exposed to the modern lifestyles and media more than those in the northern and southern parts of Iraq, where the differences between male and female speakers in the use of /g/ were not significant. In contrast to Abdul-Hassan’s study, Abu-Haidar (1989) found that women used the prestige features more than men and that these features were in the direction of Standard Arabic (SA).⁵⁰ In Saudi Arabia, Al-Essa (2008: 119) found that female informants

⁴⁹ The correlation between linguistic behaviour and informants’ attitudes towards the *gilit* dialect is discussed in more detail in § 5.2.4 of this chapter.

⁵⁰ Abu-Haidar (1989: 475) studied the following variables:

1. SA passive forms, as opposed to the vernacular 3rd person plural: *yuqāl* ‘it is said’, instead of *ygūlūn* ‘they say’
2. Substituting ordinal numbers for months of the year, as in using ‘the first’ for ‘January’.
3. The SA adverb *lamman* ‘when’ introducing a verb, in lieu of its vernacular equivalent ‘min’.
4. SA adjectives *sagīr* ‘small’ (ms) ‘small as opposed to their vernacular equivalents *zġayyir*.
5. SA forms instead of corresponding loanwords, such as *dirrāġa* ‘bicycle’ instead of *pāysikil*.
6. SA forms instead of their well-established vernacular equivalents, as in *risal* ‘to send’ instead of *dazz*.

used the Hijazi variant /t/ as a variant of the Najdi variable (θ) more than men. In all of these studies, the symbolic significance of these variants is the social awareness of informants to adopt them. Basically, a possible interpretation for this finding in relation to whether there is stable or changing sociolinguistic situations is that women lead in acquiring new forms, but only if these new forms are prestige forms, whereas men use more non-standard forms, both in stable sociolinguistic situations and in situations of language change. It looks like women in our study preferred not to use the *gilit* features because they evaluated them as standard-like (especially with regard to (q), which is in most cases attached to the SA style). Due to the lack of standard-to-non-standard distinction in the present study and given that there is state of language change in progress, I argue that all speakers used the *gilit* features, but men used them more because they were part of a highly valued variety i.e. more prestigious.

Although men and women used /g/ variably with (q), this variation was limited to the four grammatical categories (see Figure 5.4). The use of /g/ in relation to these categories is presented in Table 5.11 below:

Table 05.11 Use of /g/ by grammatical categories

	Adverbs	Verbs	Nouns	Adjectives
Males	18 %	53 %	27 %	2 %
Females	13 %	32 %	47 %	8 %
Sig.	0.027*	0.033*	0.202	0.766

* Sig. = $p < 0.05$

As can be seen in Table 5.11, the male informants were in the lead in the use of the *gilit* variant /g/ in adverbs and verbs. For example, the adverb [qidda:m] ‘in front of’ and the verb [jisqi] ‘to water’ were realised as [gidda:m] and [jisgi], respectively. The variation between male and female informants in using /g/ in these two categories reached statistical significance. From the differences in percentages between verbs and adjectives, it seems that /g/ is most socially acceptable in verbs and least acceptable in adjectives. Whereas men used /g/ in verbs the most (53 %), women preferred to use this variant in nouns the most (47 %). This variation was statistically significant ($P=0.033$). Although there was less differentiation between men and women in the use of /g/ in adverbs, where men use it 18 % and women 13 %, the statistical significance of this differentiation was higher than that of verbs ($P=0.027$). Female informants were using the innovative feature /g/ in nouns and adjectives more than male informants are. The second highest frequency of /g/ occurs in nouns, which is led by female informants, who used it 47 % of the time and male informants using it 27 % of the time. For example, [qisib] ‘type of date’ is pronounced as [gisib]. The grammatical category in which /g/ is adopted the least was adjective, which is also led by women with 8 % frequency compared to 2 % by men. Compare [miħru:q] ‘burned’ to [maħru:g]. It was not clear at this stage whether /g/ is evaluated more positively in verbs and adverbs, or negatively in nouns and adjectives.

5.2.2.2 (k) affrication

The adoption of /tʃ/ according to gender is presented in Table 5.12 below:

Table 05.12 Use of /tʃ/ by male and female informants

	/tʃ/	/k/	Subtotal
Males	12 % (33 tokens)	88 % (276 tokens)	309
Females	3 % (55 tokens)	97 % (204 tokens)	209
T-test: F=8.897; P=0.029*			Total: 518

* Sig. = $p < 0.05$

The data show a high rate of variation between male and female informants in the use of the affricated (k) and reveal that female informants clearly disfavour affrication, with only a 3 % incidence of /tʃ/. Among the 309 (k) tokens that men produced, there were only 33 tokens (12 %) in which (k) was affricated. In general, both male and female informants used /tʃ/ less than they used /g/. This may be ascribed to the social meaning attached to these variants; HIA speakers attach /tʃ/ to the *gilit* dialect, while they assign the (k) variant to their local dialect. Although there were same number of male and female informants, (18 each), the mean use of males (11.5) was much higher than that of females (2.8). The result of the independent-sample t-test ($P=0.029$) showed that gender was highly statistically significant for /tʃ/ than that for /g/. My results do not support findings arrived at by previous studies on IA, which found that female speakers were more innovative than male speakers in the use of standard and prestigious features. Abdul-Hassan (1988: 190) found that female speakers used the non-standard /tʃ/ variant of the variable (k) more frequently than male speakers did and that these differences were highly statistically significant at $p < 0.01$. To seek an explanation of the independent variables that drive this variation pattern, we need first to explore the sociolinguistic situation not only in HIA, but also in other Arabic dialects in which (k) affrication (or de-affrication) is investigated. It can be possible then to understand the patterns of variation in this variable. For example, in Saudi Arabia, Al-Rojaie (2013: 57) reported that

during data collection, one of his female informants prevented her daughter from using /tʃ/ as a variant to (k) because this variant was associated with ‘provinciality and old-fashioned speech’. In Jordan, Abd-el-Jawad (1986: 55) found that male informants used the urban variant /tʃ/ more often than female informants, who abandoned it in favour of the local variant /k/. Although Abd-el-Jawad did not refer to this pattern of variation in the discussion, in his conclusions, he mentioned that more standard or prestigious urban forms replace the linguistic forms, which are ‘stigmatised’, but carry low social evaluation.

5.2.2.3 Vowel lowering

Table 5.13 presents the distribution of vowel lowering.

Table 5.13 Percentages of vowel lowering according to gender

	[a]	[i]	Subtotal
Males	43 % (242 tokens)	57 % (327 tokens)	569
Females	28 % (189 tokens)	78 % (353 tokens)	542
	T-test: F=0.025; P=0.028*		Total: 1,111

*Sig. = $p < 0.05$

Male HIA speakers lead in vowel lowering towards the *gilit* dialect. This process occurs in initial unstressed closed syllables. For example, the word [misdu:d] was realised as [masdu:d] ‘closed’. Overall, 431 tokens of vowel lowering (from 1,111 tokens recorded for vowel lowering) were observed. Male speakers [a] was double (43 %) that of female speakers (28 %). Out of the 569 tokens containing the front vowel /i/, men had [a] realisation in 242 tokens. Female HIA speakers lowered /i/ in 189 tokens out of the 542 tokens. Although the outcome of the independent-sample t-test shows that the correlation between gender and the use of

vowel lowering was statistically significant at $P=0.028$, this correlation was less significant than that of /g/ and /tʃ/. Furthermore, the big higher frequency of vowel lowering tokens indicates that HIA speakers are less aware realisations of the vocalic features than realisations of the consonantal features. While there were 1.111 tokens of vowel lowering, there was 675 (q) tokens and 518 (k) tokens.

5.2.2.4 Vowel epenthesis

The rate of variation between male and female speakers in vowel epenthesis in onset consonant clusters in word-initial position is presented in Table 5.14 below:

Table 5.14 Epenthetic [i] according to gender

	Epenthetic [i] CiC	No epenthesis	Subtotal
Males	41 % (190 tokens)	59 % (229 tokens)	419
Females	28 % (116 tokens)	72 % (272 tokens)	388
T-test: F=2.892; P=0.098			Total: 807

Female informants used both the vocalic features in the same way. They used vowel lowering and epenthetic [i] 28 % of the time. Although there was a slightly greater difference between male and female informants in the use of epenthetic [i] (17 %) than that in the use of vowel lowering (13 %), this gender-related variation reached statistical significance at $P=0.075$. This might be ascribed to the fact that both male and female speakers used less epenthetic [i] tokens (807) than vowel lowering tokens (1,111). Despite this insignificant variation, both male and female speakers vary in using the epenthetic vowel [i] with regard to syllable type. This variation mirrors the age-related pattern, where speakers in all age groups used the epenthetic vowel [i] in CCVV syllable type the most, less in CCVVC syllable type,

and in CCVC syllable type the least. As Figure 5.11 shows, male and female speakers preferred to insert the epenthetic vowel /i/ into onset consonant clusters in word initial positions in open syllables more frequently than in closed syllables. Although male and female speakers used very few epenthetic [i] tokens in CCVC syllable type, the difference between them was statistically significant at ($P= 0.016$). The differences are insignificant: ($P= 0.359$) and ($P= 0.407$) for syllable types CCVV and CCVVC, respectively.

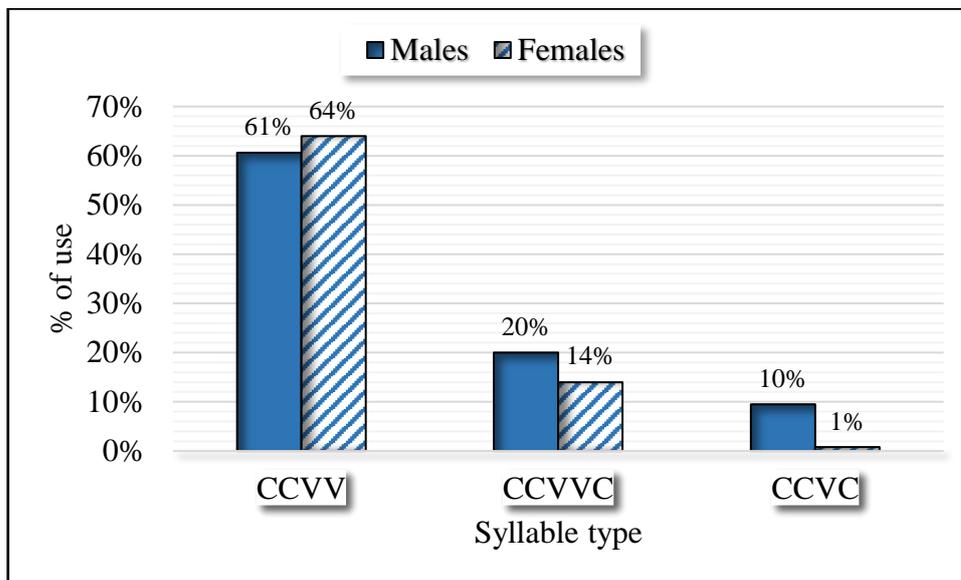


Figure 5.11 Gender-related use of epenthetic [i] by syllable type: Males (left) and females (right)

Milroy (1980: 113) argues that gender is not a simple social factor; interpreting language change in terms of speakers' gender without considering its social values is 'unwise'. Therefore, examining gender and age-related variation with regard to other factors, such as speakers' social networks might be more useful; it might help unveil the influence of these factors on the linguistic behaviour of individuals more clearly than considering gender and age as independent social factors.

5.2.3 Distribution according to SNI

5.2.3.1 Individual language behaviour

In this section, I discuss the linguistic variation in the use of the four dependent variables in relation to speakers' individual SNI scores. In many studies, a correlation is identified between language use and a speaker's position within a speech community. Sociolinguists used the SNI approach to establish the speakers' integration within the community. They relied on various strategies to test the variations in the social network structure (§ 4.7.3.1). In order to examine the SNI-related individual differences, I present speakers' linguistic scores of the four dependent variables according to their SNI scores in scatter charts.

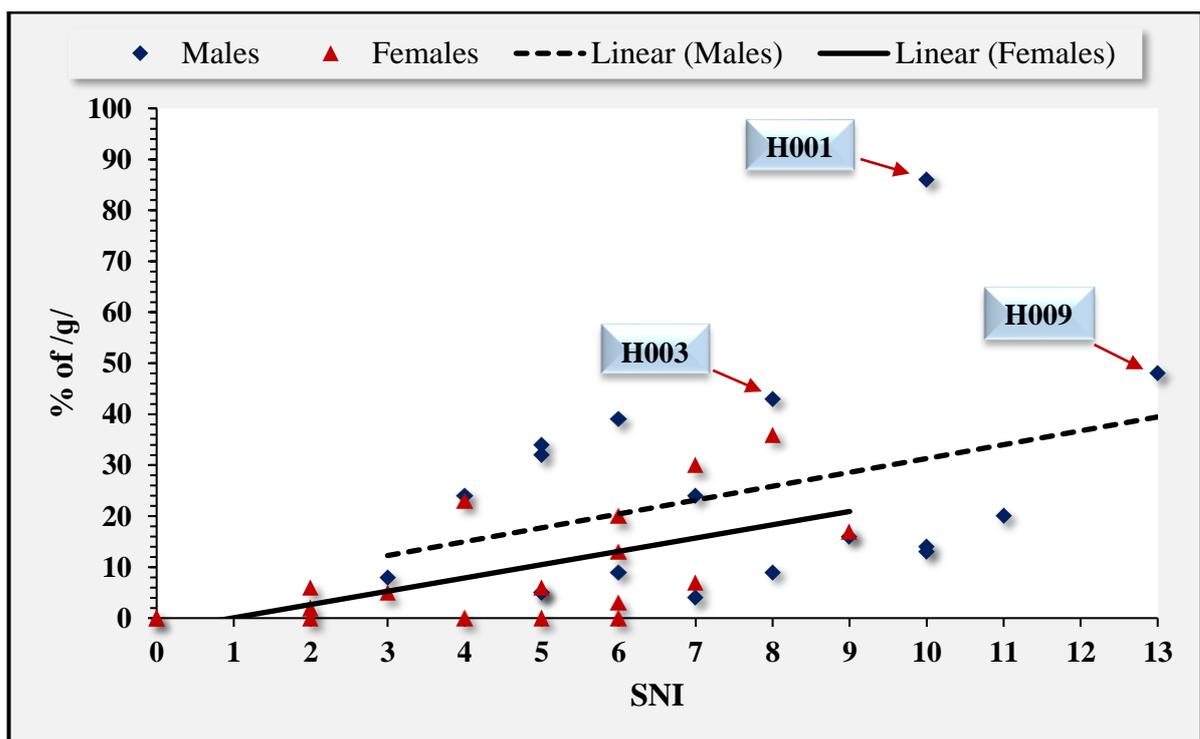


Figure 5.12 Informants' individual use of /g/ according to SNI

The distribution of the data in Figure 5.12 appears to clarify the strong correlation between SNI and use of /g/ ($r = 0.457$; $P < 0.05$). The data fit almost tightly, and the markers are

distributed equally around the trend line. We can see that some of the high-scorers (9-13 points), especially those between the 8 and 11 points, acquired /g/ very sporadically. In addition, some lower-scorers (0-4 points and 5-8 points), especially those between the 4 and 8 points used this variant almost as regular as or more than the high-scoring informants. Of the five highest scorers in /g/, there are four male informants (three younger and one older informant), and only one female (younger) informant. With regard to informants' SNI, one of the main predictions of female-led language change is that they are 'family brokers in interaction with outsiders' according to Holmes (1997: 199). However, the highest scorers in /g/ are male informants, who are integrated into the *gilit* community through friendship groups (see Figure 5.17 § 5.2.3.3.1). The first highest user of /g/ was the younger male informant (H001), who used it 86 %. The results of the present study do not support this prediction. This informant is in closed friendships with *gilit*-speakers. The second highest user of /g/ was an older male informant (H009), who used it 48 %. He is also integrated into the *gilit* community through friendship. He used to travel with his *gilit*-speaking friends on weekly basis to Baghdad for study and work purposes. The third highest user of /g/ was H003, the younger male informant from the middle SNI group, who used /g/ 43 %. Although the three highest users of this variant are integrated into the *gilit* community through friendship relations, they differ in the level and reasons for establishing such relations. The friendship of H001 and H003 came from communication with *gilit* speakers in Hīt, while H009 established his friendship outside the city and before the *gilit* migration to it. It can be concluded that even if he was exposed to this form of integration after the migration waves, he would have not acquired this variant due to age. It appears that his integration to the *gilit* community came from exposure to that community in pre-migration time; since he had lived twenty years in Baghdad. During the interview, he reported that he noticed that his accent changed since he started his study in the University of Baghdad. However, he thinks that friends rather than classmates, who are

also *gilit*-speakers, influenced him. The data in Figure 5.13 visualise individual variation in the use of the epenthetic [i].

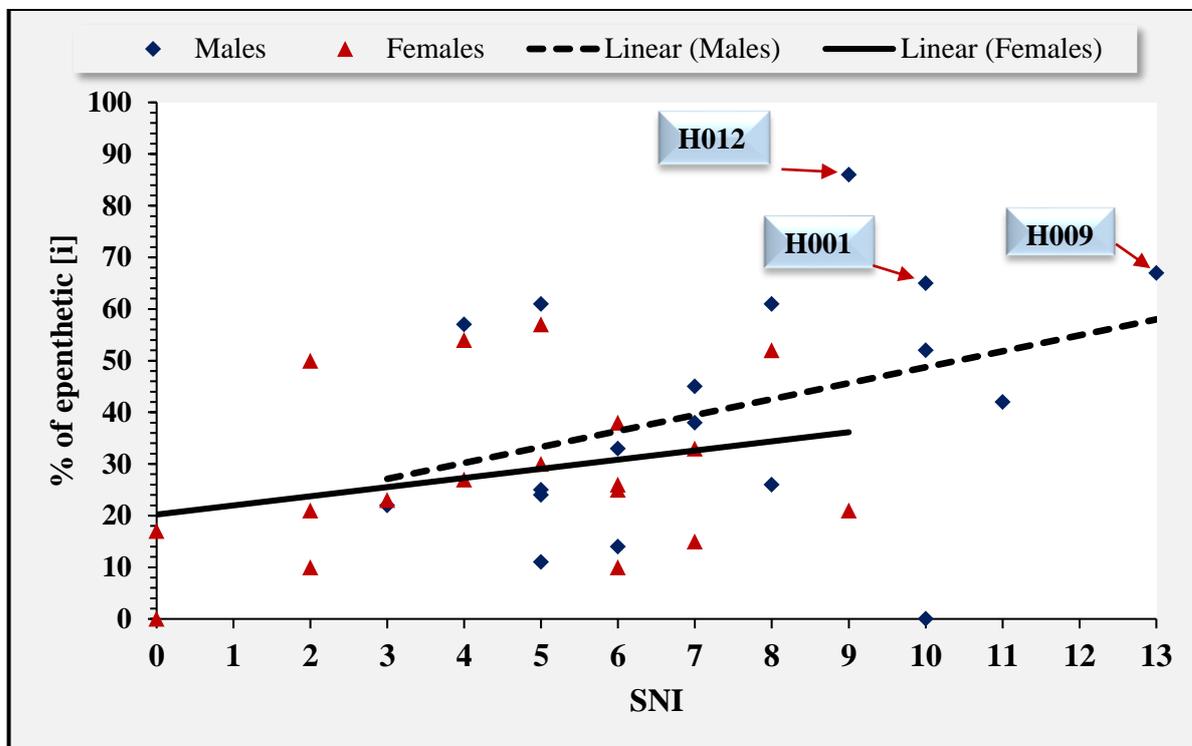


Figure 5.13 Informants' individual use of epenthetic [i] according to SNI

It was found that vowel epenthesis had the second best positive correlation with ($r = 0.455$; $P < 0.01$). It appears from the data that, with two exceptions, the lowest SNII score for male informants is 5 points, while one female scored zero on the SNII. It can be observed that H001 and H009 are still innovating in the use of the epenthetic vowel [i]. The new observation is that H009 used this variant (67 %) slightly more frequently than H001 (65 %). The first user of the epenthetic vowel [i] in initial two consonant cluster was H012, the male informant from the older age group, who used it 86 %. It looks that his usage of this variant came through exposure to the *gilit* speakers by leisure time activities. As will be seen (see Figure 5.20 § 5.2.3.3.3), these informants are the highest users of [i] in relation to leisure time. One of the two low SNII scorers in the use of the epenthetic vowel [i] comes in the sixth position among

the male informants. The other low network scorer used the epenthetic [i] higher than the 5-8 points scorers. While some female low scorers used the epenthetic vowel [i] almost frequently, one of the two high scorers used it rarely. Vowel lowering had the third best correlation with SNI ($r= 0.373$; $P < 0.05$). Figure 5.14 shows the distribution of individual informants' use of this process.

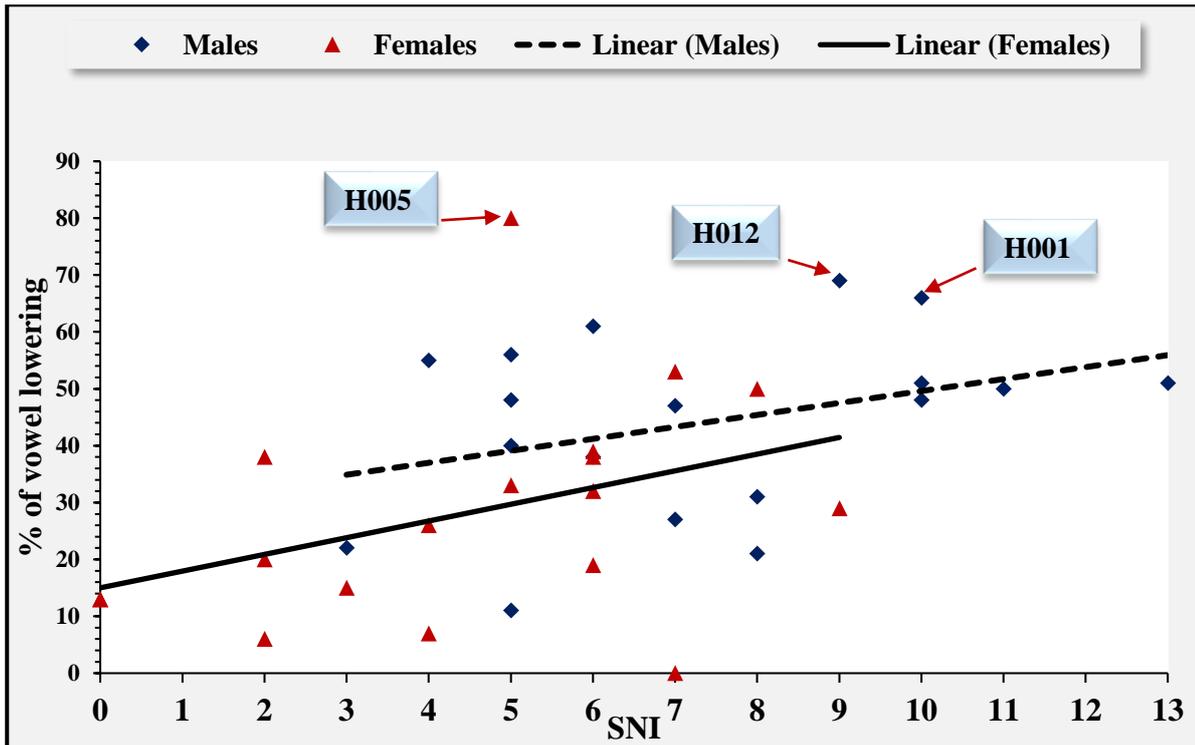


Figure 5.14 Informants' individual use of vowel lowering according to SNI

Male informants, who scored 9-13 points on the SNII used the variant [a] instead of /i/ more regularly than informants in the other two groups. Approximately more than a third (37 %) of the 5-8 point scorers used it as regularly as the high scorers, with mean use 56 %. Surprisingly, the highest user of vowel lowering H005 was a low SNII scorer. The only female SNII high scorer H034 used this variant 29 % of the time. Conversely, the highest female user of vowel lowering performed 4 points in the SNII, who used it 80 %. The majority of low and middle SNII scorers used vowel lowering rarely with no considerable variation observed. It can be noted that the highest user of vowel lowering is a younger female informant H005, who used

it 80 %, while the second user of this process was the older male informant H012, who used it 69 % and the younger male informant H001, who used it 66 %.

The only correlation which did not reach statistical significance was the correlation between SNI and /tʃ/ ($r= 0.199$; $P > 0.05$). The data in Figure 5.15 explain network-related variations in /tʃ/ at the level of individual informants.

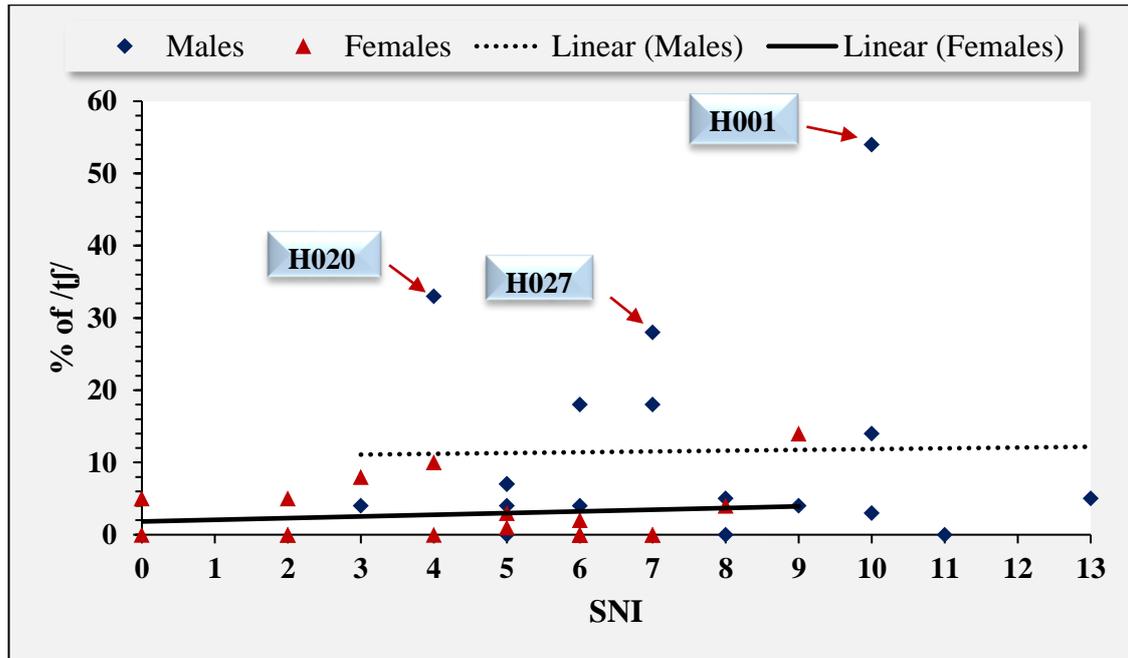


Figure 5.15 Informants' individual use of /tʃ/ according to SNI

Figure 5.15 illustrates the weak correlation between language scores for /tʃ/ and the network scores. The markers for males and females fitting very loosely around the trend lines indicates very weak relationship between gender and the use in this variant (§ 5.2.2). It looks like, at the level of individual informants, the integration of the three highest users of this variant shown in Figure 5.15 came from closed friendship. These three informants are the highest scorers in the open friendship group. It will be shown that friendship network is an important factor for the use of /tʃ/ as well as /g/ (§ 5.2.3.3).

All informants adopted the variant /tʃ/ only minimally. With the exception of three male informants, the majority of informants used it only lower than 20 %. The first highest user of

this variant was H001 from the younger age group, who adopted it 54 % of the time. The second highest users of this variant are from the middle age group; H020 with frequency of 33 % and H027, who used it 28 %. It looks like /tʃ/ is adopted only minimally because the host variety variant /k/ of the variable (k) is particularly stigmatised. I suggest here that social a meaning can attach to this variant, and my point is that this linguistic form is salient. Therefore, the variation in this variant can be explained in terms of the social meaning rather than being correlated with the demographic characteristics of informants, such as age, gender, and SNI, which is the case in the other variants. Again, the highest users of /tʃ/ are male informants.

The concept of salience is explored extensively in sociolinguistic studies of dialect contact and dialect levelling (Trudgill, 1986; Kerswill and Williams, 2002). A number of linguists tested and advanced factors according to which they consider linguistic features to become salient in these situations and discourse and ethnographic contexts (Podesva, 2011). Salience is widely defined in sociolinguistics. According to Hickey (2000:57) it is ‘the degree to which speakers are aware of some linguistic feature’ (Hickey, 2000: 57), while according to (Rącz 2013: 58), salience is ‘a property or set of properties that cause a linguistic variable to be more prominent, more conspicuous for the language users’. According to Kerswill and Williams (2002: 81), salience is ‘a property of a linguistic item or feature that makes it in some way perceptually or cognitively prominent’.

Labov (1972: 314) classifies linguistic variables into three types according to their awareness in a speech community: i.e. indicators, markers and stereotypes. Markers are prone to stigmatisation and style shifting. Indicators exhibit social variation but not stylistic variation (Roller 2016: 13), they show more style shifting than indicators and therefore are not considered as class markers (Rącz 2013: 25) and they generally fall below the level of speakers’ awareness. Because they carry more salience, markers are more likely to play

effective roles in language change situations than indicators (Rácz 2013: 59). Stereotypes are highly recognised in the speech community as they show a strong association with a particular language variety. With regard to social awareness, it has been argued that the difference between stereotypes and markers is that the speakers are aware of both, they invoke comments on markers, but not on stereotypes (Eckert 2008: 463). According to Labov (1994: 78), stereotypes are ‘overt topics of social comment’ and are ‘prominently labelled by society’ (1972: 314). In terms of social awareness, stereotypes are more salient than markers and indicators because speakers of a particular language variety cognitively comment on them, although markers and indicators show social stratification. Members of the speech community are usually less aware of linguistic variation in indicators, but are more aware of such variations in markers, which carry style-shifting pointing to a social awareness of the variation, and on which speakers sometimes comment. For example, Trudgill (1986: 7–11) noticed that he altered some linguistic variants in some of the interviews he conducted in Norwich. While he accommodates his use of T-glottaling to the interviewee, he did not alter his variant of the variable (a:) in favour of their way of speaking. He proposes that the variable (t) matches what Labov categorises as a marker, while (a:) is an indicator. Similarly, Wilson (2018) based his conclusion that phonological forms i.e. *v*-insertion, *y*-diphthongization and *é*-raising are stereotypes on the fact that informants commented on all three phonological forms during the interviews, referring specifically to individual features. When I asked my informants about the sounds that distinguish HIA from the dialect spoken in Baghdad, approximately 75% of them from all age groups mentioned that they are more sensitive to using /tʃ/ than to using /g/. Some of them reported that HIA speakers are more easily recognised when they pronounce /tʃ/ than /g/. Moreover, over than 50% of the older informants mentioned that when an HIA speaker uses the *gilit* dialect, they would be referred to as using the [tʃa:] dialect. In this regard, it seems that /tʃ/ is a stereotype and that adoption

is prevented because the host variety variant /k/ is socially positively evaluated rather by the host community. This case is in line with Ryan (1979, cited in Milroy, 1980: 18), who claims that ‘Low-prestige ethnic and status groups everywhere perceive their language or dialect as a powerful symbol of group identity, despite long-term pressures from the standardised code’.

Going back to the data in Figure 5.15, it seems that, with one exception, male informants, who scored between 8 and 13 points in the SNII used /tʃ/ less than 15 %. In contrast, three out of the nine informants, who scored 5- 8 points in the SNII used this variant 18-28 % of the time. Surprisingly, the second highest scorer in /tʃ/ was a low (0-4 points) network scorer. With one exception, all female informants, who scored between 0 and 8 points and used /tʃ/ less than 10 %. Moreover, the highest female SNII scorer did not exceed 14 % use of /tʃ/.

5.2.3.2 Group language behaviour

While the individual language behaviour provided clear information of the innovation pattern, it is still necessary to look at how the speech community as a whole behaved linguistically towards the *gilit* community. I am interested in giving a general idea of how informants’ use of the four dependent variables is influenced by their integration to the *gilit* community. To do this, I present the linguistic scores at the level of groups. Informants were assigned a score between 0 (unintegrated) to 21 (highly integrated) (§ 4.7.3.1). The mean value of these scores was 6.5. Collectively, this set of criteria was named the Social Network Integration Index (SNII). The highest score in the twenty-one-points SNII was 13 while the lowest score was 0. The mean score in the index was 6.5.⁵¹ When the group language behaviour is the focus, the

⁵¹Looking at the informants’ scores on the SNII, and taking into consideration that the mean score is 6.5, I considered the thirteen-point continuum in relation to their scores and divided them into three groups: 0-4 points, 5-8 points, and 9-13 points. If we have just two groups, for example, then we might end up with a lot of ‘average scorers’ in both the low-scoring and high-scoring groups and this is likely to skew the results. Moreover, working on three groups gives a clearer idea of how informants’ language usage is influenced by an increase, or decrease in their average social networks.

picture of this behaviour seemed clearer. Figure 5.16 presents a general picture of informants as groups.

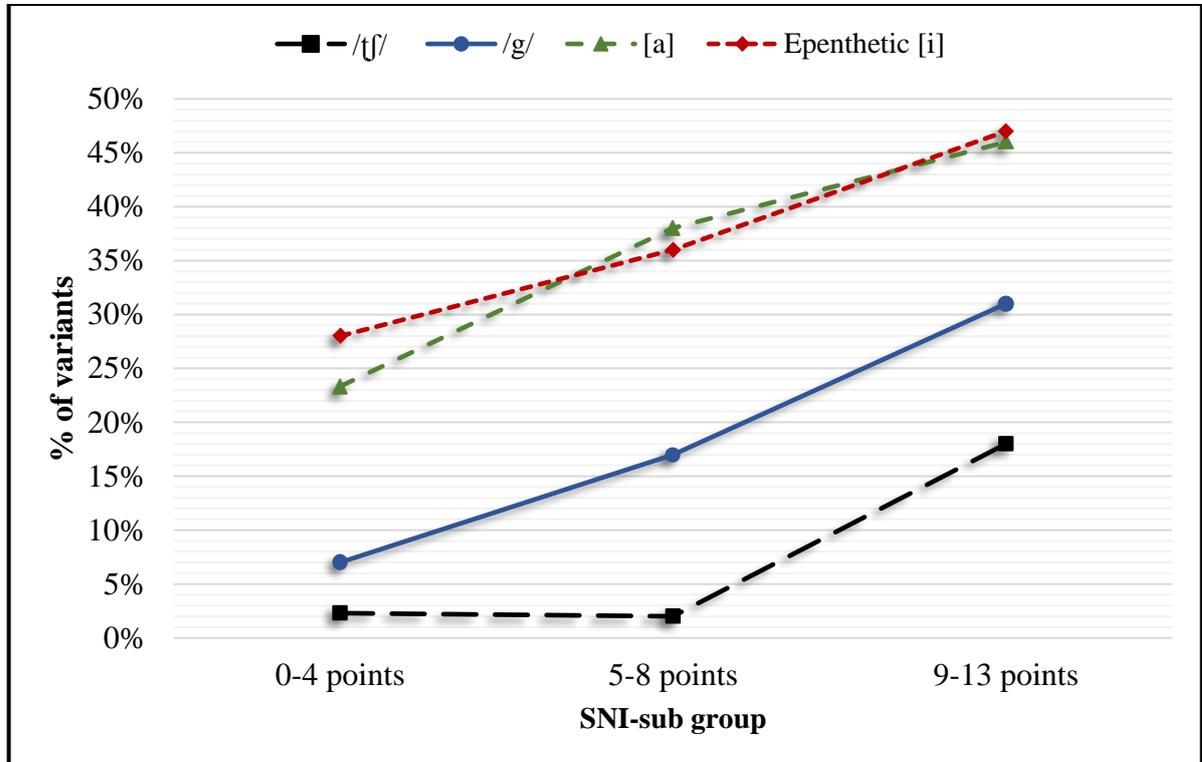


Figure 5.16 Percentages of the *gilit* variants by SNI

Overall, speakers' individual scores for /g/ contradict patterns of variation that we observed in the individual language behaviour in the previous section. The highest SNI group used less marked variants more than those in the other two groups. On initial inspection, informants' use of the *gilit* features appears to show a pattern similar to the age and gender-related patterns observed in Figures 5.1 and 5.10. For all the studied variables, informants, who scored 9-13 points on the SNII used more *gilit* features than informants with lower points (0-4 points and 5-8 points). Furthermore, informants in the three groups used the vocalic variants more than the consonantal ones. The high SNII scorers are in the lead of change towards the *gilit* dialect. Previous studies on Arabic and other languages worldwide explained that increasing linguistic

variable scores are related to increasing network scores. For example, Milroy (1980) found that informants with less integration to their local community were in the lead of language change away from that community's speech. On the other hand, individuals with close-knit networks can build a homogeneous group that enables them to resist linguistic and social pressures from outside their group (Milroy, 1980: 182).

In the case of /tʃ/, the low (0-4 points) subgroup scored equal to the middle (5-8 points) integration subgroup; /tʃ/ accounted for only 2 % of the total tokens with (k) in the speech of lower SNII (0-4 points and 5-8 points) subgroups compared to 18 % in the high SNII (9-13 points) subgroup. There is a possible explanation for this finding that due to its level of stigmatisation only highly integrated informants use /tʃ/. From another perspective, I argue that any of the *gilit* variants may be assimilated, even the more stigmatised ones, but a certain level of integration is a prerequisite for the adoption of /tʃ/. The results of Wilson (2010: 191) for the phonological variables showed a similar pattern of assimilation. While V-insertion is the least assimilated because it is the most stigmatised variable, the other two variables i.e. *É*-raising and *Ý*-diphthongization were assimilated in higher frequencies.

In terms of gender, there is a big difference between the number of male and female informants in the '0-4 points' subgroup; out of the nine informants, there are seven females, but only two males. In this subgroup, 22 informants are distributed equally into eleven male and eleven females. The sharp rise in the adoption of the *gilit* features by the '9-13 points' subgroup can also be explained in terms of gender. All the five informants, who compose this subgroup are males. This sharp increase can be explained when further multivariate tests are conducted (see Chapter 6). In line with the variations at the group level, correlation tests are performed, which revealed that with the exception of /tʃ/, there was a significant relationship between the use of the *gilit* variants and speakers' scores on the SNII. This is shown in Table 5.15 below:

Table 05.15 Correlations between language scores and SNI

Variant	Strength of relationship	Sig.
/g/	0.485***	P= 0.003 (P< 0.01)
Epenthetic [i]	0.418**	P= 0.011 (P< 0.05)
Vowel lowering	0.373**	P= 0.025 (P< 0.05)
/tʃ/	0.219*	P= 0.199 (P>0.05)

*** = Correlation is highly statistically significant

** = Correlation is statistically significant

* = No statistical significance

We have already seen (Figure 5.16) that, at the group level, SNI correlates positively with the use of the four variants. From the significance values in table 5.15 clearly shows, SNI appears to have a highly statistically significant impact on the change towards the *gilit* dialect. As SNI significantly correlates with three variants, it looks to be higher statistically significant than the impact of age, which correlates with one variant (§ 5.2.1), and gender, which correlates with two variants (§ 5.2.2). As the data show, there was a strong positive relationship between informants' SNII scores and their adoption of /g/, a moderate positive relationship between their SNII scores and use of the epenthetic vowel [i] and vowel lowering, but a weak relationship between SNI and informants' use of /tʃ/. The difference in the levels of significance between /tʃ/ and the other three variants can be associated to the fact already reported that for stigmatised variants a higher score on the SNII is required.

5.2.3.3 The SNI sub-variables

The SNII was divided into ten sub-variables testing through which social network the HIA speakers were exposed to the *gilit* dialect. They included networks of friendship, kinship,

workplaces, travel, leisure time activities, spatial mobility and media. Whereas age and gender are indicators of group behaviour rather than individual choices, the SNII sub-variables tested reflected a different state of individuals as group members. Informants were asked ten life-style questions and each question represents a sub-variable. The scoring criteria for these sub-variables were presented in together with informants' individual scores (§ 4.7.3.1). In the previous section, the sub-variables are interlinked and included within the SNII. However, as it is identified in a number of sociolinguistic studies, it is likely that some of them will affect informants' linguistic use more than others. For example, Lippi-Green found that integration into networks of workplace and adoption of non-local language forms scored the best correlation of conservative linguistic behaviour. She ascribes this correlation to the fact that integration into workplace networks is 'a better and more refined indicator of voluntary community integration' (Lippi-Green, 1989: 225). Wilson (2010: 212) found that region of origin of informants' close friends is significant for all the linguistic variables. This finding looks consistent with the results of the present study in that region of informants' friends (or whether they are *gilit* or HIA speakers) is to a certain extent important.

I used a multiple regression test to identify significant sub-variables as well as to rank sub-variables according to their impact on informants' linguistic behaviour (§ 4.9). This allowed me to determine the overall fit as well as the relative significance of each of the sub-variables to the total variance. The first step is to input all the SNI sub-variables as the independent variables against one dependent variable at a time. For example, to examine the relationship between each of the network sub-variables and /g/, these sub-variables (independent variables list) are included against /g/ (dependent variable). After including all the variables, I performed the default 'Enter' method, which included all the independent variables into the multiple regression equation irrespective of their statistical significance. As I am interested

only in the independent sub-variables, which are statistically significant, I used a 'Stepwise' method, which determined the statistically significant predictors in the equation.

Results of the multiple regression test showed that three SNI sub-variables; friendship network, workmates, and leisure time activities proved to have a statistically significant impact on the linguistic behaviour of individual informants. At the top of the pyramid was friendship network, which proved statistically significant for /g/ and /tʃ/. I assume that the individual Hītis, especially men participates in the social practices of the *gilit* community by establishing friendship relations with their *gilit* peers to the extent they are involved in that community. This was reflected into the language behaviour in terms of the above variants. This is inconsistent with results of Al-Wer (2002) on vowel raising in Amman, who found that the youngest boys adopt their parents' language features more frequently than their peers' forms. This finding may be attributed to the fact that friendship is the most important and available social network that individuals in Hīt, mostly youths established with *gilit* speakers. The majority of my informants reported that their friends exposed them to the *gilit* dialect and by time they found themselves mimic to their friends' lifestyles, including their dialect. In the present study, the scoring criteria for this sub-variable is to assign 0 points to informants, whose closest friends are from Hīt, 1 point to those, who have half of their closest friends from Hīt, and 2 points to informants, whose closest friends are from the *gilit* community. At the bottom of the important sub-variables was leisure time activities, which was important for vowel lowering and epenthetic [i]. It was tested by assigning 0 point to informants, who spend most of their spare times with friends and/or relatives, who speak HA, and 1 point to those, who spend their leisure times with *gilit* -speaking friends and/or relatives. This method examined informants' exposure to the *gilit* variety via leisure activities. Between these two variables was workmates, which proved significant only for /g/. This goes in line with other studies on other Arabic dialects. In Jordan, Abd-el-Jawad (1986) ascribed his younger

informants' adoption of /g/ to the social pressure imposed on them by work. Involvement within workplace seems to have an important role in the way Hītis acquired the *gilit* variant /g/. The scoring criterion to calculate workmates in the present study is whether most of informant's workmates come from a *gilit* place and speak HIA (0 point), or most of informant's workmates come from a *gilit* area and speak the *gilit* dialect (1 point).

5.2.3.3.1 Friendship network

Friendship network appears to be a particularly important factor to the state of integration into the *gilit* community and to the parallel degree of accommodation to the *gilit* dialect. It was the only SNI sub-variable that proved significant for all *gilit* variants. For /g/, it was very important (beta= 0.499; P < 0.01), Following Cheshire et al. (2008), I grouped the informants into three friendship groups⁵² based upon the ethnic distribution of their friendship network as follows:

0– All or most close friends from the Hīt community.

1– Some close friends from the *gilit* community.

2– All or most close friends from the *gilit* community.

I refer to informants, who scored 0 as having closed friendship networks, informants with 1 score as having open friendship networks. Informants who scored 2 points are referred to as open friendship networks. None of the informants scored 0, twenty informants scored 1, and sixteen informants scored 2 points. Informants varied with regard to how their use of

⁵²Cheshire et al. (2008) asked their participants:

How many close friends have you got? What ethnicity are they? They then grouped their participants into five friendship groups and gave each speaker a score of 1-5 depending on the ethnic distribution of their friends:

1 = all friends same ethnicity as self
 2 = up to 20% of a different ethnicity
 3 = up to 40% of a different ethnicity
 4 = up to 60% of a different ethnicity
 5 = up to 80% of a different ethnicity

dependent variables is influenced by their friendship with their *gilit*-speaking peers. Because friendship network is highly statistically significant for /g/, there is reason to discuss its impact on the use of /g/.

As groups, the linguistic behaviour of HIA speakers reflected a pattern of friendship.

Table 05.16 Use of *gilit* features according to friendship networks

Variant	Percentage of Closed friendship	Percentage of Open friendship
/g/	7 %	25 %
/tʃ/	2 %	12 %
Epenthetic [i]	27 %	40 %
Vowel lowering	26 %	44 %

The data in Table 5.16 shows that friendship network is a crucial determinant for phonological variants in Hīt. A quarter of the informants who have open friendships with *gilit* speakers used the *gilit* variant compared to 7 % of the closed friendship group who used this variant. It also shows that 12 % of the Hītis whose closest friends are from the *gilit* community used /g/. Informants in the open friendship group used the vocalic features more than the consonantal ones with 40 % and 44 % for the epenthetic [i] and vowel lowering, respectively.

Figure 5.17 shows the use of /g/ by male and female individual informants grouped by open and closed friendship networks.

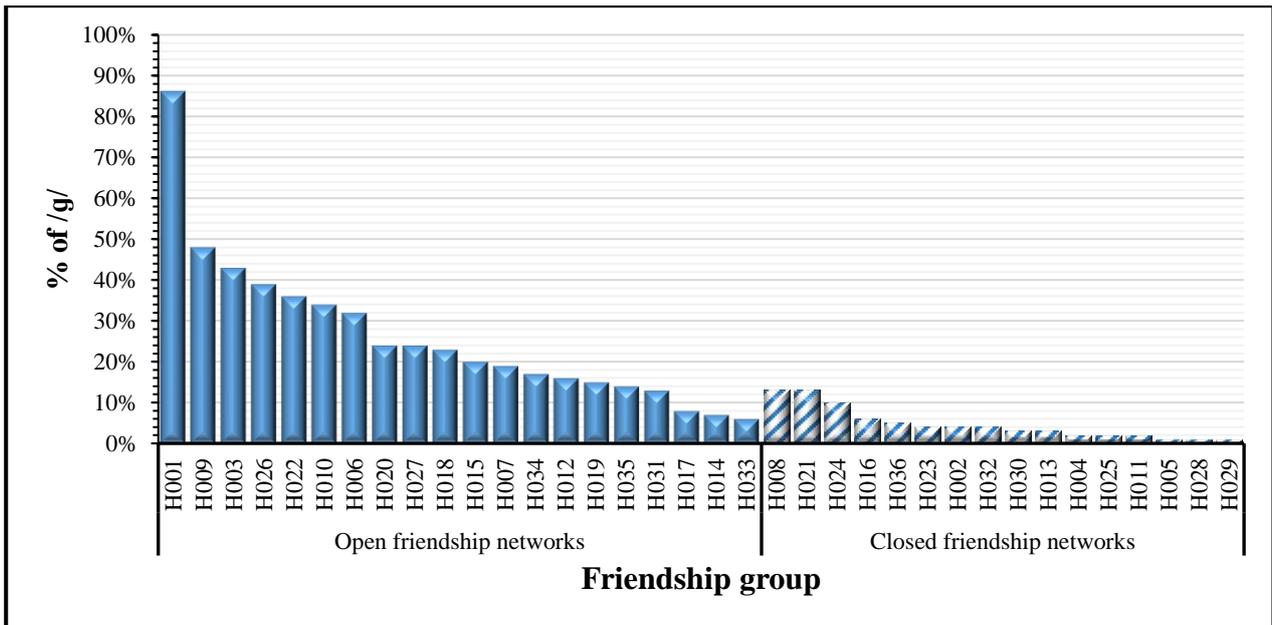


Figure 5.17 Percentages of /g/ by open and closed friendship networks

It can be clearly observed from the data in Figure 5.17 that informants with open friendship networks scored the higher on the *gilit* variant /g/, much more than those with closed friendships. In total, the mean percentage of the open friendship informants was 26 %, while the mean use of informants with closed friendships was 5 %. The highest scorer of this variant was H001, the younger male informant, who used it 86 % of the time. The second highest scorer of /g/ in the open friendship group was H009, the older male informant, who used it 48 %. The lowest users in the open friendship group are the older male informants H014, who used it 7 % and H033, who scored 6 %. The highest scorers of this variant in the closed friendship group are the female middle-aged informants H008 and H021, who used it 13 %. However, their adoption of the variant did not exceed the male informant from the same age group H019, who used it 15 %. While there are more male informants in the open friendship network than female informants, (16 compared to 4 females), most of the closed friendship members are females (14 compared to 2 males). Even within friendship networks, there appears to be a pattern that needs to be unveiled. In the open friendship group, the use of /g/

among male informants ranges from 6 % to 86 %, with a mean use of 27 %, and among female informants ranges from 13 % to 36 %, with a mean use of 22 %. Although there were less males in the closed friendship network, their average use of /g/ was the same as that of females (5 %).

Friendship network was also important for /tʃ/ (beta= 0.473; P < 0.01). Figure 5. 18 presents the use of /tʃ/ by individual informants according to friendship groups.

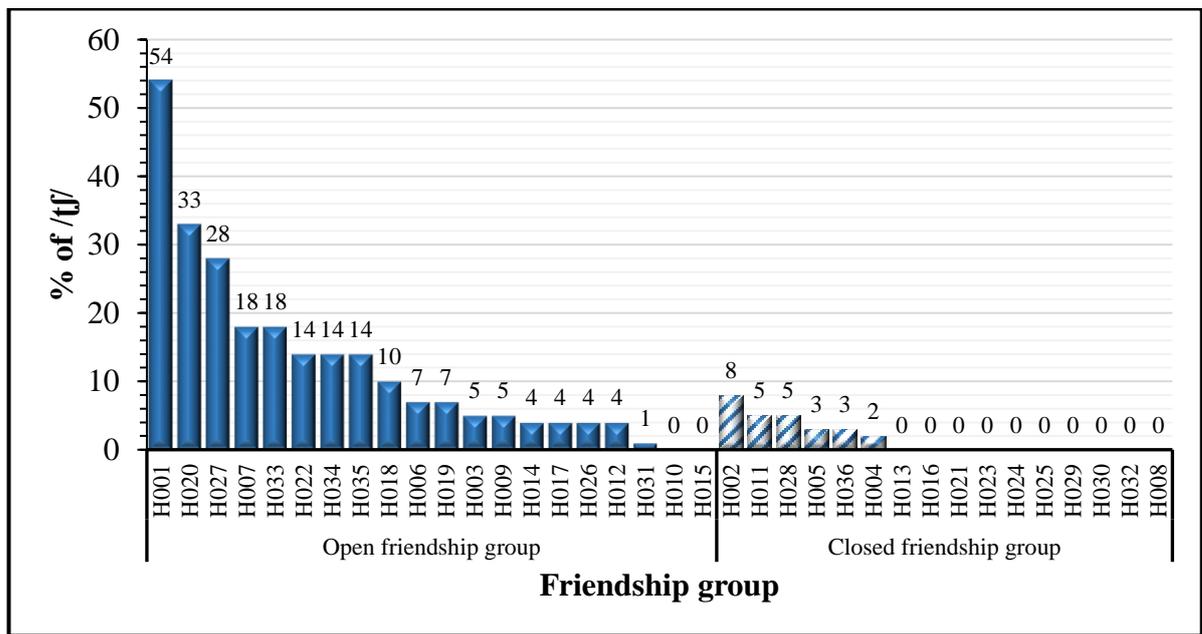


Figure 5.18 Percentages of /tʃ/ by open and closed friendship networks

The data in Figure 5.18 demonstrate that there is a difference between the two friendship groups. Of the thirty-six informants, twenty-one informants had open friendship relations with *gilit* speakers in that they established friendship relations with *gilit* speakers rather than HIA speakers. Informants with open friendship networks have higher frequencies of the *gilit* variant /tʃ/ than those with closed friendships. While open friendship informants used this variant 10 % (min. 0 %; max. 54 %), all members of the closed friendships have a very low frequency (mean 2 %; min. 0 %; max. 8 %). Five male informants in the open friendship

group are the highest users of this variant, with 62 % of the total group usage. The data in Figure 5.18 demonstrate that friendship relations influenced the middle-aged informants' use of /tʃ/ more than the other two age groups. This is evidenced by the observation that three informants of the five highest scorers of this variant are from the 40-59 age group.

On the other hand, the four scorers of it in the closed friendship group are female informants, who used it 80 % of the overall closed friendship group. Although members in the closed friendship group used the /tʃ/ variant of the variable (k), their average usage was below the use of the open friendship group of the variant /g/ of the variable (q). This indicates that HIA speakers are aware of the adoption of the *gilit* variant /tʃ/ in favour of (k), which was found to be a salient feature.

5.2.3.3.2 Workmate network

Although the use of /g/ reflects a highly statistically significant correlation with workmate network, still it is less strong and important than the correlation with friendship (beta= 0.372; $P < 0.05$). This can be explained depending on the difference between 'workmates' and 'friends' in the level of interaction; a person is not necessarily close to all the people he/she works with, but he/she is close to all of their friends. Based on this, it is likely that friends' linguistic behaviour would have a greater impact on informants than workmate relationships. Workmate proved significant only for /g/. Figure 5.19 displays individual variation in the use of /g/ by informants in open and closed work networks. Informants were divided into two groups⁵³ based upon whether their work circles are *gilit* or HIA speakers as follows:

Group 1: Half of informant's workmates speak HIA.

Group 2: Half of informant's workmates speak the *gilit* dialect.

⁵³ Informants in group 1 were assigned 0 point and informants in group 2 were assigned 1 point.

Informants in group 1 were referred to as having closed work networks, while informants in group 2 are referred to as having open work networks.

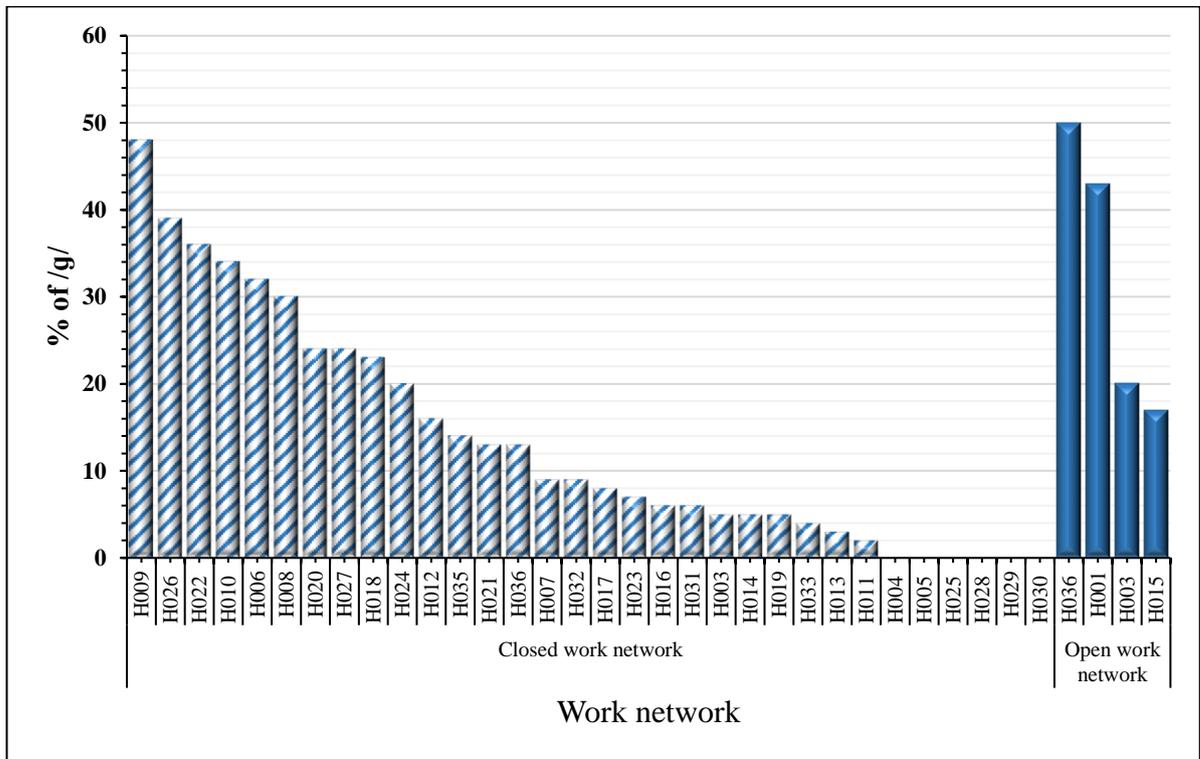


Figure 5.19 Use of /g/ by open and closed work relationships with *gilit* speakers

Informants with open work networks appear to use more of the *gilit* variant /g/ than those with closed work networks. Despite the fact that only four out of the 36 informants built work relationships with *gilit* speakers, we can see that, the mean use of this variant in the open work group (42 %) was less than that in the closed work group (13 %). all four informants are males; three of them are from the age group (20-39), while one informant was from the age group (over 60). The highest three scorers of /g/ in the open work group are the younger male informants H036, H001, and H003, who used it 86 %, 43 % and 20 %, respectively. The lowest user in the open work group was the older male informant H015, who used it 17 %.

In terms of distribution of informants according to gender, while all the eighteen members of the open work group are males, most of the closed friendship members are females (14/18). The highest scorer of this variant in the closed friendship group was the male older informant

H009, who used it 48 %. Interestingly, the six lowest scorers, who did not use /g/ are females; two from the older age group (H028, H029), and four from the younger age group (H004, H005, H025 and H030). In the closed work group, the use of /g/ among male informants ranges from 4 % to 48 %, with a mean use of 26 %, and among female informants ranges from 0 % to 36 %, with a mean use of 18 %.

5.2.3.3.3 Leisure time activities

Leisure time activities showed a significant correlation with vowel lowering (beta= 0.490; $P < 0.01$) and vowel epenthesis (beta= 0.401; $P < 0.05$). The language behaviour of individuals in both leisure time groups⁵⁴ is presented in Figures 5.20 and 5.21 for the use of vowel lowering and the vowel epenthesis, respectively.

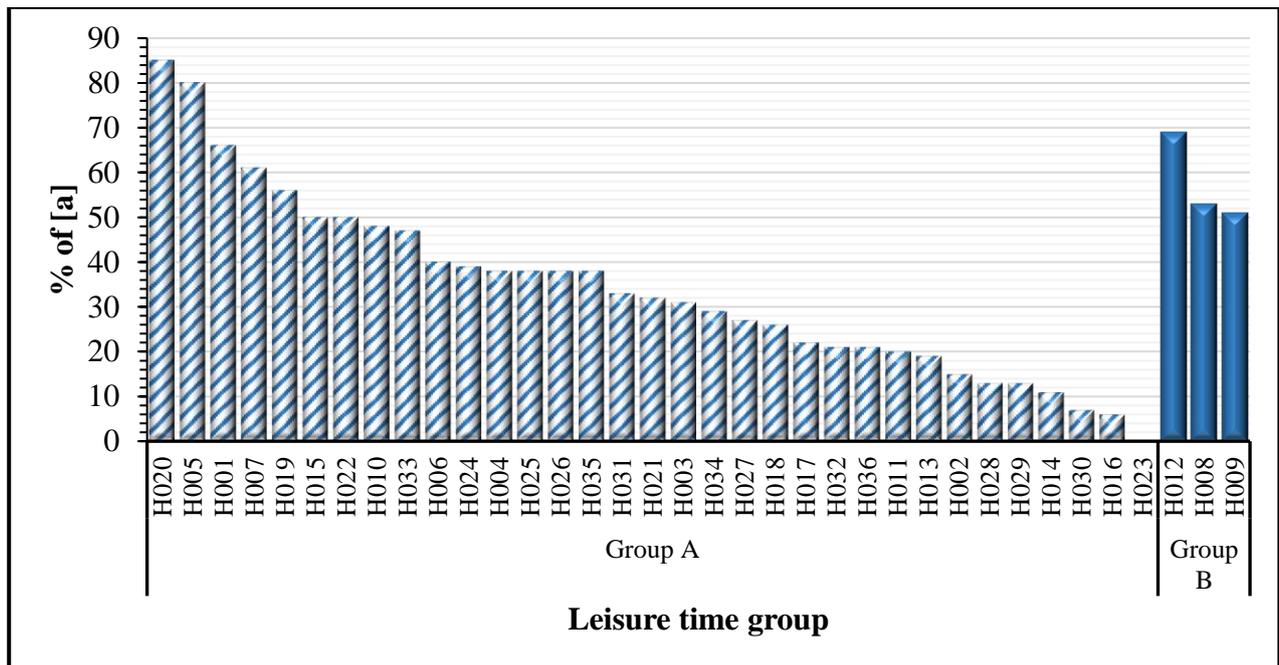


Figure 5.20 Individual use of vowel lowering according to leisure time

⁵⁴Informants were divided into two groups (A and B) depending on their leisure time activities. Group A includes informants, who spend over than 70 % of their leisure time with HIA speakers, while Group B included informants, who spend over than 70 % of their leisure time with *gilit* speakers.

Figure 5.20 reveals that, with the exception of three informants, the thirty-six informants of HIA, did not tend to spend their spare time with *gilit* speakers. Nevertheless, the three informants, who spend most of their leisure time with *gilit* speakers had on average higher frequency of vowel lowering. ‘Group B’ informants produced vowel lowering 58 % of the time, while ‘group A’ informants used it notably less 34 %. It can be observed that the use of vowel lowering according to leisure time activities is particularly pertinent in the speech of the older informants and less important for the middle-aged and younger informants. Of the three informants in group B, there are two older (males), one middle-aged (female), but no younger informants.

As for the epenthetic [i], informants also varied as to whether their use of this variant is impacted by their contact with *gilit* or HIA speakers during leisure times. Figure 5.21 illustrates the use of the epenthetic [i] by individual informants according to leisure time.

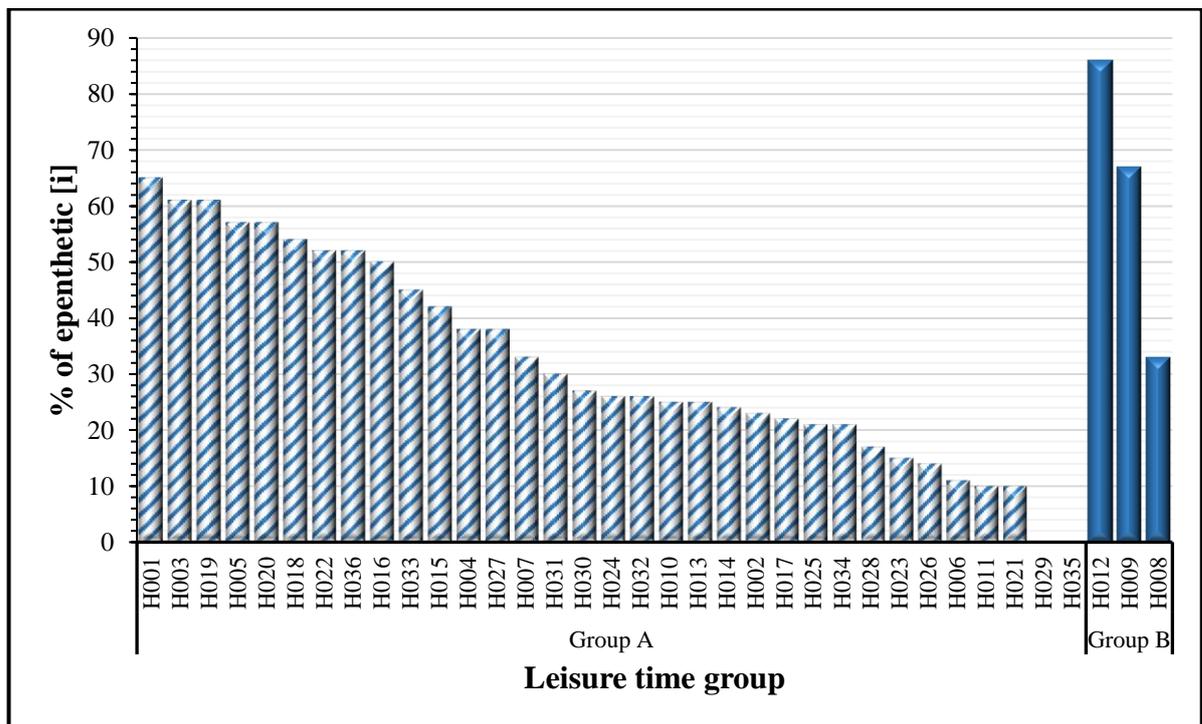


Figure 5.21 Individual scores of vowel epenthesis according to leisure time

The data in Figure 5.21 demonstrate that informants in group B used the epenthetic vowel [i] twice as much as informants in 'group A'. In total, while the three informants, who spend most of their leisure time with *gilit* speakers inserted the /i/ vowel into initial C1C2 clusters 62 % of the time, those, who communicate with HIA speakers inserted /i/ only 30 % of the time.

5.2.4 Distribution according to speakers' attitudes

While SNI allows quantification of a number of language behaviour of HIA speakers, especially in the point of time that followed the wave of migration from the *gilit* area to the city (§ 1.6), the informants are also coded according to their attitudes, taking into consideration the possibility of this factor in accounting for language behaviour. It is beneficial to test to what extent speakers' attitudes towards the *gilit* community and dialect affect their adoption of the new variants. Based on the five-point continuum (§ 4.7.4.1), ranging from 1= very negative to 5 = very positive. In order to examine the attitudes-related variation on the level of groups of informants, and to give an idea of the general pattern of this variation, I present group differences before moving on to discuss individual differences.

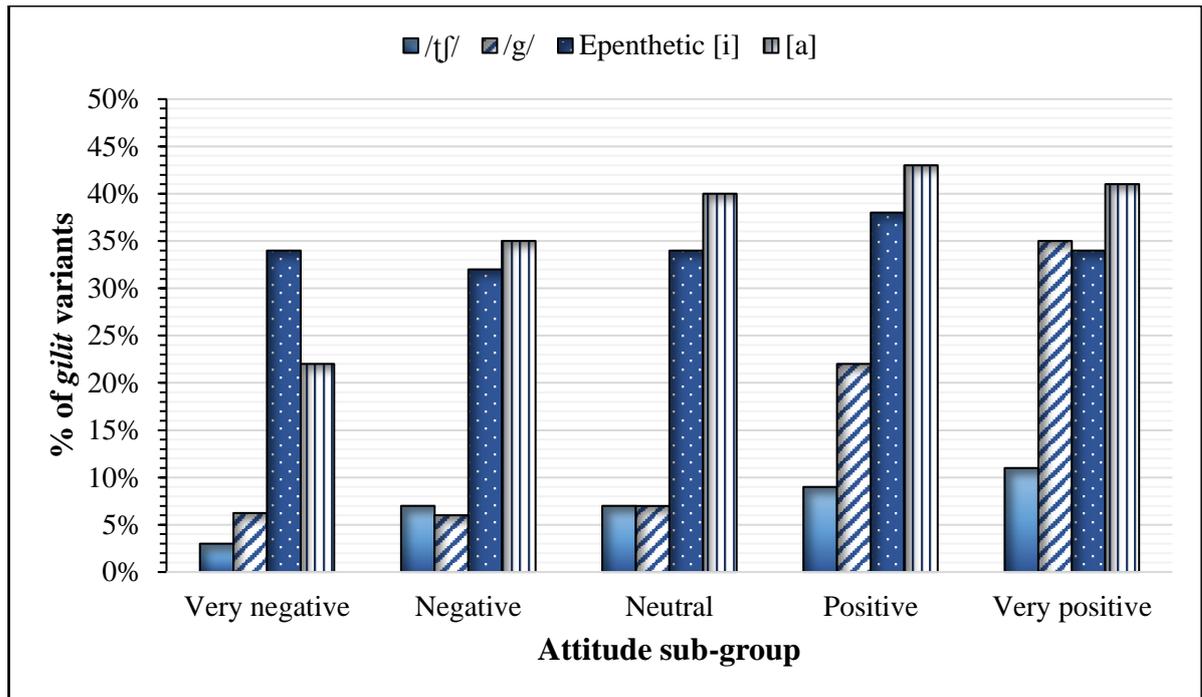


Figure 5.22 Percentages of the *gilit* variants according to speakers' attitudes

The first thing to note in Figure 5.22 is that the informants in all attitudes groups used the vocalic variants much more frequently than the consonantal ones. Another general observation is that the informants, who have positive attitudes towards the *gilit* community used more of the *gilit* features. The most striking and interesting differences are for /g/; for the other variants the results are unremarkable. For example, informants' attitudes do not appear to be important for /tʃ/ and epenthetic [i]. Overall, the distribution of /g/ according to attitudes indicates a strong and statistically significant correlation ($F= 0.619$; $P < 0.01$) between this variant and informants' attitudes towards the *gilit* community and dialect. While there is a marginal difference among the 'very negative', 'negative', and 'neutral' sub-groups in the use of this variant (mean use 6.46 %, ANOVA: $F=0.34$; $P= 0.72$), there was a notable jump in the 'positive' sub-group (22 %). However, result of the independent-sample t-test show that this 'jump' was not significant ($F= 0.590$; $P= 0.460$). Although the use of /g/ increased gradually to 35.13 % in the 'very positive' sub-group, the increase does not prove

significant ($P= 0.420$), although it indicated a strong correlation ($F= 0.689$). While these results are not statistically significant, the visual data do indicate a clear pattern of language use, the use of /g/ increasing as attitudes towards the *gilit* dialect and community become more positive. It has been found in studies on other Arabic dialects that speakers' attitudes plays a decisive role in the adoption of new dialect features. For example, in Jordan, male informants retain their Bedouin variant /g/ of the uvular stop (q) due to their positive attitude toward this variant, while urban Palestinian males resort in some contexts to abandon their identity by adopting the Bedouin variant /g/ (Abd-el-Jawad, 1986). Although the matter is different because in our case it is local inhabitants, who change their speech in favour of the migrants, it looks like informants' attitudes are still influenced by the concept of prestige the *gilit* dialect carries.

Attitude-related differences in the use of vowel lowering are also interesting. Despite the moderate correlation between informants' attitudes and their adoption of vowel lowering, variations among different attitudes sub-groups proved significant. Unexpectedly, informants in the 'positive' sub-group used vowel lowering more than the 'very positive' sub-group by 2%. However, this difference did not prove to be statistically significant ($F= 0.917$; $P= 0.354$). Therefore, I would not comment on this negligible difference and focus on the main finding that, in general, the differences among sub-groups for vowel lowering are important.

The second frequently used variant by informants in all attitudes sub-groups was the epenthetic vowel [i] and the least used variant was /tʃ/. Differences among the sub-groups are not important for neither variants. The results of the ANOVA test of variance demonstrate that the differences among the five sub-groups are moderate for the epenthetic vowel [i] and very strong ($F= 1.254$) for /tʃ/. However, they are not statistically significant at a level of significance $P= 0.13$ and $P= 0.77$ for /tʃ/ and the epenthetic [i], respectively.

During data collection, when I asked my informants about the reasons why Hītis, especially the younger people, might change their dialect and behave like *gilit* speakers, they said that those who do so are more related to the *gilit* communities. Interestingly, one of my older informants reported that one of the reasons behind this behaviour is the security situation, especially when people travelled to Baghdad, and that, talking in a *gilit*-like accent protected them from being distinguished for communal considerations as coming from 'alġarbiyya 'the western part of Iraq'.⁵⁵

To identify whether the correlation between the use of *gilit* variants and informants' attitudes is significant or not, I amalgamated my informants and then divided them into two new categories: negative and positive.⁵⁶ The 'Negative' category included informants, whose attitudes are very negative and negative, while the 'Positive' category included informants, who have positive and very positive attitudes toward the *gilit* community and dialect. I excluded the 'Neutral' scorers because they are neither positive nor negative.

⁵⁵ It needs to be mentioned here that in the years that witnessed communal struggle in Iraq, people coming from such areas are in fear of kidnap for being Sunnis, especially when they are seen in a Shi'a area. However, my informants agree that this is only effective when people from Hīt travel to a *gilit* area and that when they are home, they can use their local dialect i.e. *qiltu* freely.

⁵⁶ Wilson (2010: 218) also classified his informants into 'Negative' and 'Non-negative' categories and reported that differences in accommodation between the two categories were significant for some variables, highly significant for others, and insignificant for one variable.

Table 5.17 Informants' language scores calculated separately for 'negative' and 'positive' categories

Variant	Negative (N= 18)	Positive (N= 18)	Sig.
/g/	6.19 %	28.13 %	P= 0.00 (P< 0.01)
Vowel lowering	28.44 %	41.56 %	P= 0.03 (P< 0.05)
/tʃ/	4.88 %	10.69 %	P= 0.09
Epenthetic [i]	32.75 %	36.19 %	P= 0.33

The results repeat the five attitude groups scores shown in Table 5.17 as far as levels of significance are concerned. Variation in the use of /g/ is still the highest among other variants. The correlation between the negative and positive groups for vowel lowering is still at the same level of significance reported for the five attitudes groups. Although still insignificant, the probability value of the correlation between the negative and positive groups is lower for /tʃ/ and the epenthetic vowel [i] than that among the five attitude groups. The extra observation of the data is that for all variants, the 'positive' informants have higher frequencies than the 'negative' informants have. This is despite the fact that each group is comprised of the same number of informants, which adds a weight to the argument that speakers' attitude is still an important factor in determining the language behaviour of informants. However, it is important to reconsider the coding of informants into their attitude scores. The 17 informants in the positive group are distributed as follows:

- Four informants from age group (over 60)
- Seven informants from age group (40-59)

- Six informants from age group (20-39)

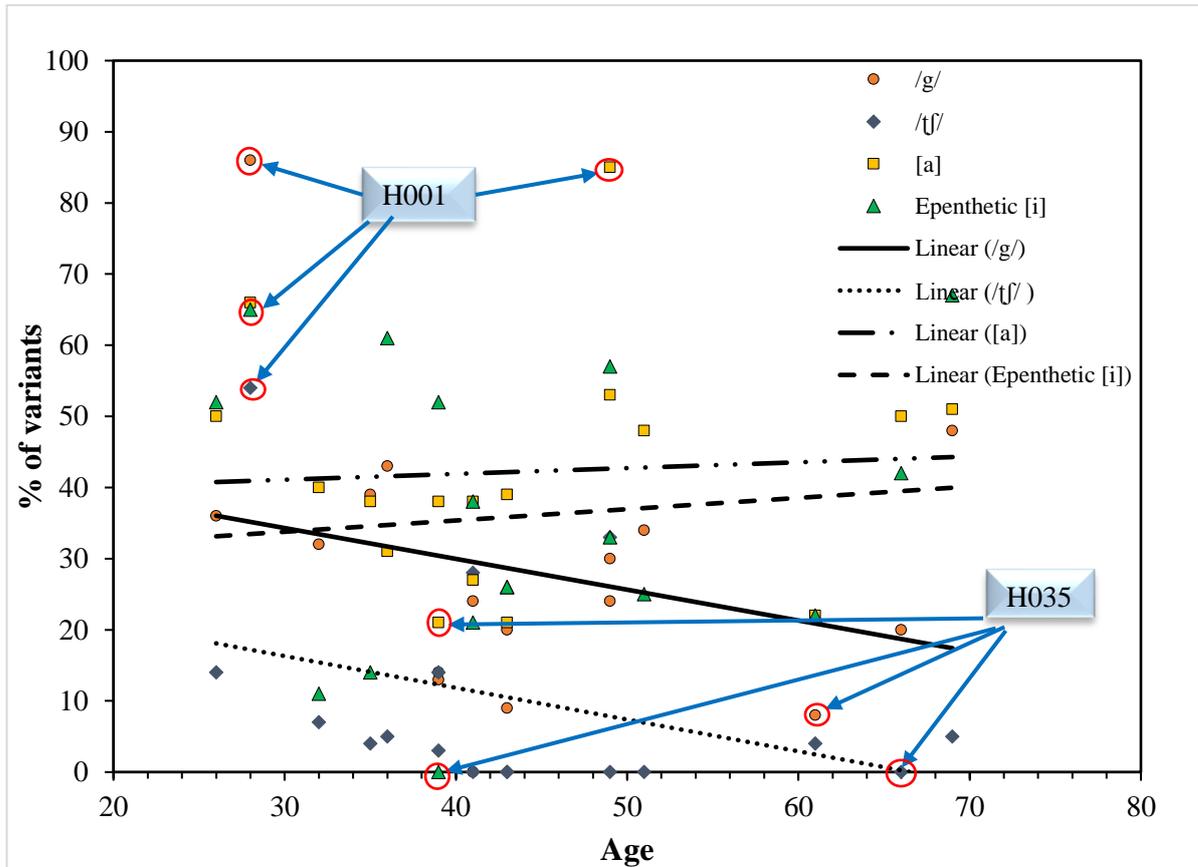


Figure 5.23 Individual language scores of positive attitude group by age

The scatter plot shows that, for the positive attitude group, none of the variants has a strong correlation with informants' age. It also demonstrates that there is a moderate negative linear correlation between the consonantal variants and informants' age ($r = -0.26$ and $r = -0.36$ for /g/ and /tʃ/, respectively), but a positive linear correlation with the vocalic variant ($r = 0.06$ and $r = 0.09$ for vowel lowering and the epenthetic [i], respectively).

At this stage of the analysis, I have obtained a picture about the impact of speakers' attitudes on their use of the *gilit* variants. It is argued that, when keeping to the use of a less prestigious language variety, minority group members have 'fewer opportunities 'for success in the society as a whole' (Ryan et al., 1982: 1). Minority group members are often put under one of two forms of social pressure: they adopt the variety of the dominant group to gain social

status, or they seek to preserve their group identity by means of retaining their native variety. Attitude can be interpreted by means of, or in relation to other factors that might direct it, such as SNI, it is suggested. Interactions between independent variables will be conducted, including the relation between SNI and attitudes (§ 6.2.3).

For the analysis presented in Figure 5.23, I selected two speakers who during the interviews expressed different attitudes towards the *gilit* community and dialect. Both were from the younger age group; H001 a male speaker was the highest positive attitude scorer, while H035 was a female speaker, was the lowest positive attitude scorer. The individual language scores of H001 were the highest among all other speakers (88 % for /g/, 54 % for affrication, 87 % for vowel lowering, and 64 % for epenthesis). During the interviews, H001 talked about the beauty of the Baghdadi (*gilit*) dialect and the different lifestyles that Baghdadi speakers carry, and stated that if he is given the choice he would live in Baghdad all his future life. He even criticised the Hītis, who did not come into contact with the *gilit* speakers and who prevent their kids from speaking like Baghdadis.

In contrast, the language scores of H035 were the lowest among all other speakers (8 % for /g/, 0 % for affrication, 22 % for vowel lowering, and 0 % for epenthesis). During the interview, she disfavoured the use of the *gilit* features, namely /g/ and /tʃ/. She mentioned that she did not hold a positive attitude towards the *gilit* community and the way they talk and stated that she did not intend to leave out of Hīt if she was given the opportunity. Along the interview, she was proud of being Hīti resident, saying ‘I love Hīt’, and explained that HIA is more standard-like and more beautiful than the Baghdad dialect.

The two examples mentioned above indicate that despite both living in Hīt and belong to the same age group, their attitudes towards the *gilit* community differ depending on how they are integrated to that community. With respect to whether speakers intend to spend their future life inside or outside Hīt (in Baghdad), the results support Labov’s findings in Marth’s

Vineyards, where speakers who hold positive attitudes towards their local land and do not intend to leave their land use more local forms, while those hold negative attitudes towards the island who intend to leave it use less local forms.

5.3 Summary of Chapter Five

This chapter was devoted to a discussion of the results obtained from the quantification of the linguistic data. The results obtained from the descriptive analysis and supplemented by statistical tests are discussed. The correlation between the four dependent variables under investigation and the four independent variables i.e. age, gender, SNI, and attitudes are examined. Of the four independent variables, SNI demonstrated to have the strongest correlation with the language behaviour of informants. The results showed that SNI has a strong positive correlation with the use of three of dependent variables and that SNI proved important for /tʃ/. We found that age correlates strongly with /g/, but weakly with the rest of the dependent variants. With the exception of epenthetic [i], there was a correlation between gender and the use of the dependent variables. Informants' attitudes are important with regard to the use of /g/ and vowel lowering, but less important to the adoption of /tʃ/ and the epenthetic [i]. Interactions between independent variables are examined in chapter 6.

Chapter Six: Interactions between Independent Variables

6.1 Introduction

In chapter 5, I studied the four independent variables separately and already have a good idea of how each variable affects informants' accommodation towards the *gilit* dialect. Social Network Integration (SNI) seems to be the most important primary independent variable reflecting the highest level of significance for three dependent variables. The second most important primary independent variable was gender, which also proved significant for three variables. The least important primary independent variable was age, which correlated significantly with only for one dependent variable. Speakers' attitudes also revealed a strong correlation for two dependent variables. Table 6.1 displays the correlation of the *gilit* variants with the independent variables.

Table 06.1 Correlations of independent variables with the dependent variables

Independent variable	Variants	Sig.
SNI	/g/	(F= 0.485; P< 0.01)
	Epenthetic [i]	(F= 0.418; P< 0.05)
	Vowel lowering	(F= 0.373; P< 0.05)
	/tʃ/	(F= 0,219; P> 0.05)
Gender	/g/	(F= 3.026; P= 0.01)
	Epenthetic [i]	(F= 2.892; P> 0.05)
	vowel lowering	(F= 0.025; P< 0.05)
	/tʃ/	(F= 8.897; P< 0.05)
Attitude	/g/	(F= 0.619; P< 0.01)
	Epenthetic [i]	(F= 0.049; P> 0.05)
	Vowel lowering	(F= 0.347; P< 0.05)
	/tʃ/	(F= 1.254; P> 0.05)
Age	/g/	(F= -0.48; P= 0.01)
	Epenthetic [i]	(F= 0.28; P> 0.05)
	Vowel lowering	(F= 1.536; P> 0.05)
	/tʃ/	(F= 1.268; P> 0.05)

The next step is to look for interactions between independent variables to determine which affects which. I will first look at SNI.

6.2 SNI

6.2.1 SNI and gender

We saw that male informants used all variants more than females (§ 5.2.2). In order to see if there is a relationship between SNI and other independent variables, I looked at the correlation between gender and adoption of variants in relation to SNI.

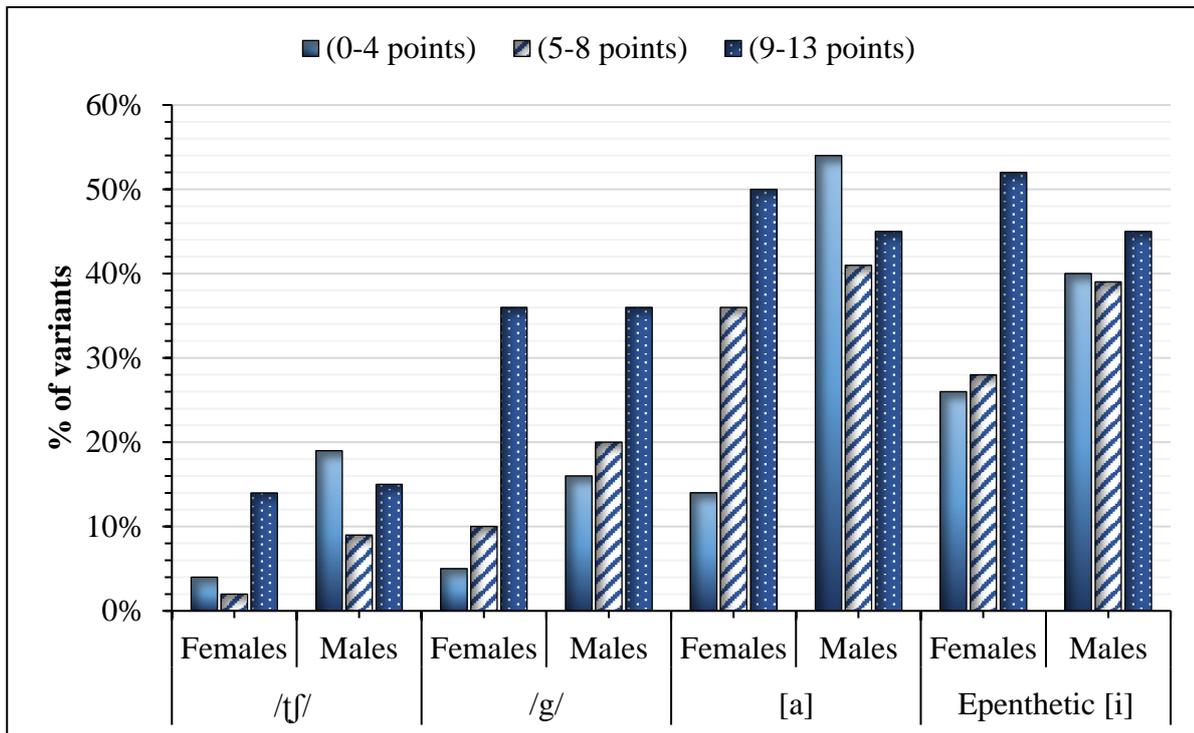


Figure 6.1 Gender-related use of variants according to SNI

We noticed that gender correlated significantly with the use of /g/, /tʃ/, and vowel lowering, but insignificantly with vowel epenthesis (§ 5.2.2). The general pattern is that as the informants SNI scores increase, so do their use of the *gilit* variants. It is clear that both male and female HIA speakers are integrated into some degree into the *gilit* community, and that the way they are integrated into that community affected their adoption of the *gilit* variants. In the low and middle SNI groups, males outscored females for all variants. In the

high SNI group, men outscored women for consonants, while women are more innovative for vowels. Once again, women proved to be more innovative with regard to the adoption of the less stigmatised variants, but more conservative with regard to the adoption of the more stigmatised variants. In order to determine whether this distinction is statistically significant, and to make decision and draw conclusions about how variables are related, I cross tabulated gender with SNI scores.

Table 06.2 Cross-tabulation of SNI and gender

			SNI			Total
			0-4 points	5-8 points	9-13 points	
Gender	Male	Count	2	10	6	18
		% within Gender	11.1%	55.6%	33.3%	100.0%
		% within SNI	20.0%	52.6%	85.7%	50.0%
	Female	Count	8	9	1	18
		% within Gender	44.4%	50.0%	5.6%	100.0%
		% within SNI	80.0%	47.4%	14.3%	50.0%
Total	Count	10	19	7	36	
	% within Gender	27.8%	52.8%	19.4%	100.0%	
	% within SNI	100.0%	100.0%	100.0%	100.0%	

In total, just below half of the total number of male and female informants are in the middle SNI group (5-8 points). In the SNI, men are more often in the high scores with 6 informants compared with 1 female informants. In this group, 85.7% of informants are men. In the lowest SNI group, over than three thirds (80.0%) of informants are female. In the middle SNI group, just over half of informants (55.6%) are males. Based on the values obtained, there was a difference of just above two points between the mean network score of the male informants

(7.3 points) and that of the female informants (4.6 points), which is likely to be important. The values were then chi-squared to test level of significance. The null hypothesis, which assumes that the SNI was not related to the informant's gender, must be accepted. The chi-square test indicates that gender and SNI are independent with a level significance ($p > 0.05$).

These statistically insignificant differences between males and females according to their level of integration can be explained by looking at the highly integrated informants. In certain cases when it is difficult to obtain a clear pattern in terms of the network margins (low vs high integration levels), researchers employ some techniques to uncover these patterns. For example, Wilson (2010: 192) merged the low (0-4 points) and middle (5-9 points) SNI sub-groups into one group and compared them to the highly integrated (10 points +) sub-group. He then obtained more reliable results to support his argument that while only highly integrated informants acquire some features, even low scorers in the SNI assimilate some other features. In my case, although there are same number of males and females in the middle SNI sub-group, the differences between them are not significant ($P > 0.05$). By merging the (5-8 points) and (9-13 points) together, I obtained an interesting outcome. Despite the fact that the difference between the mean integration score of male informants (7.8 points) and of female informants (6.1 points) was just above 1.5 point, it proved significant with an associated probability value of ($P < 0.05$). Although all female informants and five of the male informants scored more than 9 points, the minimal difference between the mean integration score for men (9.1 points) and that of women (9.3) in the high network group was insignificant.

6.2.2 SNI and age

When informants' language scores were discussed in relation to their age groups, younger informants outscored other age groups in all variants (§ 5.2.1). Despite the high degree of

correlation between SNI and language use (§ 5.2.3), there is possibility that a high level of integration does not necessarily lead to innovation. Therefore, looking at the correlation between SNI and age revealed clearer correlation patterns. Table 6.3 presents age-related differences in combination with informants' SNI.

Table 06.3 Cross-tabulation of SNI and age

		SNI			Total	
		0-4 points	5-8 points	9-13 points		
Age group	(20-39)	Count	1	4	7	12
		% within Age group	8.3 %	33.3 %	58.3 %	100.0 %
		% within SNI	11.1 %	22.2 %	77.8 %	33.3 %
(40-59)		Count	3	9	0	12
		% within age group	25.0 %	75.0 %	0.0 %	100.0 %
		% within SNI	33.3 %	50.0 %	0.0 %	33.3 %
(60+)		Count	5	5	2	12
		% within age group	41.7 %	41.7 %	16.7 %	100.0 %
		% within SNI	55.6 %	27.8 %	22.2 %	33.3 %
Total		Count	9	18	9	36
		% within age group	25.0 %	50.0 %	25.0 %	100.0 %
		% within SNI	100.0 %	100.0 %	100.0 %	100.0 %

While the younger informants are concentrated in the high integration group, the middle-aged informants are tending to be in the middle of integration into the *gilit* community. More

than 80 % of the older individuals are distributed equally between the low (0-4 points) and the middle (5-8 points) SNI sub-groups. It seems that the number of younger informants exceeds other age groups only in the high integration scores. In total, half of informants from all age groups are in the middle SNI group, 50.0 % of them are from age group 40-59. 58.3 % of the younger informants are mostly in the high integration group, 77.8 % of the high integration scorers are younger informants. This means that with increasing degree of integration into the *gilit* community, the younger generation show greater innovation in the use of the *gilit* variants in their speech. In contrast, the older generation show a higher degree of integration into their local community and as a result, they presented greater conservative language behaviour. The data in Table 6.3 suggest that older informants are by more likely to be low scorers in the SNII. Of the older informants, about 41.7 % are in the lowest integration group and just over half of the low integrated informants are from the older age group. The basic observation that can be made about the data analysed is that, the null hypothesis, which assumes that the SNI is not related to the informant's gender must be rejected. The chi-square test indicates that age and SNI are strongly related with a level significance (Chi-square = 13.667; df = 4; $P < 0.01$). Therefore, there is very strong evidence to support the relationship between age and SNI to the *gilit* community, and that both variables are extremely dependent, I used an ANOVA test of variance to test the level of interaction for the informants in the (9-13 points) SNI group, which show that the differences among highly integrated informants from the three age groups are highly significant ($F = 27.95$; $P < 0.01$).

6.2.3 Speakers' SNI and attitudes

Table 6.4 Cross-tabulation of SNI and attitudes

		SNI			Total	
		0-4 points	5-8 points	9-13 points		
Attitudes	Negative	Count	7	9	2	18
		% within attitudes	38.9 %	50.0 %	11.1 %	100.0 %
		% within SNI	77.8 %	50.0 %	22.2 %	50.0 %
	Positive	Count	2	9	7	18
		% within attitudes	11.1 %	50.0 %	38.9 %	100.0 %
		% within SNI	22.2 %	50.0 %	77.8 %	50.0 %
Total		Count	9	18	9	36
		% within attitudes	25.0 %	50.0 %	25.0 %	100.0 %
		% within SNI	100.0 %	100.0 %	100.0 %	100.0 %

Just below half of the informants with negative and positive attitudes towards the *gilit* community and dialect are in the middle SNI group (5-8 points). In the SNI, the 'Negative' informants are more often in the low scores with 9 informants in the (5-8 points) and 7 informants in the (0-4 points). Of the 'Positive' informants, 50.0 % are in the middle SNI and 38.9 % are from the high SNI sub-group. The most important observation that can be made about the data in Table 6.4 is that it is likely that those who score higher on the SNII will have more positive attitudes to the *gilit* community because they come into contact with this community more than the low scorers. It is clear from the percentages that SNI and attitudes go hand by hand in that the more integrated informants into the *gilit* community are, the more positively they evaluate that community and its dialect. The majority of the high integration

informants (77.8 %) are from the positive attitude group. In parallel to this, the same percentage (77.8 %) of the low integration sub-group had negative attitudes towards the *gilit* community. It was shown that attitudes and SNI are dependent with a level significance ($P = 0.05$).

6.3 Friendship network

6.3.1 Friendship network and age

We observed (§ 5.2.3.3) that friendship is the most important social network sub-variable that proved significant for the consonantal variants /g/ and /tʃ/ with highly statistically significant correlations. For these variants, close friendship correlated with gender and age, it is predicted. In order to test whether this interaction holds, I present cross tabulation results, which illustrate interaction between close friendship and age (Table 6.5) and gender (Table 6.6).

Table 06.5 Cross-tabulation of close friendship and age group

		Friendship network		Total	
		Closed friendship	Open friendship		
Age group	20-39	Count	3	9	12
		% within age group	25.0 %	75.0 %	100.0 %
		% within friendship network	18.8 %	45.0 %	33.3 %
	40-59	Count	7	5	12
		% within age group	58.3 %	41.7 %	100.0 %
		% within friendship network	43.8 %	25.0 %	33.3 %
	60+	Count	6	6	12
		% within age group	50.0 %	50.0 %	100.0 %
		% within friendship network	37.5 %	30.0 %	33.3 %
Total		Count	16	20	36
		% within age group	44.4 %	55.6 %	100.0 %
		% within friendship network	100.0 %	100.0 %	100.0 %

From the analysis of close friendship in combination with age groups, it is plain to see that just over half of informants from all age groups had *gilit* speakers as close friends, 45.0 % of them are from the younger age group. Moreover, 75.0 % of the younger informants

established friendship relations with *gilit* speakers. While 58.3 % of the middle-aged informants tended to open friendships with *gilit* speakers, half of the older informants did so. There is no clear pattern of interaction between age group and friendship. A Pearson chi-square test ($P > 0.05$) indicated that close friendship and age are independent. A good interaction between close friendship and gender holds as shown in table 6.6 below.

6.3.2 Friendship network and gender

Table 6.6 Cross-tabulation of close friendship and gender

			Friendship network		Total
			Closed friendship	Open friendship	
Gender	Male	Count	2	16	18
		% within gender	11.1 %	88.9 %	100.0 %
		% within friendship network	12.5 %	80.0 %	50.0 %
	Female	Count	14	4	18
		% within gender	77.8 %	22.2 %	100.0 %
		% within friendship network	87.5 %	20.0 %	50.0 %
	Total	Count	16	20	36
		% within gender	44.4 %	55.6 %	100.0 %
		% within friendship network	100.0 %	100.0 %	100.0 %

While male HIA speakers are in open friendships with *gilit* speakers, women preserved closed friendships with peers from the local community. I predict that this variation may be due to the fact that, I assume, one of the channels through which informants established

friendships is related to levels of education. Of the whole sample, there are 20 informants in the high education category. Of them, there are 12 male against 8 females. It looks that the enrolment in the University of Al-Anbar located in Ramadi is the main factor that brings more male individuals to open friendships. I assume that if there are as many female as that of the male informants in the higher education, the possibilities of the females having open friendship networks would be competing that of males. Furthermore, 6 of the 8 females in the high education group are from the younger age group. There are 20 informants from both genders with more open friendships with peers from the *gilit* community. They comprised just over 50 % of the overall number of informants. Of these, 80 % are males and 20 % are females. While the majority of the male informants (88.9 %) are in the open friendship group, only a fifth of the female informants are involved in that friendship group. On the other hand, of the sixteen closed friendship informants, there are 14 females against two males. While three quarters of the female informants preferred to keep closed friendship relations with HIA speakers, there are only 11.1 % of the males, who retained this preference. The distribution of men and women into the friendship categories show that gender interacts strongly with friendships with Pearson chi-square value of ($P < 0.01$).

6.4 Interaction of age and gender

I am interested in examining how men and women in the three age groups adopted the *gilit* features. Figures 6.2-6.5 show the use of the four variants by men and women in the three age groups. The results are supplemented by the independent-sample t-test performed in Excel 2013, which examined differences between the means of male and female informants in each age group.

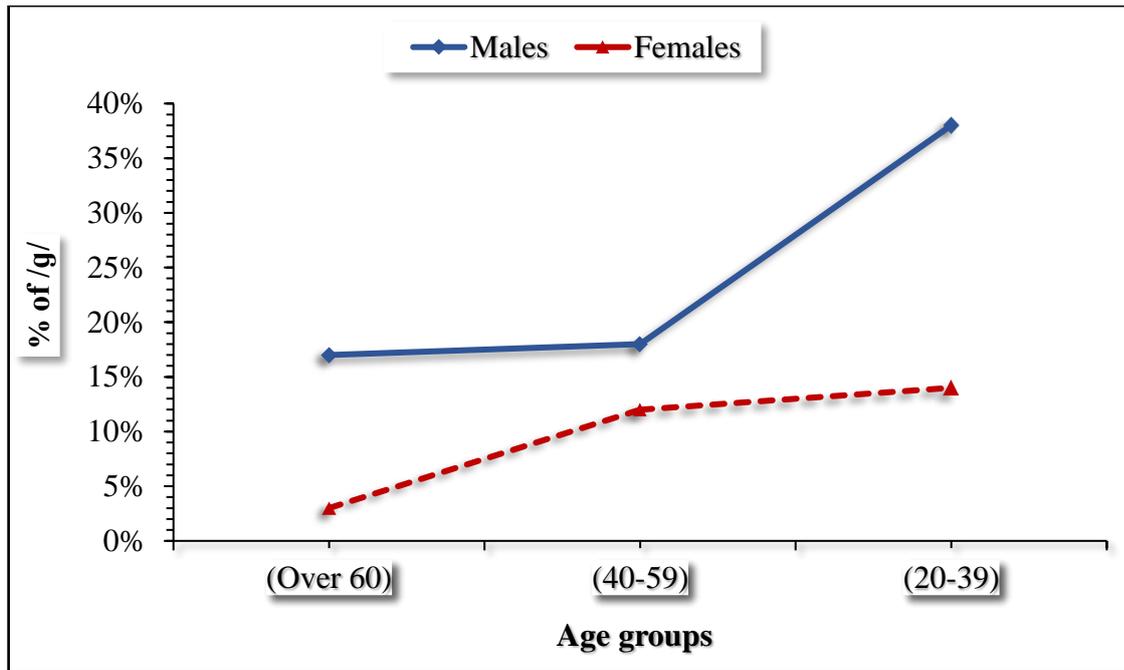


Figure 6.2 Distribution of /g/ by gender and age groups

The percentages in Figure 6.2 show an obvious correlation between age and the use of /g/ for male and female informants. It looks that this variant progressed more regularly among men than that among women in Hīt. In all age groups, male informants had a greater tendency to adopt this variant than female informants. While the older men used /g/ 17 % of the time, women in the same age group adopted it only 3 % of the time. This 14 % difference is significant with $P=0.05$. The use among men in the middle-aged group increased by only 1 % compared to 9 % growth among women. Despite the larger difference between the mean usages of both genders in this age group, it did not prove to be important at a level of significance $p=0.20$. While the diffusion of /g/ among the younger male informants jumped to 38 %, it only increased by 2 % and reached 14 % among the younger females. This may be because women, although tended to converge to the *gilit* community, resisted a change associated with men. During data collection, a number of my female informants in the younger age group reported that they the reason behind men's adoption to the *gilit* dialect

features is being integrated into that community. The differences in means between younger male and female informants are important at a level of significance $p=0.04$.

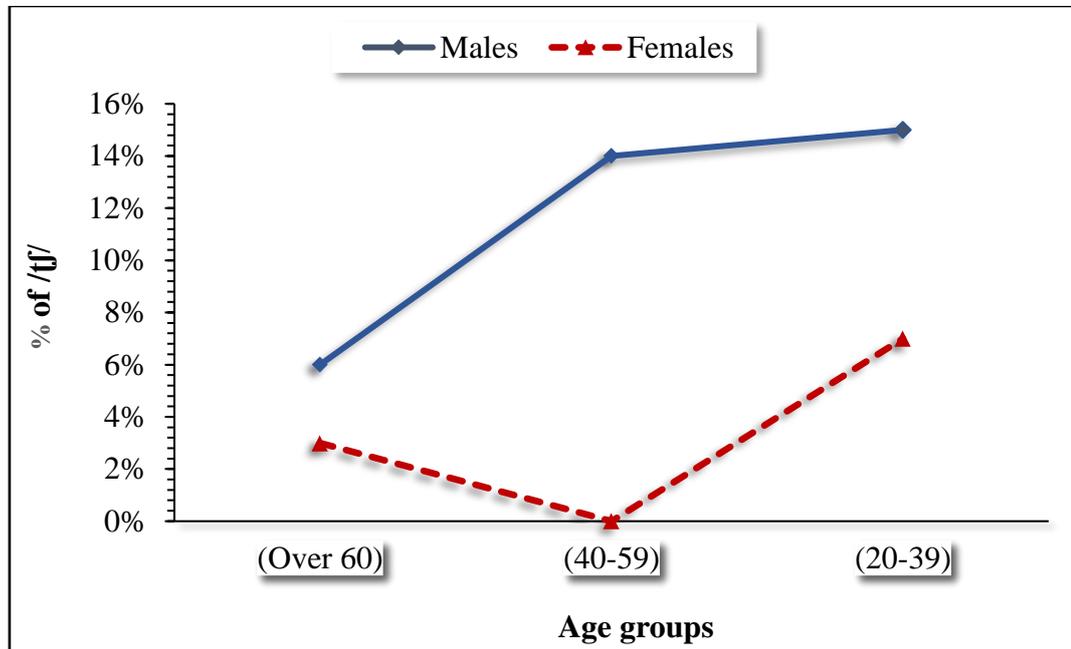


Figure 6.3 Distribution of /tʃ/ by gender and age groups

As Figure 6.3 shows, /tʃ/ men outscored women in all age groups. There appears a positive correlation between age and use of /tʃ/ for men, but not for women. Overall, the high scorers in this variant did not exceed 16%. In the older and younger age groups, men used /tʃ/ as twice frequently as women. While older male informants produced /tʃ/ 6% of the time, women in the same age group used this process 3% of the time. This difference was not of any importance at the 0.05 level of significance with $p=0.18$. Within the age group 40-59, men raised their adoption of the *gilit* variant /tʃ/. Of the 92 tokens of (k), they pronounced 14% of the tokens with /tʃ/. In contrast, women's adoption of the *gilit* variant /tʃ/ disappeared. All the 77 tokens are realised with /k/ by all women in the middle-aged group. The results of the comparison of men's and women's use of /tʃ/ was significant with probability value at 0.03. The use of this variant in the younger age group for male informants increased moderately by

15 %, but gradually for female informants (7 %). This difference was statistically very weak with a degree of significance at $p= 0.21$.

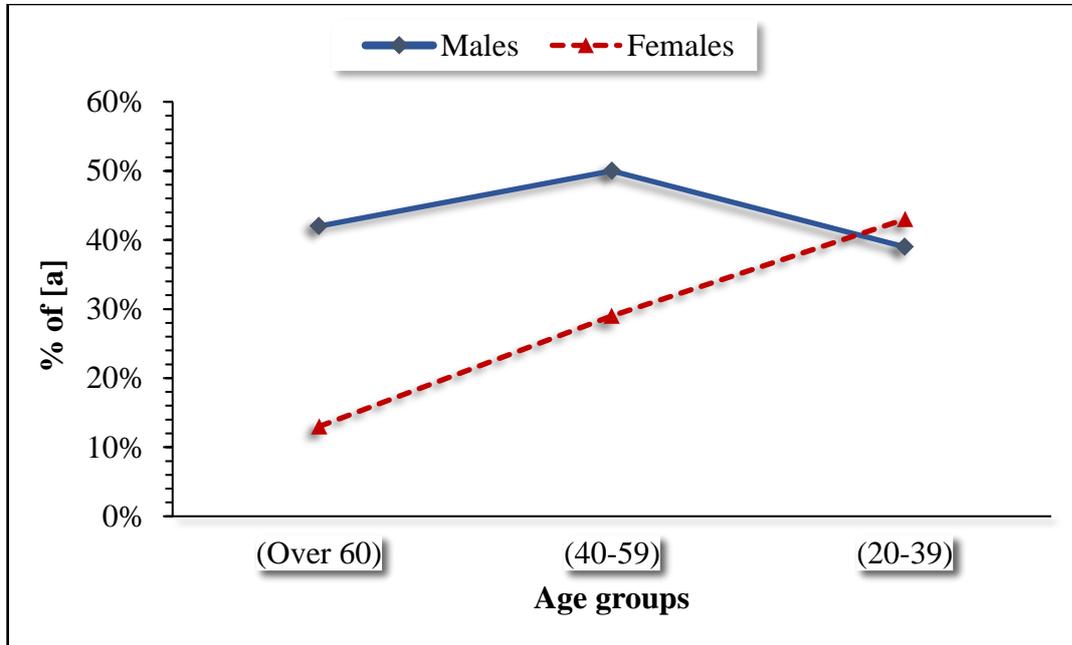


Figure 6.4 Distribution of vowel lowering by gender and age groups

It was shown that the vocalic variants are used more frequently than the consonantal ones by all age groups (§ 5.2.1) and by male informants (§ 5.2.2). By splitting the three age groups into males and females, the results showed, despite the fact that they used this vowel less than men, a clear strong positive correlation between age and the use of vowel lowering (in place of /i/) for women, but not for men. Within the older age group, men innovated vowel lowering to a greater level than women. While the older women used vowel lowering 13 % of the time, men used it 43 %. The result of the independent-sample t-test shows that there was a highly significant difference between male and female informants in the older age group ($P= 0.01$). In the age group (40-59), both men and women increased their innovation in vowel lowering. Of the 187 tokens, women realised 79 with [a] against 108 with [i]. Men increased their use of vowel lowering slightly by 8 %. While there was a gradual fall in the use of the younger

male informants by 11 %, there was a notable increase in the younger female informants' use by 14 %. The differences between males and females in the two younger age groups (40-59 and 20-39) are not significant. Results of t-test show that the probability value of differences between middle-age men and women was $p=0.06$, which is just one point above the level of significance. For the younger informants, differences between males and females are extremely insignificant with $P=0.36$. The differences between male and female informants according to age group may be explained by means of levels of integration. The significant difference between older men and women is because the two older informants in the high integration sub-group are males, which makes the mean usage important. In contrast, males and females are distributed almost equally into their integration groups. Of the nine middle-aged informants in the middle SNI group (5-8 points), there are five men and four women. They used approximately similar frequencies of vowel lowering. As for the high integrated younger informants in the, they are seven (4 men and 3 women). This overlap caused type of ambiguous variation pattern according to age.

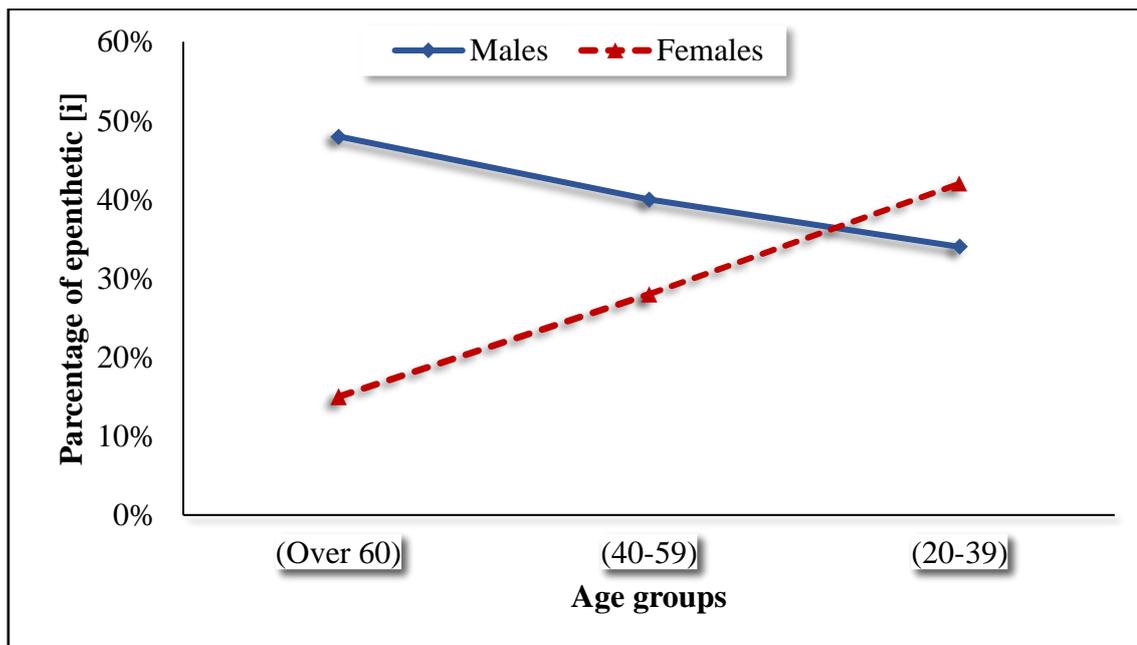


Figure 6.5 Distribution of epenthetic [i] by gender and age groups

A moderate positive correlation pattern exists for women between their ages and use of epenthetic [i]. In contrast to this, there was a moderate negative correlation pattern between age and vowel epenthesis for men. Male and female informants are clearly differentiated in the older age group, but insignificantly different from each other in the two younger age groups. While the older male informants are using the epenthetic [i] 48 %, their female peers only adopted it 15 % of the time. The Differences between men and women in the older age group are highly significant with $p=0.01$. As the male informants decreased their use of [i] to 40 %, the female informants increased their rates of inserting the [i] vowel into onset consonant clusters in word initial positions by 13 %. In the younger age group, women are innovative in the adoption of this process by reaching a 42 % rate, but men receded to 34 %. In accordance to the percentages presented in Figures 6.2-6.5, especially for the younger age group, it can be observed that while male HIA speakers innovate in the consonantal variants, the female informants are leading the change in the vocalic variants. This would mean that across age, men and women used different *gilit* features to distinguish their speech habits in favour of the *gilit* dialect.

6.5 Family-related differences

Many sociolinguistic studies found a correlation between age and language use in terms of the social pressure and awareness of informants. For example, Holmes (1992: 184) states that adolescents' adoption of new linguistic forms stems from the higher peer group pressure, which leads them to resist their society's and their parents' language forms. The most recent study that investigated family variation, to the best knowledge of me, is Al-Essa's (2008) sociolinguistic study of dialect contact in Jeddah, Saudi Arabia. Her results show that kinship is the most important contact factor in her analysis of the linguistic behaviour of three families

(Al-Essa, 2008: 126-130). I recorded three families,⁵⁷ each with three informants representing the three age groups. This served my purpose to trace differences in the linguistic behaviour across different generations in the same family and to reveal the complications of the sociolinguistic situation in the community as a whole. For example, two members of the same family who are of the same gender, but different age (mother and her daughters) revealed different language behaviour. Although exposure to parents and relatives did not have significant impact on informants' linguistic behaviour as groups, examining differences among members of the same family might be able to unveil patterns of variation at the family level. In the three families, I managed to obtain one informant from each age group. All the nine informants, who compose the three families, whose parents were born in Hīt. Of them, there are eight females and one male informant. In terms of SNI, they came from different sub-groups. It was shown that most of the informants are from the open friendship networks and that friendship network is the most important SNI sub-variable (§ 5.2.3.3.1). Since friendship appeared as the most distinguished factor, I examined the linguistic behaviour of the three families focusing on the differences in this sub-variable. Of the nine informants, there are two informants from the open friendship group and seven informants from the closed friendship group. Overall, the family backgrounds are very similar.

⁵⁷ In the analysis, the three families will be referred to as Family A, Family B, and Family C

Table 6.7 Informants in the three families

	Informant	Gender	Age group	Friendship group
Family A	H002	Female	Over 60	Closed friendship
	H004	Female	40-59	Closed friendship
	H005	Female	20-39	Closed friendship
Family B	H015	Male	Over 60	Open friendship
	H016	Female	40-59	Closed friendship
	H018	Female	20-39	Open friendship
Family C	H028	Female	Over 60	Closed friendship
	H030	Female	40-59	Closed friendship
	H031	Female	20-39	Closed friendship

There are patterns of variation among the three families in terms of their use of the *gilit* variants as groups and as individuals within the families. The results of test of variance ANOVA indicated that the differences do not embed statistical significance. The tests show the following levels of significance:

- /g/: P= 0.23
- /tʃ/:P= 0.45
- Epenthetic [i]: P= 0.08
- Vowel lowering: P= 0.75

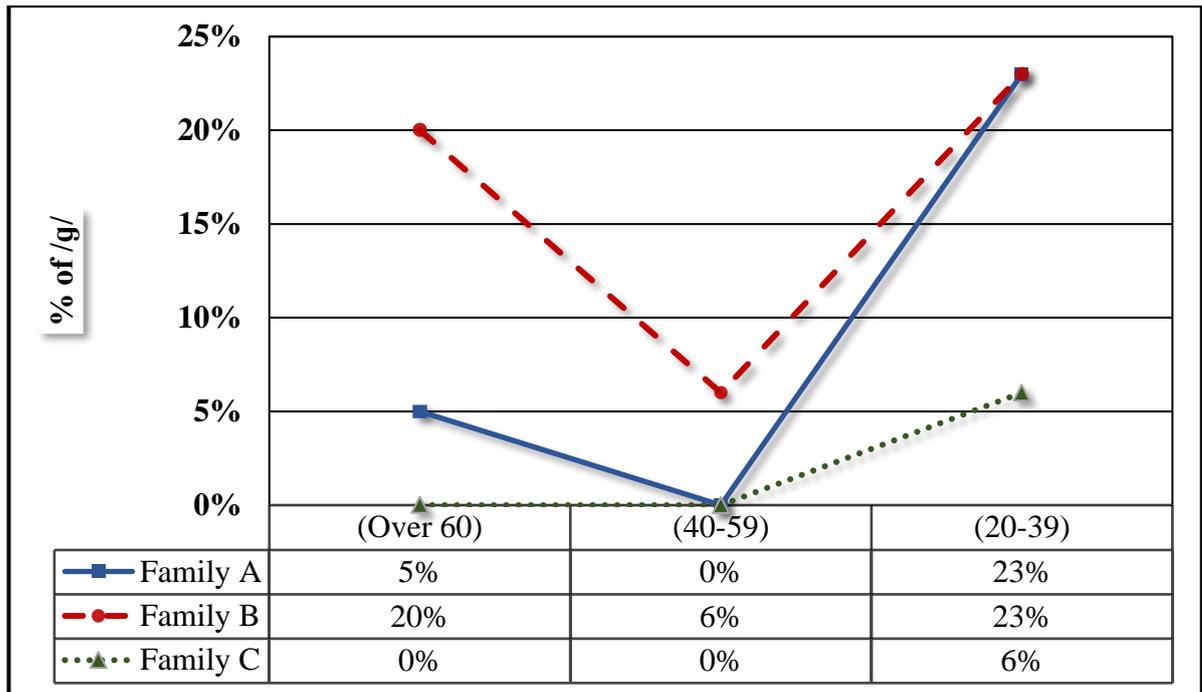


Figure 6.6 Use of /g/ in three families

The data in Figure 6.6 clearly shows that the adoption of the *gilit* variant /g/ increased in the three families. It appears that this variant was present in the older generation in families A and B, but not in Family C. The mothers in Family A and B used it 5 % and 20 %, respectively, while their peer in Family C did not tend to adopt it. While the use of this variant was stable in the younger generation in Family C, there was a sharp decline by 14 % in the same generation in Family B and a gradual fall by 5 % in Family A. The transmission of this variant jumped from 0 % to 23 % in Family A, and from 6 % to 23 % in Family B. Further, the use of this variant increased steadily by 6 % in the younger generation in Family C. Interestingly, in family B both high scorers of /g/ are open network informants. The contrast between the high adoption of /g/ in the older generation in the three families is the fact that the younger informant in Family B was from the high integration sub-group (9-13 points), while his peers from Families A and C are from the low integration sub-group (0-4 points). This distinction

asserts the role of network integration as the most important social factor that drives the linguistic behaviour of informants.

Overall, the distribution of the /q/ variant across the three age groups within a family goes in line with the majority of variationist studies in that younger informants are leading the adoption of innovative features away from their native variety. A number of Arab sociolinguistic studies revealed a similar pattern and found that adolescents resist their parents' linguistic forms as a result of their integration with friends. For example, in Jordan, Abd-el-Jawad (1986: 58) found that younger informants use more of the /q/ variant than older informants, who have been preferring the local variant /k/. He assumed that this tendency might be due to the social pressure imposed on younger informants by neighborhood, study and work peers. I will explain this when I discuss the variation in relation to SNI to the *gilit* community (§ 5.2.3), which may affect their adoption to that community's variants. One year after, Abd-el-Jawad (1987: 302) has found that older informants maintained the local variant /q/, while younger informants used the urban variant /ʔ/, which they consider more prestigious.

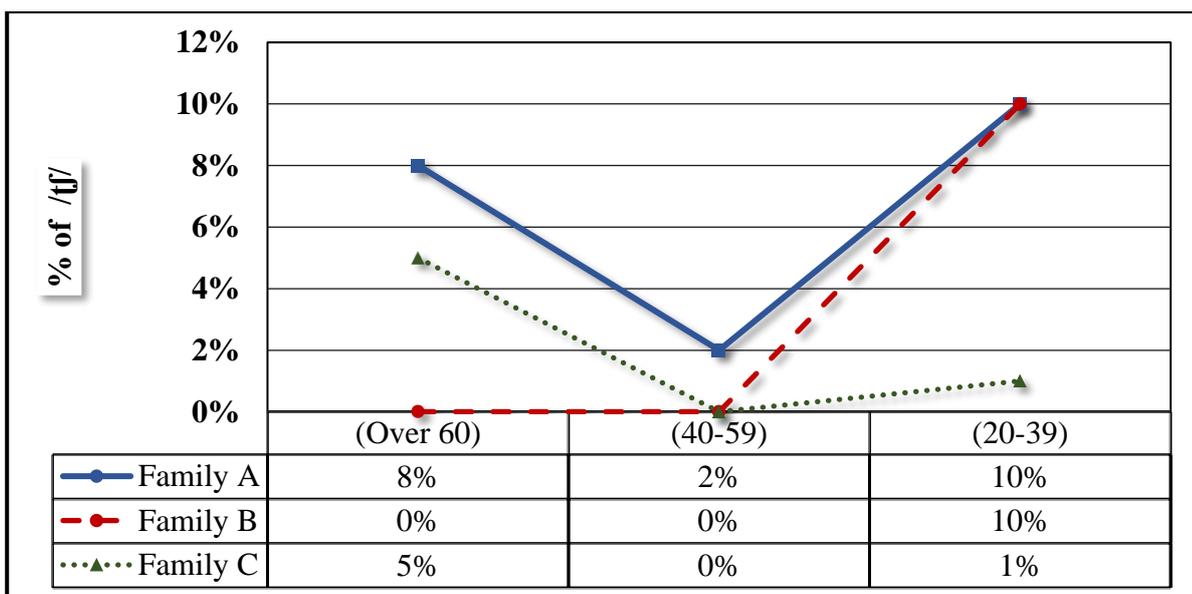


Figure 6.7 Use of /tʃ/ in three families

The percentages in Figure 6.7 reveal that Family A is leading the change towards the variant /tʃ/ in the two older generations. The older generation tended to affricate (k) into /tʃ/ by 8 % and 5 % of the time in Families A and C, respectively. In contrast, there appears to be no tendency in Family B to use this variant in either of the older generations. In average, the middle-aged speakers in Families A and C decreased their use of /tʃ/ by 5.5 %. In contrast, their age peers in Family B preserved the same level of use (0 %). Notably, the percentage shows that the younger generation in Family B tends to be prone to use this variant as sporadically as their peers in Family A adopted it (10 %), the younger informant in Family C only raised by 1 %. However, the best regular transmission of /tʃ/ was recorded by members of Family B, whose adoption of this variant increased from 0 % to 10 %.

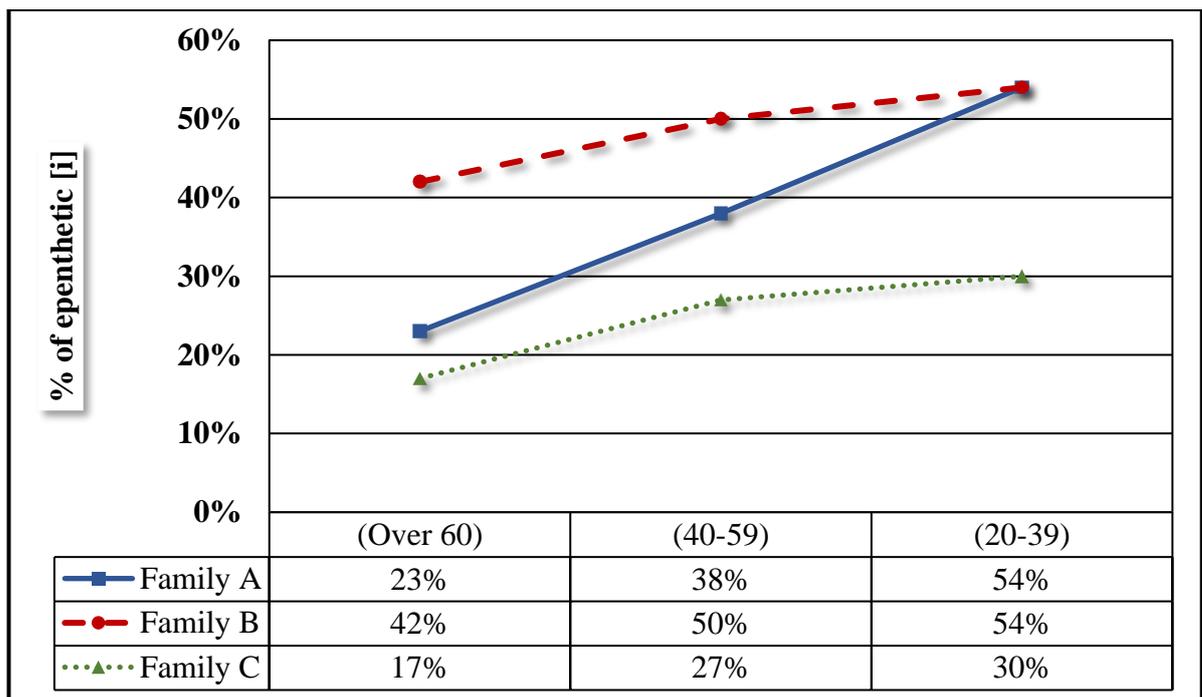


Figure 6.8 Use of epenthetic [i] in three families

It looks from the data in Figure 6.8 that the epenthetic [i] is not a new variant as the older informants in the three families in comparison are using it in an average of 27 %. Members

of Family B emerge to be the innovative in the use of this variant. In this family, the insertion of the epenthetic vowel [i] in initial CC cluster increased gradually from 42 % in the older age group to 50 % in the middle-aged informant and then raised steadily to 54 % by the younger informant. The second highest users of this variant are members of Family A, whose mother used it 23 %, which increased by 5 % by her middle-aged daughter and then by 6 % by her youngest daughter. Although the adoption of epenthetic [i] appeared in Family A lower than that in Family B, the younger members in both families used it in the same rate (54 %). The least adopters of the variant are located in Family C. Although the use of the epenthetic [i] increased slowly by 10 % in the age group (40-59), it reached almost half of the rate in which Families A and B used it.

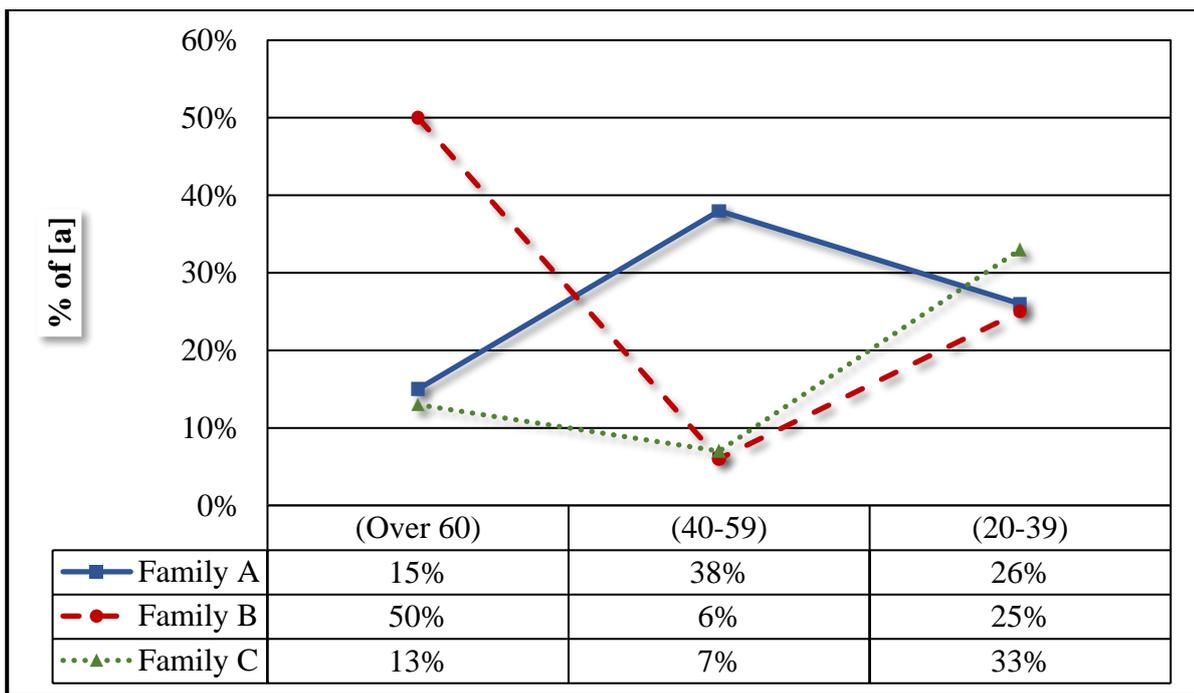


Figure 6.9 Variation in vowel lowering in three families

The data in Figure 6.9 clearly shows that there is no clear pattern of variation in vowel lowering among the three families. While Family B outscored the other two families in the

older age groups with 50 %, they used least of the vowel lowering vowel in the younger age group with 25 %. In contrast, while the low scorer of vowel lowering in the older age group was from Family C, the high scorer of this variant in the younger age group was from the same family with 33 % compared to her peers from Family A (26 %) and B (25 %).

6.6 Summary of Chapter Six

This chapter was divided into five sections. In § 6.1, I introduced the chapter. I explained the aim of the chapter and reminded the reader of the most important independent variables that are discussed in chapter 5. Because SNI proved to be the most important independent variable for the language behaviour of informants, I devoted a lengthy section to discuss it in relation to other variables. In § 5.2, I discussed the results of the interaction between SNI and gender by providing bar charts and tables explaining gender-related differences in the use of dependent variables according to SNI. Afterwards, I provided the interaction between SNI and age. With regard to the SNI sub-variables, I § 6.3, I provided a detailed discussion of friendship network as the most important network sub-variable and then its correlation with gender and age. In § 6.4, I presented an account of the interaction between gender and age in the use of the four *gilit* variants and highlights the main observations. It was shown that in all age groups, males are innovating change for all dependent variables. There was an obvious correlation between age and the use of /g/ and /tʃ/ for male, but a clear correlation between age and use of the epenthetic [i] and vowel lowering for females. Finally, in § 6.5 I examined the language variations at the level of families. It first provides demographic information of the informants under comparison. It then explores the language behaviour of the nine informants who build the three families chosen for the comparison. The results show that to a certain extent, family is an important variable. Moreover, the two ‘open-network’

informants are among the highest scorers for all variables. This enabled me in interpreting the differences among members of the same family by examining the impact of SNI.

Chapter Seven: Conclusion and Suggestions for Future Research

7.1 Overview of the main contribution

This study investigates the consequences of dialect contact between the *qiltu* dialect spoken in Hīt (HIA) and the *gilit* dialect. This investigation is motivated by a fundamental sociolinguistic principle that individuals whose social networks are weak approximate to the language norms of the groups outside their community and are mostly exposed to language change. Since the early 1980s, Hīt has been target to high levels of internal migration of people from the *gilit*-speaking cities, namely the capital Baghdad. This resulted in the close-knit localised networks of the community, which have over time retained highly systematic and intricate sets of socially built linguistic standards to disrupt. The study was limited to 36 participants (18 males+ 18 females) of the Hīt community, who are born and spent all their life in the city. It was also limited to three age groups (20-39, 40-59, and over 60). The study investigates four phonological variables; two consonantal (variations in (q) and (k) affrication) and two vocalic features (vowel lowering and vowel epenthesis). There is empirical evidence showing dialect levelling, which involves the replacement of local linguistic forms with others with a wider geographical spread (Cheshire et al., 1999: 1) and motivated by individuals having open networks to people outside of their community. This study has shown that a number of factors determine the linguistic outcome of dialect contact between HIA speakers and the *gilit* speakers. They include social, linguistic and social-psychological factors. These factors and their role in determining the outcome of dialect contact in HIA are discussed in the findings section in relation to the research questions addressed in the study.

It has been claimed that a linguistic variable, which is traditionally associated with groups of low social status is evaluated as prestigious because it is similar to the Standard Arabic form (e.g. Abd-el-Jawad, 1986; Al-Rojaie, 2013). On the basis of my results, I can confirm

that this claim is inaccurate: HIA speakers consider the *gilit* features, which they acquired, as prestigious not because they are different from the Standard forms, but rather because they are used by more socially and politically dominant groups. The quantitative variationist analysis of the *gilit* features, namely of /g/ and /tʃ/, is a good example of the benefits that can be taken from such a sociolinguistic pattern in terms of prestige. This analysis explains language variation and change in Iraqi Arabic independently from the traditional standard/non-standard dichotomy, which has for a long time been applied to Arabic sociolinguistics.

Any academic research, including a PhD study has its limitations. The present study is no exception and I was faced with potential methodological barriers, which required additional work to be done in order to eliminate their effects on the research. One such limitation was the necessity to involve a female research consultant to record interviews with some of my female informants for the reasons specified in § 4.5. Given that some of the female informants were interviewed by my female consultant, it is conceivable that their linguistic behaviour might manifest short-term accommodation towards my female consultant rather than reflecting the results of long-term accommodation whereby initial modifications to speech have become routinized. On comparing the data obtained in the interviews conducted by my consultant and those from the interviews that I conducted, there does not appear to be any notable difference in the linguistic behaviour of the female informants; therefore, I am confident that employing a second interviewer did not have a negative impact on the study or skew its results.

The present study has brought together areas of variationist investigation that have never been explored within a single study on IA before. It has provided a detailed account of the main phonological features of the HIA. This was the first variationist investigation to analyse (k) and (q), which have been considered as distinguishing features of the *qiltu* dialects in Iraq and vowel lowering and epenthesis, which are unique to HIA. The aim was to shed light on potential links between the socioeconomic changes that have been taking place in Hit and

how they have influenced the linguistic behaviour of HIA speakers. Most importantly, in this study I called for a reconsideration of the traditional typological descriptions of the Iraqi Arabic dialects, such as the dialect spoken in one of the Iraqi urban centres in the light of war-induced internal migration from the big cities that have been taken place. The reliance on traditional dialectological and sociolinguistic methods is no longer sustainable. One of such methods is the reliance on the *gilit/qiltu* dichotomy which has been the inspiration for the majority of previous research on IA.

In the present study, I have tried to address the issues pointed out in previous Arabic research in dialectologist and sociolinguistic research by merging the insights available from previous works in dialectology and variationist sociolinguistics into my analysis from the earliest stages. The analysis I present follows recent methods in quantitative analysis, as pioneered and developed by scholars in the field (Milroy, 1980; Trudgill, 1986; Torgersen and Kerswill, 2004; and Al-Essa, 2008)), without ignoring the fact that the communities and dialects under investigation have their own attributes. At the same time, by presenting my data within the framework of a ‘modern’ quantitative sociolinguistic model I that these data can be used to benefit theoretical formulations and future research on HIA and other IA dialects and work on Arabic and sociolinguistics more generally.

7.2 Findings

7.2.1 Socioeconomic situation in Hīt

Hīt is located 190 kilometres to the west of Baghdad and 60 kilometres to the west of Ramadi and 65 kilometres to the east of Haditha. Until the early 1980s, Hīt was socially and, possibly, linguistically isolated from these *gilit*-speaking surrounding regions owing to its

homogeneous social composition represented by close-knit localised networks. Hīt has been witnessing socioeconomic changes that helped its community disrupt these networks. The basic factor for this disruption is the waves of migration from the *gilit* areas to the city during the three sequential wars; the First (1980-1988), the Second (1991) and the Third (2003) Gulf War with the largest wave being after the Third Gulf War. These waves brought members of the Hīt community into daily contact with thousands of *gilit* speakers and consequently, influenced their language behaviour largely as it was seen in the speech of the younger generation, who are born and grown during these migration waves. Following analysis of the four dependent variables (q-velarisation, k-affrication, vowel lowering and vowel epenthesis) and their use by HIA speakers, I am able to answer the research questions that I advanced at the start of the present study (§ 1.9).

The Hīt community represents a closed non-mobile society with an isolated dialect (Williams and Kerswill, 1999). Accordingly, HIA is characterised by social insularity and linguistic conservatism. However, it was found to display simplification and reduction characteristic of contact dialects (Versteegh 1997; Trudgill 2002; Alessa, 2008) in contrast to other Arabic and Iraqi dialects, which show linguistic vitality and resistance to change in immigrant-based as well as non-mobile communities (Jassem, 1987; Yaseen, 2015, 2016). For example, the *qiltu* dialect spoken in Mosul displays resistance to change in (q) despite the mass waves of migration into the city from surrounding *gilit* areas. The transformation of Hīt from a closed dialect society to an open dialect society is reflected in the differences in the language behaviour observed in the speech of the informants examined in the present study. The key factor in this linguistic transformation is speakers' social integration to the *gilit* community and their attitudes towards it. Previous Arabic variationist research shows that regional dialects, which undergo change do not lose their linguistic identity. For example, Versteegh (1993: 68) argues that, although members of speech communities are adopting features of prestigious and dominant dialects, they still have a sense of dialect identity.

However, the results of the present study do not support this pattern: those who used most *gilit* features, who are highly integrated into the *gilit* community and have positive attitudes towards the *gilit* dialect, do not show a sense of local identity. This can be clearly observed from their attitude scores that indicate their tendencies to maintain and enhance stronger social relations with the *gilit* speakers, at least those living in Hīt. Moreover, in contrast to the claim that dialects that witness change do not become extinct (Milroy, 2002), and from the high frequencies and fast spread of the *gilit* features among HIA speakers, I predict that HIA features will disappear in the next generation of speakers. Based on the results obtained and discussed in chapters 5 and 6, it can be stated that speakers' SNI into the *gilit* community is the main factor that influences their linguistic behaviour towards that community.

7.2.2 Gender-related differences

Although Arabic variationist research on language and gender shows significant gender-related differentiation (§ 4.7.2), to date no noticeable trends in gender variations have been observed in network integration-based studies. The present study aims to provide a more recent example to Arabic sociolinguistics to uncover this pattern. To achieve this goal, the SNI method was used to explain gender variations in IA. While some previous studies on IA showed gender-related language variation independently from the social practices of men and women (Bakir, 1986; Abu-Haidar, 1989), the present study clarified why male HIA speakers use more *gilit* forms than female speakers. However, gender differentiations were not clear-cut without looking at speakers' social networks.

This thesis shows that language change is in progress. It started during the older generation of informants and is still developing in the speech of the younger generation. In general, in all age groups, the *gilit* forms outnumber the local *qiltu* forms. The vocalic features (vowel lowering and vowel epenthesis) are assimilated more frequently than, and spreading at a faster

rate among the younger generation, the consonantal features (q-velarisation and k-affrication). HIA speakers are found to assimilate all the linguistic variables under investigation with different rates of variation. The variation rates appear to depend on a number of external factors.

Speakers' age correlates strongly with /g/, but weakly with the rest of the dependent variants. In all age groups, males are innovating change for all examined variables. There was an obvious correlation between age and the use of /g/ and /tʃ/ for male speakers, but a clear correlation between age and use of the epenthetic [i] and vowel lowering for female speakers. Female speakers proved to be more innovative with regard to the adoption of the less stigmatised variants, but more conservative with regard to the adoption of the more stigmatised variants.

Although the new variants of the vocalic features are used more frequently among HIA speakers than the consonantal ones, this does not seem to prove significant. Across the three age groups, variation was significant for /g/ ($p < 0.05$), but not for the other three variants. The results indicate a negligible difference between the informants in the age group (over 60) and the age group (40-59) for all the dependent variables, which implies that the community was divided into two generations in relation to waves of migrations. Indeed, when the three age groups are recoded into two groups (old generation and the younger generation), the results are more interesting in that the differences between the older and younger generations are statistically more significant than those between successive age groups. While there was a significant level of variation between the two generations in the use of /g/ and vowel lowering, differences in the use of /tʃ/ and epenthetic [i] are less striking. Change affecting (q) was progressing faster than in other *qiltu* dialects that have been recently investigated, such as the variety spoken in Mosul (MA). Unlike MA (Yaseen, 2015; 2016), HIA has so far lost some of its salient features, namely (q) in favour of the more dominant *gilit* variant /g/.

Despite the finding that both male and female HIA speakers adopted the supralocal variants, the present study has demonstrated that men used them more than women did in all age groups. With the exception of vowel epenthesis, there was a correlation between gender and the use of the dependent variables. Male and female informants used the vocalic variants slightly higher than the consonantal ones. For men, the values of the variants ranged from 12 % to 43 % and for women they ranged from 3 % to 28 %. Gender-related differences are significant for all variants, except vowel epenthesis. For the variation in the use of (q) and (k) reflexes, the results corroborate a number of previous gender-related studies in other Arabic dialects, which reported that men are linguistically more innovative than women (Abd-el-Jawad, 1986; Haeri, 1997; Al-Essa, 2008, 2009; Al-Harashseh, 2014).

In sum, the results of the present study showed a gender-related dialect change pattern different from the previously reported patterns in terms of changing sociolinguistic situations. Previous works on other language, such as English have found that in situations of language change women are more innovative than men (Labov, 1966). However, my results support the findings of Arabic in that in such situations, male speakers were found to lead the change. The reliance on the social network theory in the present study marks a new trend of Arabic sociolinguistic research and contributes to Arabic sociolinguistic research.

7.2.3 The role of Social Network Integration (SNI)

The present study goes beyond the traditional dialectological approach, which is still predominant in most of the Arabic sociolinguistic studies, the Iraqi situation in particular, presumably because the majority of these studies have aimed to investigate the general linguistic status of speech communities rather than attempting to establish a more comprehensive analysis of potential phonological variation or to explain reasons for language variation and change in these communities. Some Arab linguists have called for more up-to-

date approaches to investigate variation and change in Arabic and have attempted to apply methods of theoretical sociolinguistics to Arabic-speaking communities, namely those witnessing rapid social and linguistic developments (e.g. Holes, 1987). One of the principal research questions addressed in the present study is whether SNI as a quantifiable sociolinguistic variable can reliably identify innovative language use. To answer this question, the present study seeks to apply a practical data-based model (i.e. SNI) to Arabic sociolinguistics. Although the results showed age and gender-related differences, such differences were not clearly explained without looking at speakers' network integration. For example, the younger male speaker H001 was the highest scorer both on the SNII and with respect to the language scores. Therefore, SNI as a quantifiable sociolinguistic method proved a reliable predictor of language innovation as well as a reliable predictor of linguistic conservatism.

The results show that speakers' SNI in the *gilit* community has the strongest impact on their language behaviour for three of the four independent variables. Within the SNI categories, friendship and workmate relations appear to be the most influential sub-variables through which HIA speakers are integrated into the *gilit* community. At the individual level, the results contrast earlier findings of language change led by female speakers. For example, with the exception of vowel lowering, the three highest scorers in all the linguistic variables are male informants, who are integrated into the *gilit* community either through *gilit* friends, workmates, or spending their leisure times with *gilit* speakers. Friendship was the only SNI sub-variable that proves significant for all dependent variables. Speakers' integration into the *gilit* community through workmates was important for /g/, but less important than that of friendship. Leisure time activities proved important for vowel lowering and vowel epenthesis.

The adoption of the *gilit* features led by male speakers was explained by examining the distribution of these speakers according to their SNI scores. The results of interaction between SNI and gender revealed that out of the eleven high scorers in the SNI index, there are eight

male speakers and three female speakers. However, the chi-squared correlation tests show that gender and SNI are independent with a level significance ($p > 0.05$). By merging the two low SNI sub-groups and comparing them against the high sub-group, I obtained an associated probability value of ($P < 0.05$), which highlights why male speakers use the innovative features more than female speakers.

At the group level, the results show that the high integration scorers are the leaders of change towards the *gilit* dialect. With the exception of /tʃ/, SNI correlate positively and strongly with the adoption of the supralocal variants. Informants are integrated into the *gilit* community through three social network sub-variables; friendship, work networks and leisure time activities. In terms of friendship and workmate relations with the *gilit* community, informants are highly differentiated in the use of /g/ and /tʃ/. On the other hand, exposure to the *gilit* community by leisure time activities influenced the acquisition of the vocalic variants i.e. vowel lowering and the epenthetic [i].

The innovation, which was led by younger speakers was also explained in relation to their SNI scores. The number of younger informants exceeds other age groups only in the high integration scores. The chi-square test indicates that age and SNI are strongly related with a level of significance (Chi-square = 13.667; df = 4; $P < 0.01$).

7.2.4 Psycholinguistic factors

Many studies on dialect contact have reported that certain language forms are more or less likely to be acquired than others (Trudgill, 1986). It has been found that more stigmatised language features are acquired the least, while less stigmatised features are acquired the most. This distinction has been usually explained by means of the level of social acceptance of such features among speakers. While several Arabic studies relate this variation to the stigmatised-prestigious dichotomy (e.g. Abd-el-Jawad, 1987), others proposed the existence of social

loyalties in defining this type of variation (e.g. Sallam, 1980). On the basis of the findings of such studies and the need to avoid the use of traditional methods in Arabic sociolinguistics, the present study proposes speakers' attitudes as a technique to explain these loyalties. This goal was achieved by looking at individual speakers' language behaviour in relation to their network integration as well as their attitudes. It was found that individual speakers, who evaluate certain *gilit* features, such as /tʃ/, negatively did not adopt them. In addition, it was found that for the acquisition of stigmatised variants a higher score on the SNII is required. This explains in more depth not only why more stigmatised forms are used the least, but the reason why they are never acquired. In terms of gender-related variation, the present study has added to previous Arabic variationist studies a dimension whereby female speakers tend to be more innovative in the use of less stigmatised variants (e.g. vowels), but more conservative in the use of more stigmatised variants (e.g. consonants).

Speakers' attitudes are important with regard to the use of /g/ and vowel lowering, but less important with regard to the adoption of /tʃ/ and the epenthetic [i]. Speakers in all attitudes groups used the vocalic variants much more frequently than the consonantal ones. The use of /g/ increases as attitudes towards the *gilit* dialect and community become more positive. Socially salient phonological variables, such as (k) are levelled only minimally and the vocalic features are levelled more and adopted more frequently than the consonantal features. Despite this, speakers' attitudes seems to be connected to their SNI level. On initial inspection, speakers' attitudes seem to be the key factor that drives this behaviour. However, as I predicted, their social integration can be seen as responsible for this pattern of variation. As we saw in Chapter 6, the more integrated informants in the *gilit* community are, the more positively they evaluate that community and its dialect. Informants, who are more integrated into the *gilit* community are found to evaluate such a community and its dialect more

positively. The correlation between speakers' attitudes and their SNI scores was statistically significant ($P = 0.05$).

The results show that the two consonants are more salient for the HIA speakers in that they tend to be more recognised as distinguishing the HIA dialect and less used by informants. In contrast, HIA speakers were less aware of differences in the reflexes of vocalic features, such as vowel lowering and vowel epenthesis; they used them at higher rates than the consonantal features. The way in which HIA speakers evaluate the salient variants is in line with Trudgill's (1986: 11) properties of a salient linguistic feature, based on Labov's distinction between markers and indicators. The results of the present study show that accommodation is not in the direction of SA and thus support findings of some previous sociolinguistic studies of the dialect contact between varieties of Arabic (Ibrahim, 1986; Bakir, 1986; Abd-el-Jawad, 1987, Holes, 1987; and Al-Wer, 1997) but not others (e.g. Abu-Haidar, 1989) that have identified accommodation and second-dialect acquisition in the direction of SA (Abd-el-Jawad, 1987).

7.2.5 Linguistic factors

The results show that some of the linguistic changes are governed by linguistic factors. Although the variation in /g/ is conditioned by grammatical constraints, this variation might be a matter of chance. Similarly, despite the fact that vowel epenthesis in initial two-consonant cluster was limited to three syllable types i.e. CCVV, CCVC, and CCVVC, it did not hold any significance. (k) affrication has been shown to be a phonological feature since (k) was affricated only in the context of the high front vowel /i/ or its long version /i:/, in open and closed syllables, and in word-initial and word-final position.

7.2.7 Family-related variations

At the family level, the thesis investigated language variation in three families, each with three informants, who represent the three age groups. This served to trace differences in the linguistic behaviour across different generations in the same family and to explain patterns of the sociolinguistic situation in the whole community. Without prior intention by the author, eight of the nine informants recruited for this purpose are females. The variations within the family are dependent on levels of integration of their members to the *gilit* community. The results go in line with the most of variationist studies conducted on other Arabic dialects in that younger members innovate language change away from their older relatives, usually parents. Moreover, the highest scorers in the four linguistic variables are from the high SNI scorers regardless of their ages and genders.

Despite the clear-cut family-related variation reported in Chapter 6 (§ 6.5), the present study provides a new trend of variation by applying network integration as a method to uncover such variation. By looking at the language behaviour of members of the three families selected for analysis, I was able to interpret why the spread of certain linguistic variables is faster in one family than in another. The key factor underlying this difference is individual speakers' SNI into the *gilit* community.

7.3 Suggestions for future research

The present study proposes a number of recommendations and suggestions for future research:

7.3.1 Investigating the speech of the *gilit* migrants in Hīt

It is recommended that investigating the speech of members of the *gilit* community who are born after the third wave of migration to Hīt, more specifically after 2003 to examine whether these migrants acquired any of the *qiltu* features at the expense of their native *gilit* features.

7.3.2 Investigating other *qiltu* dialects

This study focused only on HIA. It would be interesting to conduct a socio(linguistic) study on other *qiltu* dialects to enhance the ongoing investigation of members of this dialect group. Such dialects would include the *qiltu* dialects spoken in Anah and Tikrit. Due to the recent war-induced demographic changes taking place in Iraq represented by internal migration, thousands of families moved from these two cities and settled in the *gilit* areas, such as the capital Baghdad. Therefore, it seems important to conduct accommodation studies either in these migrant communities to determine social factors that govern potential changes in the *qiltu* dialect group. It needs to be mentioned here that, to the best of my knowledge, no previous studies are conducted on these dialects.

7.3.3 Longitudinal studies

This study investigated the speech of the HIA speakers, who moved to Baghdad and lived there for an average period of four months (§ 4.4). It is recommended to investigate accommodation in this migrant community according to the time that migrants spent in Baghdad. It is interesting to conduct a panel longitudinal analysis by conducting further interviews with some of the informants who participated in the present study, namely those who preferred to stay in Baghdad.

7.3.4 Investigating other phonological processes

The present study shows that HIA exhibits a number of vocalic phonological processes (§ 1.10):

1. Vowel deletion in initial and medial unstressed open syllables and whole syllable deletion.
2. The shortening of /a:/ and /i:/ in unstressed open final syllables, of /a:/ in non-final stressed closed syllables and pre-stressed open syllables.
3. The raising of /a/ to [i] in unstressed closed syllables.

It would be very interesting to conduct sociophonetic studies to investigate these processes with a special reference to English. These studies would contribute to the wider socio(linguistic) situation of HIA as well as tackling pedagogical problems for HIA speakers learning English as a foreign language.

7.3.5 Examining the impact of other social factors

Within this study, the influence of age, gender, network integration, and attitudes on language change are examined. In a number of situations, it looks like speakers' level of education and media exposure may play an important role in the innovation of the *gilit* features. It seems interesting to examine the effect of these factors on language change.

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Appendix A: Ethical documents

A1: Research ethical review letter

Performance, Governance and Operations
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UNIVERSITY OF LEEDS

Fuad J. Mohammed
 Linguistics and Phonetics
 University of Leeds
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**PVAR & Arts joint Faculty Research Ethics Committee
 University of Leeds**

5 October 2015

Dear Fuad

Title of study **Social network integration and language change in progress in Iraqi Arabic: a sociolinguistic study of regional dialect levelling in the Hit dialect**
Ethics reference **PVAR 15-004**

The above project was reviewed by the PVAR Faculty Research Ethics Committee at its virtual meeting of 30th September 2015. The following documentation was considered:

Document	Version	Date
PVAR 15-004 Ethical Plan Application. Fuad J. Mohammed.doc	1	12/09/15
PVAR 15-004 fieldwork risk assessment.doc	1	12/09/15
PVAR 15-004 participant information sheet.doc	1	12/09/15
PVAR 15-004 Consent Form.docx	1	12/09/15
PVAR 15-004 Interview questions.docx	1	12/09/15
PVAR 15-004 Ethical approval plan.pdf	1	12/09/15

On the basis of the information provided, the Committee requested further information/ clarification on the following matters before approval can be granted:

Application section	Comment	Response required/ amended application required/ for consideration
A8/ C10	Application states "social network integration" is being investigated – this is fairly sensitive data as is the fact that one dialect is perceived as more prestigious than another. The participants may feel uncomfortable about their use of an inferior dialect or integration the researcher should outline how these issues will be addressed	Response required
C11, C12	There is a conflict of interest in having relatives involved in the consent/ information process, particularly given variable	Response required

	family dynamics – can someone independent to the relatives do this instead?	
C13	If friends are responding on behalf of other individuals how can the researcher guarantee the individual's consent?	Response required
Interview questions	Participants are asked to recall a critical situation – please explain rationale of inclusion of this question?	Response required

A response should be sent to the Committee which addresses each of these points, and further consideration will be given to your response. Please highlight or use a different colour font to indicate the changes to your application form and supporting documents. Students are strongly advised to discuss their response with their supervisor before it is submitted.

The Committee is not able to approve your application at this stage so you are unable to begin your research. Please do not hesitate to contact us if you have any questions.

Yours sincerely

Jennifer Blaikie
Senior Research Ethics Administrator, Research & Innovation Service
On behalf of Dr Kevin Macnish, Chair, [PVAR FREC](#)

CC: Student's supervisor(s)

A2: Research ethical approval letter

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UNIVERSITY OF LEEDS

Fuad J. Mohammed
 Linguistics and Phonetics
 University of Leeds
 Leeds, LS2 9JT

**PVAC & Arts joint Faculty Research Ethics Committee
 University of Leeds**

28 October 2015

Dear Fuad

Title of study **Social network integration and language change in progress
 in Iraqi Arabic: a sociolinguistic study of regional dialect
 levelling in the Hit dialect**

Ethics reference **PVAR 15-004**

I am pleased to inform you that the above research application has been reviewed by the Arts and PVAC (PVAR) Faculty Research Ethics Committee and following receipt of your response to the Committee's initial comments, I can confirm a favourable ethical opinion as of the date of this letter. The following documentation was considered:

Document	Version	Date
PVAR 15-004 response 1.doc	1	13/10/15
PVAR 15-004 Ethical Plan Application. Fuad J. Mohammed.doc	1	12/09/15
PVAR 15-004 fieldwork risk assessment.doc	1	12/09/15
PVAR 15-004 participant information sheet.doc	1	12/09/15
PVAR 15-004 Consent Form.docx	1	12/09/15
PVAR 15-004 Interview questions.docx	1	12/09/15
PVAR 15-004 Ethical approval plan.pdf	1	12/09/15

Please notify the committee if you intend to make any amendments to the original research as submitted at date of this approval as all changes must receive ethical approval prior to implementation. The amendment form is available at <http://ris.leeds.ac.uk/EthicsAmendment>.

Please note: You are expected to keep a record of all your approved documentation, as well as documents such as sample consent forms, and other documents relating to the study. This should be kept in your study file, which should be readily available for audit purposes. You will be given a two week notice period if your project is to be audited. There is a checklist listing examples of documents to be kept which is available at <http://ris.leeds.ac.uk/EthicsAudits>.

We welcome feedback on your experience of the ethical review process and suggestions for improvement. Please email any comments to ResearchEthics@leeds.ac.uk.

Yours sincerely

Jennifer Blaikie
 Senior Research Ethics Administrator, Research & Innovation Service
 On behalf of Dr Kevin Macnish, Chair, [PVAR FREC](#)

CC: Student's supervisor(s)

Appendix B: Speaker metadata

	Code Name	Gender	Age	Dialect	Parents born	Occupation	Educational background
1	H001	Male	28	HIA	Hīt	PGR	BA
2	H002	Female	77	HIA	Hīt	Housewife	Primary school
3	H003	Male	36	HIA	Hīt	Lawyer	BA
4	H004	Female	34	HIA	Hīt	Teacher	Diploma
5	H005	Female	34	HIA	Hīt	Teacher	Diploma
6	H006	Male	32	HIA	Hīt	Teacher	Diploma
7	H007	Male	56	HIA	Hīt	Employee	Secondary school
8	H008	Female	49	HIA	Hīt	Housewife	Secondary school
9	H009	Male	69	HIA	Hīt	Doctor	BSc.
10	H010	Male	51	HIA	Hīt	Builder	Primary school
11	H011	Female	80	HIA	Hīt	Housewife	Uneducated
12	H012	Male	65	HIA	Hīt	Shopkeeper	Secondary school
13	H013	Female	84	HIA	Hīt	Housewife	Primary school
14	H014	Male	64	HIA	Hīt	medical assistant	Diploma
15	H015	Male	66	HIA	Hīt	driver	Primary school
16	H016	Female	55	HIA	Hīt	Housewife	Uneducated
17	H017	Male	61	HIA	Hīt	Employee	Secondary school

18	H018	Female	26	HIA	Hīt	Housewife	Secondary school
19	H019	Male	59	HIA	Hīt	Contractor	Secondary school
20	H020	Male	49	HIA	Hīt	Shopkeeper	Diploma
21	H021	Female	54	HIA	Hīt	Diploma	Teacher
22	H022	Female	26	HIA	Hīt	Housewife	BSc.
23	H023	Female	65	HIA	Hīt	Housewife	Primary school
24	H024	Female	43	HIA	Hīt	Accountant	Diploma
25	H025	Female	41	HIA	Hīt	Teacher	Diploma
26	H026	Male	35	HIA	Hīt	Teacher	BSc.
27	H027	Male	41	HIA	Hīt	Academic	PhD
28	H028	Female	64	HIA	Hīt	Housewife	Uneducated
29	H029	Female	62	HIA	Hīt	Housewife	Uneducated
30	H030	Female	54	HIA	Hīt	Employee	Primary school
31	H031	Female	37	HIA	Hīt	Teacher	BA
32	H032	Male	43	HIA	Hīt	Employee	BSc
33	H033	Male	82	HIA	Hīt	Retired teacher	Diploma
34	H034	Female	39	HIA	Hīt	Teacher	Diploma
35	H035	Male	39	HIA	Hīt	Academic lecturer	PhD
36	H036	Male	40	HIA	Hīt	Academic lecturer	PhD

Appendix C: Informants' individual scores for consonants

	Code Name	Gender	Age	/tʃ/	/g/				
					Overall	Verb	Noun	Adverb	Adjective
1	H001	Male	28	54 %	86 %	82 %	0 %	9 %	9 %
2	H002	Female	77	8 %	5 %	0 %	100 %	0 %	0 %
3	H003	Male	36	5 %	43 %	0 %	0 %	100 %	0 %
4	H004	Female	34	2 %	0 %	0 %	0 %	0 %	0 %
5	H005	Female	34	3 %	0 %	0 %	0 %	0 %	0 %
6	H006	Male	32	7 %	32 %	34 %	16 %	50 %	0 %
7	H007	Male	56	18 %	9 %	0 %	100 %	0 %	0 %
8	H008	Female	49	0 %	30 %	14 %	58 %	14 %	14 %
9	H009	Male	69	5 %	48 %	63 %	0 %	37 %	0 %
10	H010	Male	51	0 %	34 %	28 %	58 %	14 %	0 %
11	H011	Female	80	5 %	2 %	100 %	0 %	0 %	0 %
12	H012	Male	65	4 %	16 %	50 %	0 %	50 %	0 %
13	H013	Female	84	0 %	3 %	0 %	100 %	0 %	0 %
14	H014	Male	64	4 %	5 %	100 %	0 %	0 %	0 %
15	H015	Male	66	0 %	20 %	100 %	0 %	0 %	0 %
16	H016	Female	55	0 %	6 %	0 %	100 %	0 %	0 %
17	H017	Male	61	4 %	8 %	25 %	75 %	0 %	0 %
18	H018	Female	26	10 %	23 %	0 %	10 %	0 %	0 %
19	H019	Male	59	7 %	5 %	0 %	100 %	0 %	0 %
20	H020	Male	49	33 %	24 %	25 %	75 %	0 %	0 %
21	H021	Female	54	0 %	13 %	100 %	0 %	0 %	0 %

22	H022	Female	26	14 %	36 %	0 %	75 %	25 %	0 %
23	H023	Female	65	0 %	7 %	0 %	100 %	0 %	0 %
24	H024	Female	43	0 %	20 %	50 %	50 %	0 %	0 %
25	H025	Female	41	0 %	0 %	0 %	0 %	0 %	0 %
26	H026	Male	35	4 %	39 %	28 %	44 %	28 %	0 %
27	H027	Male	41	28 %	24 %	75 %	0 %	25 %	0 %
28	H028	Female	64	5 %	0 %	0 %	0 %	0 %	0 %
29	H029	Female	62	0 %	0 %	0 %	100 %	0 %	0 %
30	H030	Female	54	0 %	0 %	0 %	0 %	0 %	0 %
31	H031	Female	37	1 %	6 %	0 %	100 %	0 %	0 %
32	H032	Male	43	0 %	9 %	100 %	0 %	0 %	0 %
33	H033	Male	82	18 %	4 %	100 %	0 %	0 %	0 %
34	H034	Female	39	14 %	17 %	50 %	50 %	0 %	0 %
35	H035	Male	39	14 %	14 %	100 %	0 %	0 %	0 %
36	H036	Male	40	3 %	13 %	50 %	50 %	0 %	0 %

Appendix D: Informants' individual scores for vowels

	Code Name	Gender	Age	lowering vowel	Epenthetic [i]			
					Overall	C(i)C VV	C(i)CVC	C(i)CVVC
1	H001	Male	28	66 %	65 %	100 %	0 %	0 %
2	H002	Female	77	15 %	23 %	40 %	0 %	60 %
3	H003	Male	36	31 %	61 %	44 %	0 %	56 %
4	H004	Female	34	38 %	38 %	100 %	0 %	0 %
5	H005	Female	34	80 %	57 %	100 %	0 %	0 %
6	H006	Male	32	40 %	11 %	100 %	0 %	0 %
7	H007	Male	56	61 %	33 %	63 %	0 %	37 %
8	H008	Female	49	53 %	33 %	82 %	0 %	18 %
9	H009	Male	69	51 %	67 %	40 %	0 %	60 %
10	H010	Male	51	48 %	25 %	66 %	34 %	0 %
11	H011	Female	80	20 %	10 %	50 %	0 %	50 %
12	H012	Male	65	69 %	86 %	70 %	15 %	15 %
13	H013	Female	84	19 %	25 %	100 %	0 %	0 %
14	H014	Male	64	11 %	24 %	75 %	0 %	25 %
15	H015	Male	66	50 %	42 %	50 %	10 %	40 %
16	H016	Female	55	6 %	50 %	89 %	0 %	11 %
17	H017	Male	61	22 %	22 %	100 %	0 %	0 %
18	H018	Female	26	26 %	54 %	53 %	0 %	47 %
19	H019	Male	59	56 %	61 %	45 %	0 %	55 %
20	H020	Male	49	85 %	57 %	93 %	0 %	7 %
21	H021	Female	54	32 %	10 %	50 %	0 %	50 %

22	H022	Female	26	50 %	52 %	92 %	0 %	8 %
23	H023	Female	65	0 %	15 %	100 %	0 %	0 %
24	H024	Female	43	39 %	26 %	100 %	0 %	0 %
25	H025	Female	41	38 %	21 %	100 %	0 %	0 %
26	H026	Male	35	38 %	14 %	66 %	34 %	0 %
27	H027	Male	41	27 %	38 %	80 %	20 %	0 %
28	H028	Female	64	13 %	17 %	100 %	0 %	0 %
29	H029	Female	62	13 %	0 %	0 %	0 %	0 %
30	H030	Female	54	7 %	27 %	100 %	0 %	0 %
31	H031	Female	37	33 %	30 %	84 %	16 %	0 %
32	H032	Male	43	21 %	26 %	60 %	0 %	40 %
33	H033	Male	82	47 %	45 %	70 %	10 %	20 %
34	H034	Female	39	29 %	21 %	0 %	0 %	0 %
35	H035	Male	39	38 %	0 %	0 %	0 %	0 %
36	H036	Male	40	21 %	52 %	50 %	40 %	10 %

- 2- 50 % close friends from the *gilit* community. (كلت) من اصديقاي يتحدثون لهجة ال(كلت)
- 3- Up to 60 % close friends from the *gilit* community. (كلت) من اصديقاي يتحدثون لهجة ال(كلت)
- 4- 100 % close friends from the *gilit* community. (كلت) من اصديقاي يتحدثون لهجة ال(كلت)

5. Leisure time

Q/ What do you do in your leisure time?

ماذا تعمل(ين) في أوقات فراغك؟

0- أقضي أوقات فراغي مع أقرباءي في هيت.

0- Informant's social activities involve spending most of the time with relatives in Hīt.

1- أقضي أوقات فراغي بالذهاب في رحلة الى منطقة ال(كلت).

1- Informant's social activities involve going on trips to a *gilit* place.

6. Frequency of contacts.

Do you have your frequent daily contacts with HIA or *gilit* speakers?

هل تواصلك اليومي مع من يتحدثون لهجة هيت أم لهجة ال(كلت)؟

0- Most of the informant's contacts are with HIA speakers. أغلب تواصلتي مع من يتحدثون لهجة هيت.

1- Most of the informant's contacts are with *gilit*-speaking individuals. أغلب تواصلتي مع من يتحدثون لهجة ال(كلت).

7. Spatial mobility

Q/ How often do you travel the *gilit* areas?

كم مرة بالعادة تسافر(ين) الى منطقة ال(كلت)؟

0- Informant never travels. لا اسافر.

1- Informant travels once every three months. أسافر مرة كل ثلاثة اشهر.

2- Informant travels once a month. أسافر مرة في الشهر.

3- Informant travels several times a month. أسافر عدة مرات خلال الشهر.

4- Informant travels daily. اسافر بشكل يومي.

8. Motivation for going to the *gilit* area:

Q/ Do you intend to live, work in Hīt or the *gilit* areas? هل ترغب بالعيش في هيت أم في منطقة ال(كلت)؟

0- Informant intends to work in Hīt. أأرغب بالعيش في هيت

1- Informant intends to work in the *gilit* area. أأرغب بالعيش في منطقة ال(كلت).

9. Pre- migration contacts:

Q/ Have you ever lived in a *gilit*-speaking area? How long? هل سبق وأن عشت في منطقة ال(كلت)؟

0- Informant never lived in a *gilit*-speaking area. لم أعش مطلقاً.

1- The informant has lived in a *gilit*-speaking area for less than three months. عشت أقل من ثلاثة أشهر.

2- The informant has lived in a *gilit*-speaking area for more than three months. عشت لأكثر من ثلاثة أشهر.

10. Exposure to the *gilit* dialect by media:

Q/ How often do you watch Iraqi programmes on TV كم مرة تشاهد برامج باللهجة العراقية؟

0- Informant never watches TV. لا أشاهد هكذا برامج.

1- Informant watches TV once every three months. أشاهدها مرة كل ثلاثة أشهر.

2- Informant watches TV once a month. . أشاهدها مرة في الشهر

3- Informant watches TV several times a month. أشاهدها عدة مرات خلال الشهر.

4- Informant watches TV daily أشاهدها بشكل يومي

Appendix F: Indicators of Attitudes

The following questions and their scoring criteria were designed to test informants' attitude towards the *gilit* community and dialect:

Please put (✓) opposite the suitable choice. رجاء وضع علامة (✓) امام الاختيار المناسب

1. هل تعتقد (ين) بأن لهجة (كلت) لها مكانة أكبر من لهجة هيت؟

1. Do you think that the *gilit* dialect is more prestigious than HIA?

- 0- Yes نعم
1- No كلا

2. أي لهجة تعتقد (ين) أقرب للعربية الفصحى؟

2. Which variety do you consider more standard-like

- 0- Informant considers HIA as more standard. لهجة هيت.
1- Informant considers the *gilit* dialect as more standard. لهجة ال(كلت).

3. Where do you use HIA?

3. أين تتحدث (ين) لهجة هيت؟

- 0- Informant prefers to use HIA in Hīt only. أفضل استخدامها داخل هيت فقط.
1- Informant prefers to use HIA everywhere including the *gilit* area. أسنخدمها في أي مكان.

4. Where do you like to live all of your life?

4. أين تفضل (ين) أن تعيش بقية حياتك؟

- 0- In Hīt. في هيت.
1- Anywhere including the *gilit*-speaking area. أينما كنت حتى في منطقة ال(كلت).

5. هل سبق وأن قال لك أحدهم أنك تستخدم (ين) لهجة ال(كلت)؟

5. Has it happened that someone from Hīt thought that you were *gilit* speaker?

- 0- No. كلا
1- Yes. نعم

6. What do you think of the *gilit* dialect?

6. ما هو رأيك بلهجة ال(كلت)؟

7. Do you speak differently in Hīt than in a *gilit* place? هل تتحدث (ين) بشكل مختلف إذا كنت

داخل أو خارج هيت؟

0- Informant speaks differently in Hīt than in a *gilit* place. 0- نعم

1- Informant speaks the same in Hīt than in a *gilit* place 1- كلا

8. وأنت عاندة (ة) من منطقة ال(كلت), هل أخبرك أحدهم بأنك تدعي (ين) التحدث بلهجة ال(كلت)؟

8. When you return from a *gilit* city, have people ever commented that you pretend to speak a *gilit* dialect?

0- Yes. 0- نعم

1- No. 1- كلا

9. هل تعتقد (ين) بأن لهجتك تغيرت منذ أن بدأ تواصلك مع من يتحدث ال(كلت)؟

9. Do you consider that your accent has changed since you made contacts with *gilit* speakers?

0- No 0- كلا

2- Yes 2- نعم

Appendix G: Research information sheet and participant's consent form

(معلومات عن البحث ونموذج موافقة للمشاركة في البحث)

G1: Consent for in Arabic

نموذج موافقة على المشاركة في دراسة بحثية.

عنوان البحث: التطور في اندماج شبكة العلاقات الاجتماعية وتغير اللغة في اللغة العربية العراقية: دراسة لغوية-

صوتية لظاهرة الانصهار اللهجي الإقليمي للهجة مدينة هيت

الباحث الرئيسي: فؤاد جاسم محمد

السلام عليكم ورحمة الله وبركاته

أنت (ي) مدعوة (ة) للمشاركة في دراسة بحثية يقوم بها طالب من كلية اللغات والثقافات والمجتمعات في جامعة ليدز في بريطانيا، مع العلم بأن مشاركتك في هذا البحث ستكون عمل تطوعي بالكامل. إذا اخترت (ي) المشاركة، فإن مشاركتك ستكون عبارة عن مقابلة فردية غير رسمية مع الباحث لمدة ٢٠-٣٠ دقيقة تقريباً.

سيتم إضافة التسجيل الصوتي للمقابلة الخاصة بك إلى مجموعة ضخمة من التسجيلات الصوتية التي تحتفظ بها جامعة ليدز والتي تضم العديد من اللهجات التي تعود إلى لغات من جميع أنحاء العالم. ويتم استخدام هذه التسجيلات لغرض دراسة تغير الأنماط في اللهجات واللكنات الخاصة بهذه اللغات، علماً بأن جميع التسجيلات المستخدمة في هذه المجموعة الصوتية ستظل سرية ولن يتم التعريف بالتسجيل الخاص بك عن طريق اسمك ولكن من خلال رقم تسلسلي خاص. إذا كنت تود (ين) المشاركة في هذه الدراسة، يُرجى التكرم بتزويدنا ببعض المعلومات الخاصة بك كما هو موضح أدناه. كما نرجو منك قراءة هذا النموذج بعناية ومن ثم وضع علامة (✓) في المكان المخصص للتأكد من قراءتك للنموذج وموافقتك على المشاركة في الدراسة البحثية.

- أقر بأنني قد قرأت وفهمت ورقة المعلومات المرفقة والتي توضح الدراسة البحثية المذكورة أعلاه بتاريخ [] وقد تم منحي الوقت الكافي لطرح أي أسئلة أو استفسارات تخص الدراسة البحثية ().
- أوافق على حفظ التسجيلات الخاصة بي واستعمالها في البحوث المستقبلية ذات الصلة أو أوافق على وضع التسجيلات الخاصة بي في الأرشيف الصوتي في جامعة ليدز. [إذا لزم الأمر ()]
- أدرك بأن هناك أجزاء معينة من البيانات التي يتم جمعها خلال هذه الدراسة البحثية يمكن الإطلاع عليها من قبل مدققين من جامعة ليدز أو من قبل السلطات التنظيمية ومن الممكن أن تكون المشاركة الخاصة بي ضمن هذه الأجزاء، وبناءً عليه أنا أسمح للجهات المذكورة أعلاه بالحصول على بياناتي ().

• أوافق على المشاركة في الدراسة البحثية المذكورة أعلاه وسأقوم بإعلام الباحث في حال تغيير عناوين الاتصال

الخاصة بي () .

اسم المشارك:

توقيع المشارك:

التاريخ:

اسم الباحث الرئيسي:

التوقيع:

التاريخ : (يتم التوقيع ووضع التاريخ بحضور المشارك في الدراسة البحثية)

G2: Consent for in English

Full project title: Social Network Integration and Language Change in Progress in Iraqi Arabic: A Sociophonetic Study of Dialect Levelling in the Hiti Dialect

Principal researcher: Fuad Jassim Mohammed.

Dear participant,

You have been invited to participate in a research project by a student enrolled in the School of languages, cultures and societies at the University of Leeds. Your participation in this project is entirely voluntary. If you agree to participate, your participation will consist of an individual informal interview conducted by the student. The entire session will last approximately 20-30 minutes.

The recording of your voice might be added to a large collection of recordings held by the University of Leeds covering various dialects of languages around the world. These recordings would be used to study the changing patterns of accents and dialects in these languages. Recordings used in this collection are entirely anonymous. Your interview will be identified by number and not by name.

If you are happy to participate, it would be helpful if you could provide some background information about yourself, as requested below. Please read this form carefully and then put a tick (✓) in the box to confirm you read and agree to participate in the project.

- I confirm that I have read and understood the information sheet dated [] explaining the above research project and I have had the opportunity to ask questions about the project.
- I agree for the data collected from me to be stored and used in relevant future research. I agree for the data I provide to be archived at the University of Leeds speech. [If applicable]

- I understand that relevant sections of the data collected during the study, may be looked at by auditors from the University of Leeds or from regulatory authorities, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.
- I agree to take part in the above research project and will inform the lead researcher should my contact details change.

Name of participant:

Participant's signature:

Date:

Name of lead researcher:

Signature:

Date*:

*To be signed and dated in the presence of the participant.

Appendix H: Examples of target and expected reflexes of words tested in picture description (target sounds in bold)

HIA reflex	<i>gilit</i> reflex	English gloss
/simak <u>k</u> /	/simat <u>f</u> /	Fish, pl.
/m <u>i</u> squ:f/	/m <u>a</u> sque:f/	Grilled fish
/sam <u>k</u> a/	/sim <u>t</u> fa/	Fish sing.
/m <u>i</u> flu: <u>g</u> /	/m <u>a</u> flu: <u>g</u> /	Burnt out
/dʒri:ʃ/	/dʒ <u>i</u> ri:ʃ/	Groats
/tʰi:n/	/tʰ <u>i</u> :n/	Flour
/bsa:ti:n/	/b <u>i</u> sa:ti:n/	Farms
/ <u>k</u> i:s/	/ <u>f</u> i:s/	Carry bag
/fti:la/	/f <u>i</u> ti:la/	Wick
/t <u>i</u> nnu:r/	/t <u>a</u> nnu:r/	Oven
/m <u>i</u> s ^s nu:ʃ/	/m <u>a</u> s ^s nu:ʃ/	Produced
/m <u>i</u> ʃhu:r/	/m <u>a</u> ʃhu:r/	Famous
/n <u>i</u> dʒdʒa:r/	/n <u>a</u> dʒdʒa:r/	Carpenter
/h <u>i</u> dda:di:n/	/h <u>a</u> dda:di:n/	Goldsmiths
/f <u>i</u> lla:h/	/f <u>a</u> lla:h/	Farmer
/nwa:ʃi:r/	/n <u>i</u> wa:ʃi:r/	Water weels
/q <u>l</u> a:da/	/g <u>l</u> a:da/	Necklace

Appendix I: Collection of pictures used in the interview to illicit linguistic variables

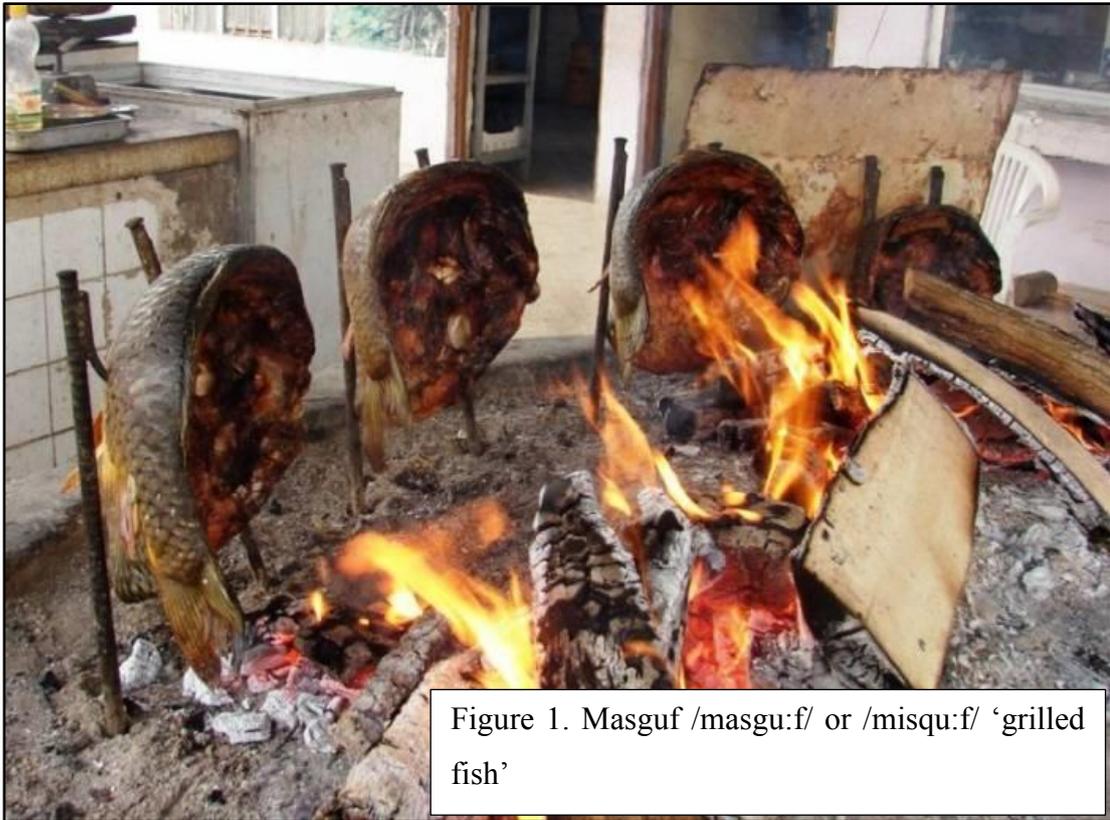


Figure 1. Masguf /masgu:f/ or /misqu:f/ ‘grilled fish’



Figure 2. Jarusha /dʒa:ru:ʃa/ ‘grinder’. It makes /tʰi:n/ or /tʰi:ni/ ‘flour’

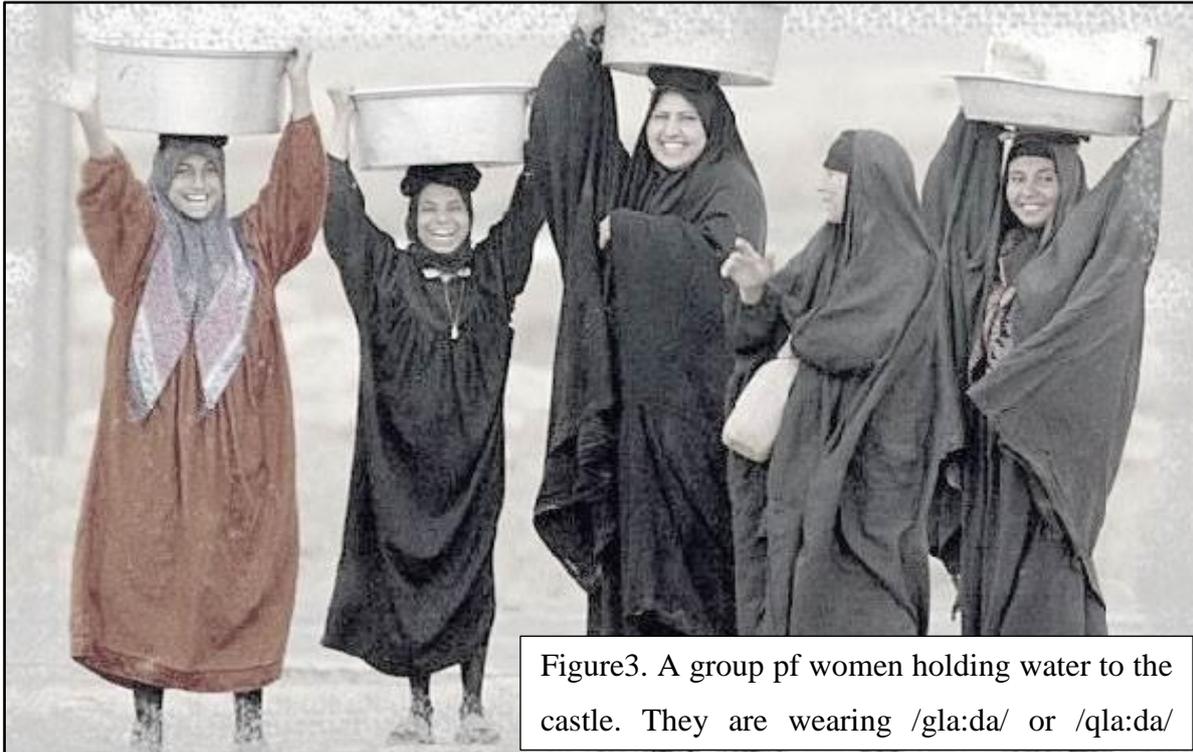


Figure3. A group pf women holding water to the castle. They are wearing /gla:da/ or /qla:da/



Figure 4. Nawa'eer /nwa:ʕi:r/ or /niwa:ʕi:r/ 'water wheels'

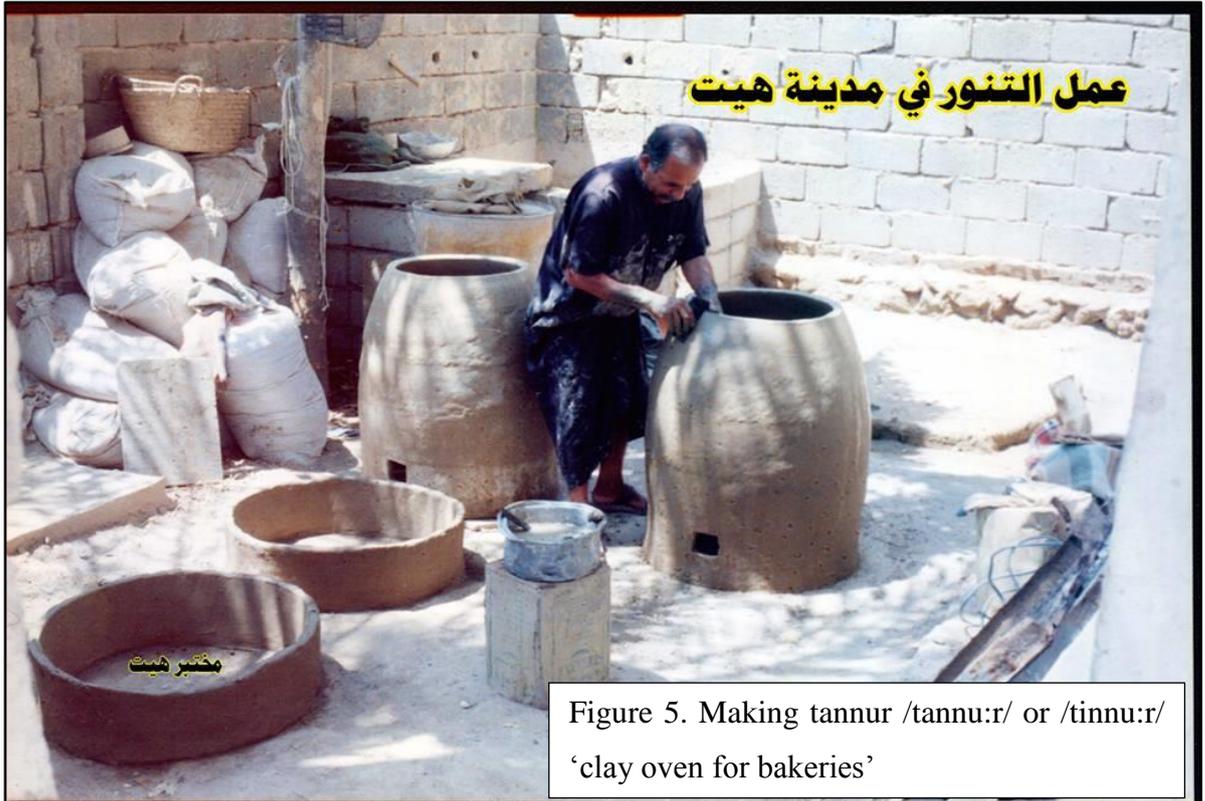




Figure 7. Zmaleeq 'onion bracts'. /zma:li:q/ or /zimai:q/.



Figure8. Jawan 'mortar'. It is used to make madguga /madgu:ga/ or /midgu:ga/ 'grinded dates and sesame'

Appendix J: Sample of Transcribed Speech

Speaker 1 (H001): male, younger

sadzdzalit bil ?awwal ibtida:?i bil xamsa w tis?i:n ?rba?fa w tis?i:n ?ana bs?af ?awwal ibtida:?i

Translates to: I started my first primary class in 1995 ...in 1994 I was in the first primary class.

?it?filla:b *f?a:naw* ma jiqu:n mu:ða:k ?il mistawa ?il *mat?lu:b*

Translates to: The pupils were not studying, they did not have the required level.

f?a:n ?umri taqri:ban *f?init* ra:bi? ibtida?i.

Translates to: My age was about.... I was in the fourth primary class.

ka:bnaw min hi:t miurruma:di min ?a:na min ra:wa ja?ni..... ?aylabhum ruma:di

Translates to: They (my classmates) were from Hīt, Ramadi, Anah, Rawah..... Most of them were from Ramadi.

?ilmijjan ma tirham li?an ?il dzi:na:t *tgu:m* tixtalif

Translates to: Scientifically, it is not good because the genes are different.

?ilmuhim dza:zafna w t?abbe:na w *t?alla?na:hum* w [f?a:n ?aku wa:ħid mantu:l

Translates to: Anyway, we risked, entered and brought them out, there was a boy having an electric shock

maθalan tru:h lbayda:d *tgulla* a:ni min sakanat hi:t *tgullak* haj we:n hi:t

Translates to: For example, you go to Baghdad and say I live in Hit, they ask where Hīt is?

nistafa:d minhabil *t?iħi:n* w bi:hamaqbad^s min *fo:g*

Translates to: We benefit from it in getting the flour and it has a handle on the top.

fiti:la ?illi hijja wis^slit qma:ʃ tmiš^s ?il nnafit^s w tiʃtaʃil

Translates to: Wick, which is a piece of clothes that absorbs the oil and make fire.

ha:ja ?il mihna jsawwi *tannu:r* t?i:n

Translates to: This job is making a clay oven

Speaker 2 (H031): female, younger

ʔana ʔintaqalit min ʔil bista:n *nzalit* lil madrasa ʔibbe:t *dzdi:d*

Translates to: I moved from the farm and went to the school in the new house.

ka:n ʔabuja ʔaħħa jirħamu huwwa *jwiddi:na* w jdzi:bna

Translates to: Our father (May Allah mercy him) used to drop us to and pick us from school.

bju:t qadi:ma dziddan jaʕni *nsimmi:hazqa:q* ʔihna bil ʕa:mmijja

Translates to: Small houses, in our dialect we call ally.

nħadʕʕir ʔil timman ʔil *matʕhu:n* lil *ħala:wa*

Translates to: We prepare the rice flour for the sweet.

sana wiħda birruma:di qisim da:xili: *qʕadit* wijja *madzmu:ʕa* min ʔil dʒinu:b

Translates to: One year in Ramadi, I lived in the university accommodation with a group (of girls) from the south

sʕa:daqit ʔahal ʔil dʒdʒinu:b ʔakθar min ʔahal hi:t

Translates to: I made friendships with southerners more than Hītis.

jqulu:n ʔintu: ʔilluʕa ʔilʕarabijja ʔilfasʕi:ħa ʔil ʔasʕlijja.... ʔil qa:f ʕidna wa:dʕha dziddan

Translates to: They say you are the standard language, the original language. The ‘qaf’ (q) is very clear in our speech.

ʕga:l w ʔilyitra w ʔildifda:ʕa w ʔil *ʕaba:ja*

Translates to: The headband, the head dress, and the gown.

ha:ða simak jaʕni: *su:q* hi:t *maʕru:f* bha:ða ʔil ʕi:

Translates to: This is fish, Hīt market is famous of this thing.

tʕari:qat ʕawi ʔil *simak* jħitʕu:n ʔil *samka* tʕabʕan w *jtibli:ħa* ʔibbaʕdʕ ʔil bha:ra:t

Translates to: The method of roasting fish is to put the fish, indeed, and add to it some spices.

Speaker 3 (H007): male, middle-age

kinna w *ka:nat* mada:risna mu: da:xil ?il qalʕa

Translates to: We were, and our schools were not inside the castle.

kinna ?ajja:m ?il mutawasʕitʕa jaʕni ʕbarna ?il ?ibtida: ?ijja ?iða sta:d ja:kir qa: ?id bil hadi:qa ma nigdar nfu:t bil sa:jid ?illi huwwa bi:

Translates to: When we were in the secondary stage, if Mr. Shaker is sitting in the school garden, we could not pass next to him.

min *kbarna qumna* nru:h lkbe:s w nitna:fas wijja ?hl kbe:s

Translates to: When we got older, we began to go to Kubaysah and compete their teams.

kinna nsawwi: ma:l ?il *wsʕal* ndzimmiʕa killa w ndzi:b *ki:s* na:jlon w nirbitʕa w tsʕi:r tʕibba

Translates to: We used to bring pieces of clothes, join them altogether and put them in carry bag and turn them to a ball.

w ha:ða jru:h jirkidʕ jilzama *qabil* ma *tu:qaf* bil ga:ʕha: *ka:nat* il liʕba

Translates to: And this runs, catches it before it reaches the floor, this was the game.

jawmijjan min ?ilʕasʕir ?iwwara *jsiwwu:n* da: ?ira ha: ʕammi: w *jqifdu:n* na:s *?iddig* w tganni:

Translates to: Every day after midday, they sit in circles, play music and dance.

qabil jistaxdimu:n ?il *faxtu:r* balam bas *kbi:r* dziddan *kbi:r* jaʕni: ?ifʕu:n *tqu:l* hasa safi:na zyeira

Translates to: In the past they use ‘shaxtur’, a boat, but a very big boat, say, ship.

ka:naw jidzdzimʕu:n ?umsija bi ?ille:l w *jqifdu:n madzmu:ʕa* min ?ilʕaba:b ?aw ʕala mistawa ?il ʕawa: ?il

Translates to: They used to gather at night and sit in groups or in family gatherings.

ha:j ?il *nawa:ʕi:r* w hi:t *mafhu:ra* bil nawa:ʕi:r. ?il wasi:la ?il waʕi:da jaʕni ?ihna blahdzitna nqu:l l siqi ?il bisa:ti:n

Translates to: These are water wheels and Hīt is famous of water wheels. The main method of irrigation.

jdixnu: qabil ma jsitaxdimu: li?an ha:ða ?il tadxi:n *ixilli:* jitma:sak

Translates to: They smoke it (the oven) because that makes it more solid.

Speaker 4 (H008): female, middle-age

fa nil?ab *madzmu:fa:t* ja?ni ?ihna w *dzja:ri:nna* siwa wilid w *bana:t* ja?ni muxtalaf

Translates to: We play in groups with our neighbors altogether boys and girls.

jdzibu:n ?u:da *t⁶wi:la* w jrif?u:ha min ?il nigra w jd⁶irbu:hab maka:n *bfi:d*

Translates to: They bring a long stick, lift it from the hole and throw it far away.

?illi jil?ab wijja: la:zim jru:h *jilqaf* ha:j ?il ?u:da *qabil* ma *tu:qaf* b ?il ga:f

Translates to: Whoever, plays with him should go and catch the stick before it reaches the floor.

qabil ?ila:qa:thum *maħdu:da* mudztama? *d⁶ajjiq* ja?ni maku: tat⁶allu?a:t ?akθar ja?ni: jsa:fir
?aw jidrus barra

Translates to: In the past the relations were limited, a narrow society, e.g. one travels or studies abroad.

maθalan ?aru:h ?aftari: min ?abu: maħal magdar *?aħki:* b lahidzti: la:zim *?aħki:* b lahdzit ?ahal
bayda:d walaw ?ana ?aftaz b lahidzti

Translates to: For example, I go to shop, I can't use my dialect I have to use the dialect of Baghdadis even though I am proud of my dialect.

jawmijjan min ?il?as⁶ir ?iwwara *jsiwwu:n* da:?ira ha: ?ammi: w *jqi?du:n* na:s *?iddig* w tganni:

Translates to: Every day after midday, they sit in circles, play music and dance.

qabil jstaxdimu:n ?il *faxtu:r* balam bas *kbi:r* dziddan *kbi:r* ja?ni: ?i?fu:n *tqu:l* hasa safi:na
zyeira

Translates to: In the past they use 'shaxtur', a boat, but a very big boat, say, ship.

wil fakar ma:l ?ahal *qabil* mu: miθil hasa *mashu:q* ha:ð *jsimmu: hi:ki* muka?fa:t kba:r

Translates to: And sugar was not powder like nowadays, they call it cubes, large.

w bil tilfizjo:n nismaŋ jaŋni: *ba:kir* ʔawwal jo:m ramadʕa:n

Translates to: In the TV we hear that tomorrow is the first day of Ramadhan.

ha:ja waħħahi ʔana *kbarit* ma ʔifta bsʕara:ħa ʔana *wʕe:t* ʕal ʕibra ha:ja *jsimmu:ha* ʔil guffa

Translates to: This is, by Allah, I did not see as I saw the ferry. This is called ‘guffa’.

Speaker 5 (H009): male, older

θne:n bil *bsa:ti:n* w ʔa:ni: *ʔfint* ʔil xa:mis fa ʔabu:ja *sadzdzalni:* b madrasa

Translates to: Two and I am the third, my father sent me to school

ħaði:k ʔil sana ħaqi:qa ʕift ʔil dira:sa

Translates to: That year, in fact, I left study.

θa:ni: sana *rdzaʕit rdzaʕit* bsʕaf ʔil ʔawwal

Translates to: The next year, I returned to school, at the first class.

fa *sʔalit* ʔimmi: we:n ʕab ʔil sala:m *qalatli:* ra:h lil *bsa:ti:n* ʔabu rija:dʕ jri:d min ʕindu: di:na:r

Translates to: I asked my mum where is Abd-el-Salam? She told me he went to the farms, Ab-Riyadh wants a dinar from him.

kint ʔʕu:f kurat ʔil qadam w ʔil tʕa:ʔira w ʔil salla bas *kint* wa:hsi: *hi:ʔf* ʕumur bas ʔalʕab salla

Translates to: I used to play football, volleyball and basketball, but I was preferring to play basketball.

ʔaħħa jirħamhum wa:ldi: w wa:lidti: *jgaʕdu:ni* bille:l min *wakit* ʔakθar ʕi: nistaʕmil ʔihna timman w marag

Translates to: My dad and mum (May Allah mercy them), wake me up at night. We usually cook rice and marag.

fa *nigʕud siħu:r* ʕa:di: w ħatta ʔuxu:ti: taqri:ban kulli:tna sʕa:jmi:n

Translates to: And we wake up normally, even my brothers, almost all of us were fasting.

ʔana *wiʕe:t* maka:n ʔaku: tasʕfi:ja bhi:t

Translates to: As I grew up, there was no (water) filtering in Hit

ʕidzi:n ʕa:di: wijja ʔil dihin wijja ʔil *ʕadzi:n* w qisim minna jistaʕmilu:n *mabru:f* ʔaw ʕakar
jhitʕtu: wijja ʔil *ʕidzi:n*

Translates to: Dough, normally, we add oil to it and some of us use peeled coconut or sugar.

kinna nitʕawaf kul xami:s w dʒimʕa w kaða: w nta:biʕ ʔil dira:sa

Translates to: We used to meet every Thursday and Friday and the like to check our study.

Speaker 6 (H013): female, older

dʒatni: ʔil qisma ʔizziwadʒit ʔil ʕamdilla: *xillafit bna:t* w wlida:t ʕne:n qa:sim w ʔabu:
hawe:ða saʕi:d

Translates to: My destiny came, I got married and had girls and two boys: Qasim and Saeed
dad of this (Pointing to her grandson).

ka:nat ʔil mudi:ra sit ʕafi:fa ʕami:d min bayda:d ʔe: ʔaððakkar ʔe: ya: wle:di

Translates to: The head teacher was Mrs. Khadija Hameed from Baghdad. Yes, I remember,
yes my son.

ma tiððakkar ʔil ʕibra we:n *qabil*. ʔe: ʔil ʕibra ha:j ʔil ʕibra w ʔihna he:n *qba:lina* ndahhiq
ʕle:ha

Translates to: Do remember where the ferry was? This was the ferry and we were opposite
it, we used to look at at.

ʔawwal ma tidʒi mara waħda tidʒi *tqu:l* nri:d mara tiʕruf ʔinta ʔiða jwa:fqu:n ʔahla *jqulu:n*
majxa:lif

Translates to: First, a woman comes and says we need a woman, you know. If they agree
they would say okay.

tra:ki qabil fudʕdʕa maku: la swa:rat w la ʕi: hassa swa:rat ðahab w *tra:ki*: w *qba:jid* ðahab

Translates to: Silver Earrings, in the past there were no gold wristbands, but nowadays there
are gold wristbands and necklaces.

ʔil ho:ʕ *kbi:r hi:k* fe:ha bhal ʕme:sa *qa:ʕdi:n*

Translates to: The house was big, so, in the sun we used to sit

ʔaku bi:hum *zna:gi:l* ʔiʃfahar ha:ða li *ʔle:na* radʒab w ʃaʃba:n ʃahr ʔil zaka: jqismu:n flu:s
miθil ʔil faqi:r jqisʃulu hdu:m

Translates to: Some of them were rich, in this month Rajab and Shaaban the month of zakat, they distribute money and clothes to the poor.

jidzi ʃabd ʃwe:na jdig bhal tʃabil *giʃdi giʃdi* ja: *sahra:na* ʔisli ʔil timman bil ndza:na

Translates to: Abd ʃwena comes: ‘wake, wake you drowsy (woman) wash the rice in the bowl’.

baʃad maʃa:d bijja *ʔaħki* w *ʃrabit* maj w *ʃʃarit*

Translates to: I was unable to speak, I drank water and broke my fasting.

ha: ʔe: *qu:q qwa:qa qwa:qa* ʔe: sʃahi:h jʃtaru:ha min haðu:l ʔil *jsiwwu:n* ʔil ħba:b

Translates to: Oh, yes jar, jars, jars, which they buy from those who make potteries.

Appendix K: A screenshot of the SPSS variable view

Page 1 of 2

The screenshot shows the SPSS Variable View for a dataset named 'Untitled2 [DataSet2]'. The interface includes a menu bar (File, Edit, View, Data, Transform, Analyze, Direct Marketing, Graphs, Utilities, Add-ons, Window, Help) and a toolbar with various icons. The main area displays a table of variables with the following columns: Name, Type, Width, Decimals, Label, Values, Missing, Columns, Align, Measure, and Role. The variables listed are:

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
1	id	Numeric	8	0	Code_name	{1, H001}...	None	8	Right	Nominal	Input
2	Age_group	Numeric	8	0	Age group	{1, 20-39}...	None	8	Right	Ordinal	Input
3	Age	Numeric	8	0	Age	None	None	8	Right	Scale	Input
4	Gender	Numeric	8	0	Sex	{1, Male}...	None	8	Right	Nominal	Input
5	Lifestyle	Numeric	8	0	Network Integra...	{1, 0-4 point...	None	8	Right	Ordinal	Input
6	Relatives	Numeric	8	0	Relatives_living	{0, Most of t...	None	8	Right	Ordinal	Input
7	Attitudes	Numeric	8	0	Attitude	{1, 1 point}...	None	8	Right	Ordinal	Input
8	Workmates	Numeric	8	0	Workplace	{0, Work in ...	None	8	Right	Ordinal	Input
9	Liesure	Numeric	8	0	Leisure time ac...	{0, With MH...	None	8	Right	Ordinal	Input
10	Friendship	Numeric	8	0	Friendship netw...	{0, Closed fr...	None	8	Right	Ordinal	Input
11	Travel	Numeric	8	0	Spatial mobility	{0, Never tra...	None	8	Right	Ordinal	Input
12	Media	Numeric	8	0	Media exposure	{0, Never}...	None	8	Right	Ordinal	Input
13	Work	Numeric	8	0	Workmates	{0, Most wo...	None	8	Right	Ordinal	Input
14	Living	Numeric	8	0	Motivation to livi...	{0, Never liv...	None	8	Right	Ordinal	Input
15	Parents	Numeric	8	0	Parents birth	{0, Both par...	None	8	Right	Ordinal	Input
16	g	Numeric	8	0	[g]	None	None	8	Right	Scale	Input
17	Affrication	Numeric	8	0	tʃ	None	None	8	Right	Scale	Input
18	Epenthesis	Numeric	8	0	[simi:n] vowel	None	None	8	Right	Scale	Input
19	Lowering	Numeric	8	0	[a]	None	None	8	Right	Scale	Input
20	Lifestyles	Numeric	8	0	Lifestyle	None	None	8	Right	Scale	Input
21	Attitude	Numeric	8	0	Attitudes	None	None	8	Right	Scale	Input
22	CCVV	Numeric	8	0	Type CCVV	None	None	8	Right	Scale	Input
23	CCVC	Numeric	8	0	Type CCVC	None	None	8	Right	Scale	Input
24	CCVVC	Numeric	8	0	Type CCVVC	None	None	8	Right	Scale	Input
25	Mark	Numeric	8	0	[ə] Mark	None	None	8	Right	Scale	Input

At the bottom of the window, there are two tabs: 'Data View' and 'Variable View', with 'Variable View' currently selected.

Page 2 of 2

The screenshot shows the SPSS Variable View for the same dataset, displaying variables 25 through 30. The interface is identical to the previous screenshot, showing the menu bar, toolbar, and the variable list table.

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
25	Verb	Numeric	8	0	[g] Verb	None	None	8	Right	Scale	Input
26	Noun	Numeric	8	0	[g] Noun	None	None	8	Right	Scale	Input
27	Adverb	Numeric	8	0	[g] Adverb	None	None	8	Right	Scale	Input
28	Adjective	Numeric	8	0	[g] Adjective	None	None	8	Right	Scale	Input
29	Attit	Numeric	8	0	Attitudes	{1, Negative...	None	8	Right	Ordinal	Input
30	Education	Numeric	8	0	Level of education	{1, Primary ...	None	8	Right	Ordinal	Input

Appendix L: Sample of SPSS data view saved as MS Excel 2013

id	Age_group	Age	Gender	Lifestyle	Relatives	Attitudes	Workmate	Liesure	Friendshij	Travel	Media	Work	Living	Parents	g	Affricator	Epenthesi	Lowering	Lifestyles	Attitude	CCVV	CCVC	CCVVC	Verb	Noun	Adverb	Adjective	Attit	Education
1	1	28	1	3	0	5	0	0	2	4	1	1	0	1	86	54	65	66	10	6	100	0	0	82	0	9	9	2	3
2	3	77	2	1	0	2	0	0	1	1	0	0	2	0	5	8	23	15	3	3	40	0	60	0	100	0	0	1	1
3	1	36	1	3	0	5	0	0	2	1	4	1	2	1	43	5	61	31	8	6	44	0	56	0	0	100	0	2	3
4	1	34	2	3	0	2	0	0	1	1	4	0	1	0	0	2	38	38	10	3	100	0	0	0	0	0	0	1	3
5	1	34	2	3	0	3	0	0	1	1	1	0	2	0	0	3	57	80	9	4	100	0	0	0	0	0	0	1	3
6	1	32	1	2	0	4	0	0	2	1	1	0	2	0	32	7	11	40	5	5	100	0	0	33	16	50	0	2	3
7	2	56	1	2	0	2	0	0	2	1	3	0	2	0	9	18	33	61	6	3	63	0	37	0	100	0	0	1	2
8	2	49	2	2	1	4	0	1	1	1	1	0	2	1	30	0	33	53	7	5	82	0	28	14	58	14	14	2	2
9	3	69	1	3	0	4	1	1	2	1	3	0	2	0	48	5	67	51	13	5	40	0	60	63	0	37	0	2	3
10	2	51	1	2	0	5	0	0	2	1	2	0	2	0	34	0	25	48	5	6	66	34	0	28	58	14	0	2	1
11	3	80	2	1	0	1	0	0	1	1	0	0	1	0	2	5	10	20	2	2	50	0	50	100	0	0	0	1	1
12	3	65	1	2	0	1	1	1	2	1	4	0	2	0	16	4	86	69	9	2	70	15	15	50	0	50	0	1	2
13	3	84	2	2	0	1	0	0	1	0	2	0	2	2	3	0	25	19	6	0	100	0	0	0	100	0	0	1	1
14	3	64	1	2	0	3	0	0	2	0	2	0	2	1	5	4	24	11	5	4	75	0	25	100	0	0	0	2	3
15	3	66	1	3	1	4	0	0	2	4	4	1	2	0	20	0	42	50	11	5	50	20	40	100	0	0	0	2	1
16	2	55	2	1	0	1	0	0	1	0	1	0	1	0	6	0	50	6	2	2	89	0	11	0	100	0	0	1	1
17	3	61	1	1	0	4	0	0	2	2	0	0	0	0	8	4	22	22	3	5	100	0	0	25	75	0	0	2	2
18	1	26	2	1	0	1	0	0	2	0	2	0	1	0	23	10	54	26	4	2	53	0	47	0	10	0	0	1	2
19	2	60	1	2	0	2	0	0	2	2	0	0	2	0	5	7	61	56	5	3	45	0	55	0	100	0	0	1	2
20	2	49	1	1	0	4	0	0	2	1	0	0	2	0	24	33	57	85	4	5	93	0	7	25	75	0	0	2	3
21	2	54	2	2	0	2	0	0	1	1	2	0	2	0	13	0	10	32	6	3	50	0	50	100	0	0	0	1	3
22	1	26	2	3	0	5	1	0	2	1	0	0	2	1	36	14	52	50	9	6	92	0	8	0	75	25	0	2	3
23	3	65	2	2	0	2	0	0	1	1	3	0	2	0	7	0	15	0	7	3	100	0	0	0	100	0	0	1	1
24	2	43	2	2	0	5	0	0	1	2	1	0	2	0	20	0	26	39	6	6	100	0	0	50	50	0	0	2	3
25	2	41	2	2	0	4	0	0	1	0	0	0	1	0	0	0	21	38	2	5	100	0	0	0	0	0	0	2	3
26	1	35	1	2	0	5	0	0	2	1	4	0	2	0	39	4	14	38	6	6	66	33	0	28	44	28	0	2	3
27	2	41	1	2	0	4	1	0	2	0	4	0	2	0	24	28	38	27	7	5	80	20	0	75	0	25	0	2	3
28	3	64	2	1	0	1	0	0	1	0	0	0	0	0	0	5	17	13	0	2	100	0	0	0	0	0	0	1	1
29	3	62	2	1	0	1	0	0	1	0	0	0	0	0	0	0	0	13	0	2	0	0	0	0	100	0	0	1	1
30	2	54	2	1	0	1	0	0	1	1	0	0	2	0	0	0	27	7	4	2	100	0	0	0	0	0	0	1	1
31	1	37	2	2	0	2	0	0	2	2	0	0	2	0	6	1	30	33	5	3	84	16	0	0	100	0	0	1	3
32	2	43	1	2	0	5	0	0	1	2	3	0	2	0	9	0	26	21	8	6	60	0	40	100	0	0	0	2	3
33	3	82	1	2	0	2	0	0	2	1	4	0	2	0	4	18	45	47	7	3	70	10	20	100	0	0	0	1	3
34	1	39	2	2	1	3	1	0	2	2	1	1	1	1	17	14	21	29	9	4	0	0	0	50	50	0	0	1	3
35	1	39	1	3	0	5	1	0	2	3	1	0	2	0	14	14	0	38	10	6	0	0	0	10	0	0	0	2	3
36	1	40	1	3	0	4	1	0	1	3	4	0	2	0	13	3	52	21	10	5	50	40	10	50	50	0	0	2	3